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GROUP MENTORING FOR RESILIENCE: INCREASING POSITIVE DEVELOPMENT AND REDUCING INVOLVEMENT IN THE JUVENILE JUSTICE SYSTEM

Final Technical Report

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OJJDP FY 13 Mentoring Best Practices Research: Category 2: New Mentoring Research and Evaluations

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1. ABSTRACT

This "Mentoring Best Practices" project investigated the effectiveness of group mentoring as an intervention strategy for improving developmental outcomes among youth at risk for juvenile justice system involvement and produced an operations manual that can facilitate effective replication of the Project Arrive model. The evaluation data revealed positive effects of participation for several resilience assets and reducing academic risk factors. Findings also pointed to the role of positive relationships with mentors and group climate in contributing to these outcomes. Researchers found that smaller group sizes were related to development of relationships with mentors and group climate, but other group characteristics such as gender and ethnic diversity of mentees was less important. Mentors and mentees reported several critical program practices including rituals and routines, relationally focused sessions, co-mentors, and a flexible curriculum. The findings indicate that Project Arrive is an auspicious approach to building resilience and reducing risk for young people vulnerable to school dropout and juvenile justice involvement. Building on these findings, future research should continue studying the potential of group mentoring programs, both in school and community settings.

2 BACKGROUND AND REVIEW OF LITERATURE

Although the rate of juvenile arrests has declined in recent years, juvenile delinquency continues to be a serious concern nationwide. In 2010, juveniles accounted for 14% of all of the country's violent crime arrests and 22% of all property crime arrests (Sickmund & Puzzanchera, 2014). There are several individual and social factors related to youth involvement in the juvenile justice system. This project focused on two late onset (ages 12-14) factors in the school domain: academic failure and truancy (Shader, 2004). According to OJJDP, truancy is one of the early warning signs that youths are potentially "headed for delinquent activity, social isolation, or educational failure" (OJJDP Programs Guide). Attendance patterns are a clear early indicator of dropping out of high school (Bridgeland et al. 2006), and high school dropouts are three and a half times more likely to be arrested than high school graduates (Bridgeland et al. 2001).

Academic failure and truancy are two risk factors used in San Francisco Unified School District's (SFUSD) Early Warning Indicators System (EWI). Developed in conjunction with the John W. Gardner Center for Youth and Their Communities at Stanford University, the EWI identifies students who are at high risk of dropping out of school. The indicators are applied to students transitioning from the 8th to 9th grade, when youth experience major changes in school structure and in adult and peer relationships, which are often associated with declines in self-confidence and academic engagement (Herrera et al, 2011).

There is clear evidence that the EWI effectively identifies youth who are at-risk for school dropout and associated problems including juvenile offending. In an analysis of two cohorts of first-time high school freshmen, SFUSD found that of students who had both risk factors (GPA below 2.0, attendance rate below 87.5%), only 14.8% graduated high school, compared to 84.4% for those students with zero risk factors and 42.6% for those with only one risk factor. Of note is that of all the SFUSD 9th graders with risk factors, 52.5% were African American and 39% were Latino (John C. Gardner Center for Youth and their Communities, 2011), even though these two groups represent only 11% and 23% of SFUSD students, respectively (SFUSD, 2012).

Project Arrive is a group mentoring initiative from SFUSD's Mentoring for Success program designed to address the needs of youth at-risk of dropping out of school. Inspired by promising research, SFUSD began in 2010-2011 to implement Project Arrive for an EWI-selected population at four public high schools to increase the resilience, GPAs, and attendance—thereby decreasing their chances of dropping out of high school and committing a crime. The district found that unlike in the field of 1:1 mentoring, there were no manuals for implementing group mentoring programs, no curriculum, and no support to help facilitate and nurture group processes. Information on other group mentoring programs was varied and rarely school-based. Project Arrive met all of its objectives in the first two years of implementation, including high proportions of students reducing their unexcused absences from school (28%) and students improving their school grades (48%). After the first 2 years of EWI implementation, SFUSD saw modest but statistically significant improvements in school attendance among identified 9th grade students, a period of time in which truancy is expected to increase for this group. Some of this success can surely be attributed to Project Arrive, which served nearly 1 in 5 of 9th grade students identified by EWI.

However, despite its early successes, the need remained for more robust and evidence-based approaches to guide the further development of Project Arrive and fill in the gaps in group mentoring research. The current grant sought to meet these needs 1) by providing rigorous empirical evidence of the effectiveness of group mentoring, and 2) generating clear practical guidance based in empirical and experience-based best practices for practitioners seeking to implement group mentoring programs.

2.1 Research on Efficacy of Group Mentoring

It is well-established that one-to-one mentoring increases positive outcomes for vulnerable youth. Recent meta-analyses (DuBois et al., 2011; Tolan et al., 2008) found consistent evidence that mentoring is effective for reducing delinquency (e.g., arrests, self-reported involvement) and key associated outcomes (e.g., aggression, drug use, academic failure). Both studies also noted that existing research provides insufficient detail about the specific defining features of mentoring and key implementation characteristics. With particular relevance to the current project, DuBois et al. (2011) noted that evaluations of mentoring programs have not consistently collected data on whether they reduce juvenile offending.

Recent research has called into question the notion of "school dropout," pointing to the high rates of adverse childhood experience and disconnection often experienced by youth who leave school prior to graduation. Findings from a mixed-method national study conducted by the Center for Promise (2015) suggest that expanding the network of supports available to youth in schools and communities, including teachers, health care professionals, and peers, may be the most powerful approach for helping young people reach their academic potential. These findings are consistent with models of resilience that emphasize the importance of strengthening individuals' external assets (e.g., supportive relationships) and internal assets (e.g., self-efficacy) as primary means of helping youth overcome significant adversity in their lives (Zimmerman et al., 2013). Because of its focus on building positive relationships among peers and between youth and adults, group mentoring may be particularly valuable for such youth (Kuperminc, 2016; Kuperminc & Thomason, 2013).

Group mentoring can offer a platform to increase positive social networks and promote a sense of agency by providing a supportive setting for young people to develop under the guidance of adults as well as cultivate meaningful peer relationships (Kuperminc, 2016). Group mentors foster and mediate positive peer interactions as well as model communication and healthy social behaviors (e.g. understanding another's perspective, negotiating) (Karcher, Kuperminc, Portwood, Sipe, & Taylor, 2006). Several recent studies have shown that group mentoring is associated with a range of positive outcomes for children and adolescents across age, socio-economic status, academic performance, ethnicity, and gender (Boddy, 2009; G. Kuperminc, 2016; Washington, Barnes, & Watts, 2014). DuBois and colleagues' (2011) meta-analysis of youth mentoring programs found similar effect sizes for group as compared to 1-to-1 mentoring, and there is emerging evidence that group mentoring may be more effective in some contexts. For example, Plourde and colleagues' (2017) systematic review of mentoring programs for adolescent girls found that the group mentoring framework was more effective than 1-to-1 mentoring for improving reproductive health knowledge, academic achievement, and social networks and decreasing risky sexual behaviors and exposure to violence.

Some of the strongest evidence for the effectiveness of group mentoring can be found in rigorous experimental and quasi-experimental studies of youth facing significant risks to their development. In one small, randomized trial, Jent and Niec (2009) found that group mentoring in a community-based mental health services clinic helped children (8 to 12 years of age) reduce their internalizing and externalizing behavior problems, and increase social problem-solving skills relative to controls. Geenan, Powers, & Phillips' (2015) experimental study of high-school aged youth in foster care who were experiencing mental health challenges found improvements in mental health, hope, self-determination, self-efficacy, planning for the transition to adulthood, and post-secondary participation for group mentored youth relative to controls. Two large randomized studies of youth involved in the justice system found reductions in recidivism and number of arrests for group mentored youth (Lynch, Astone, Collasos, Lipman, & Esthappan, 2018; Seroczynski, Evans, Jobst, Horvath, & Carozza, 2016).

Although there is a growing body of research demonstrating that group mentoring has positive effects on youth, little is known about how these outcomes come about. Washington and colleagues (2014) postulate that group mentoring works based on Bandura's social learning theory (1977), the idea that learning happens in a social context and can occur through observation and imitation; however, this conceptualization does not take into account the group processes that occur in a group mentoring setting. Other researchers have found that intervening mechanisms in group mentoring center around these group processes and social skills building (House, Kuperminc, & Lapidus, 2005; Jent & Niec, 2009). In one study, House and colleagues found that group members cultivated close relationships within the group and used one another as reciprocal sources of support.

Kuperminc and Thomason (2013) argue that group mentoring has the potential for contributing to positive youth development: "The potential mechanisms of change operate via the (vertical) relationship between mentors and mentees (as in traditional one-to-one mentoring) as well as through (horizontal) processes of group cohesion and mutual help." Youth participants can observe how adult mentors model prosocial skills, such as cooperation and listening to other perspectives. The group setting also offers a safe environment in which to practice social skills and receive constructive feedback from peers (Karcher, Kuperminc, Portwood, Taylor, & Sipe, 2006). Thus, in addition to the connections forged between mentors and mentees that are the central feature of the traditional 1:1 mentoring approach, peer group cohesion and mutual support are social processes unique to group mentoring (Kuperminc & Thomason, 2013).

Kuperminc and Thomason reviewed evaluations of 10 formal group mentoring programs, most of which targeted youth at risk for school difficulties or behavioral problems. Results from the 4 studies with rigorous experimental or quasi-experimental designs showed gains in academic and behavioral functioning among program participants relative to controls – factors strongly related to truancy and risk for juvenile justice system involvement. Despite these promising findings, Kuperminc and Thomason found that most of the research relied on small samples with limited statistical power, failed to account statistically for the group structure (which violate the assumption of independence of observations), and offered little insight into the mechanisms through which group mentoring can be effective. Regarding the latter, whereas the strongest effects were for programs that featured a high degree of structure, research has not considered

the tension between structuring group activities through formal curricula vs. allowing space for youth directed activities and discussion (Jent & Niec, 2009). These findings raise the following research questions:

1. Does participation increase resilience and reduce risk factors for juvenile justice system involvement - reduced truancy, disciplinary problems and improved academic performance?
2. What is the role of group social processes (cohesion, mutual help, connection with mentor) in contributing to outcomes for group mentoring participants?
3. What program, mentor, and mentee characteristics contribute to positive group processes?
4. What critical program practices (e.g., structured activities, student choice/influence on group activities) increase the likelihood of positive outcomes for the group and its members?
5. How do structural, mentor, and mentee characteristics influence implementation and fidelity?

2.2 The Development of a School-Based Group Mentoring Program

Mentoring for Success

Mentoring for Success (MFS) is San Francisco Unified School District's school based mentoring program that matches K-12 students with highly qualified and committed mentors who collaborate with students to increase school success, improve attendance, and develop self-confidence. Since 2007, MFS has grown from serving youth at 7 middle schools to the current roster of 50 schools supporting MFS program implementation that serves over 700 SFUSD students. MFS has put equity at the forefront by supporting individualized relationships with students who would benefit most by having a mentor.

Together, MFS "matches" spend about an hour a week engaging in dynamic activities at school throughout the year. MFS mentors focus on developing student protective factors that build resilience. They help their mentees establish lasting skills for academic and social/emotional success, improved attendance, and positive engagement in the community. MFS offers two program options: MFS One-to-One and Project Arrive Group Mentoring.

Development of Project Arrive

Project Arrive (PA), is an initiative of SFUSD designed to address the needs of youth at-risk of dropping out of school. PA, uses the EWI system to identify participants. In September 2011, 100 ninth graders were selected by school staff using 8th grade EWI data and the district's Transitions Program, which provides support services to vulnerable students transitioning to the next level of schooling (e.g., middle to high school). Of the 100 students selected, 77 volunteered to participate and were matched in mentoring groups led by 21 school-based mentors at the beginning of October. Of the 77 youth, 68 (88%) completed the program. Of those, 32% were African American and 35%were Latino—the same populations that disproportionately have the highest percentage of the two risk factors, and the highest rates of truancy and high school drop-out rates in the district. Project Arrive met all of its objectives in the first two years of implementation, including high proportions of students reducing their unexcused absences from

school (28%) and students improving their school grades (48%). After just 2 years of implementation, SFUSD saw modest but statistically significant improvements in school attendance among identified 9th grade students, a period of time in which truancy is expected to increase for this group.

After eight years, Project Arrive continues to utilize group mentoring to support students through developing meaningful relationships with mentors and peers, providing access to resources within their schools and communities, and developing academic and life skills to improve success. As a seminal school-based group mentoring program, Project Arrive is also helping researchers better understand how group mentoring works as well as establish a base of best practices.

Project Arrive mentoring groups typically consist of 6 to 8 students, who meet weekly during school hours with 2 co-mentors for 50-minute sessions over a full academic year. Mentors are school staff (counselors, advisors, principles, other staff) or community partners (employees of local non-profits). A full-time program coordinator conducts a four-hour training for volunteer mentors prior to the start of the academic year, assists mentors with recruiting and enrolling students into the program, meets monthly with mentoring teams at each school, provides ongoing match and logistical support, and serves as a liaison between each school and the district's student support programs office. The curriculum and match support draw from Tuckman's (2010) model of group development, including stages of Forming, Storming, Norming, Performing, and Adjourning that have been widely used to guide the implementation of small group interventions in a variety of contexts, including education (Bonebright, 2010). Mentors are provided a binder containing program procedures, contact information, and curricular materials, and are able to access a website with a menu of activities that are keyed to the group stages and address common adolescent issues (e.g., identity development, resisting problem behavior, resolving conflict, building study skills). Mentors are encouraged to select relevant activities or to work with their mentees to develop their own activities and discuss topics in line with overall program goals. This "curriculum with creativity," thus, encourages mentor and mentee autonomy within an overall framework of building a sense of connectedness to school and to the group, and fostering positive social and academic development.

3 RESEARCH QUESTIONS AND OBJECTIVES

Overarching goals were to investigate the effectiveness of group mentoring as an intervention strategy for improving developmental outcomes among youth at risk for juvenile justice system involvement and to produce an operations manual that can facilitate effective replication of the Project Arrive model. To monitor progress toward these goals, researchers reported the performance metrics required in the DCTAT system and in bi-annual progress reports required in OJJDP's Grants Management System, including participant characteristics, information about service delivery, and project outcomes. Table 3a details specific measurable objectives and performance measures for this project.

Table 2.2.a Objectives

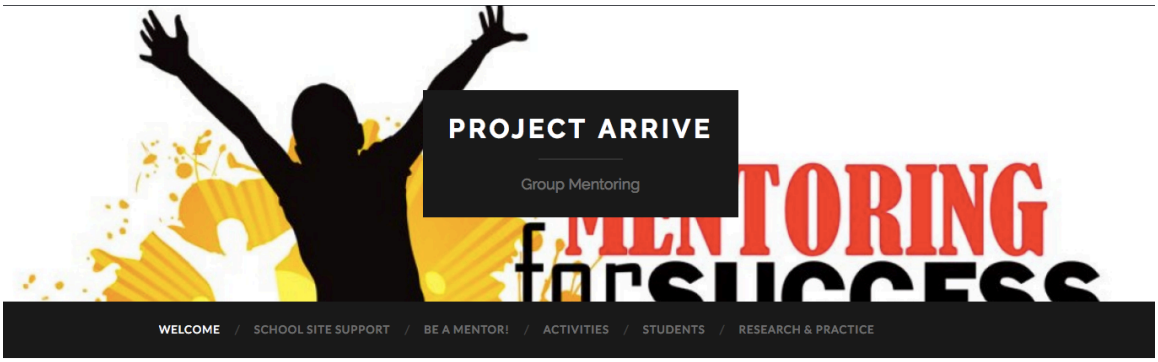
Objective	Performance Measures	Description	Deliverables
To support research that will further what is understood about evidence-based and effective practice in a group mentoring program that serves youth at risk for school drop out and delinquency	Percentage of research related deliverables (reports, etc.) completed.	The number of published and development products and publications based upon grant funded research or evaluation students or training curricula developed during the reporting period. Agency records are preferred data source.	Overview documents
			Interim reports
	Percentage of deliverables that meet OJJDP's expectations for depth, breadth, scope and quality of study, and pertinence.		Progress reports submitted every 6 months
			Group Mentoring Operations Manual
			Technical journal articles
			Final report

The remainder of the report summarizes the two overarching goals: development of a comprehensive operations manual and program evaluation.

4 OPERATIONS MANUAL

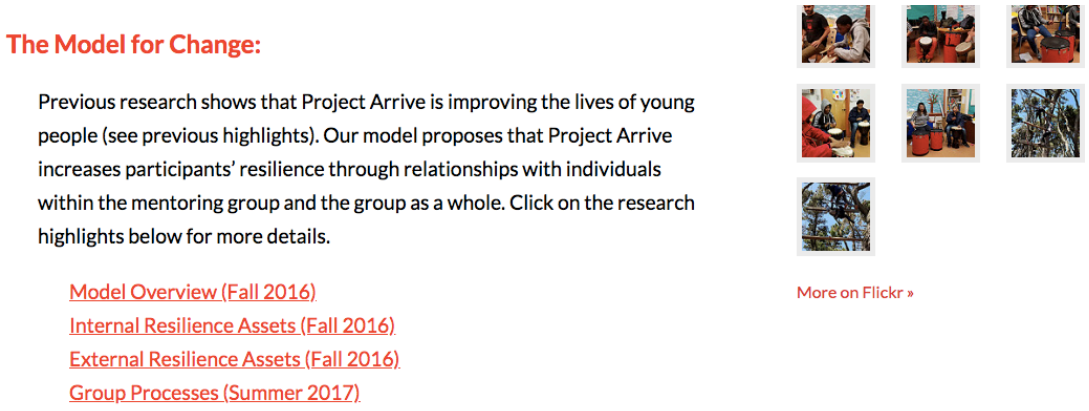
The operations manual was initially intended to be a traditional printed manual; however, researchers and program coordinators realized that a web-based manual would provide a more convenient, interactive, and modern approach. Thus, the operations manual took shape as the following website: http://sites.gsu.edu/project-arrive/ (see Figure 4.1). This medium provided an opportunity for real time interaction with program coordinators, schools, mentors, and mentees and their parents through which information and resources could be tested and feedback incorporated immediately. Utilizing data analytic software, researchers have learned that the website is also being used by others interested in group mentoring with 400-1,300 unique visitors from several countries per month.

Figure 2.2.1 Screen shot from Welcome page of web-based operations manual



The overall structure of the website contains all of the major sections of a comprehensive operations manual based on Michael Garringer and colleagues' (2015) Elements of Effective Practice for Mentoring including information on recruitment, screening, training, matching and initiating, monitoring and support, and closure. It also presents over 50 group mentoring activities, external mentoring resources, and research highlights including meaningful data on participant outcomes, best practices for group mentoring, and troubleshooting issues in the group mentoring setting (see Figure 4.2).

Figure 2.2.2 Screen shot from Research page



Utilizing Tuckman's (2010) stages of small group development, the website presents a framework for developing group mentoring curricula relevant to developing group cohesion and productivity. For each of the five stages (forming, storming, norming, performing, adjourning), the manual provides information regarding what to expect from mentors and mentees, signs that the group is moving to the next stage, and appropriate activities designed to help groups move through the stages (see figures 4.3 and 4.4).

Figure 2.2.3 Screen shot from Group Stages page

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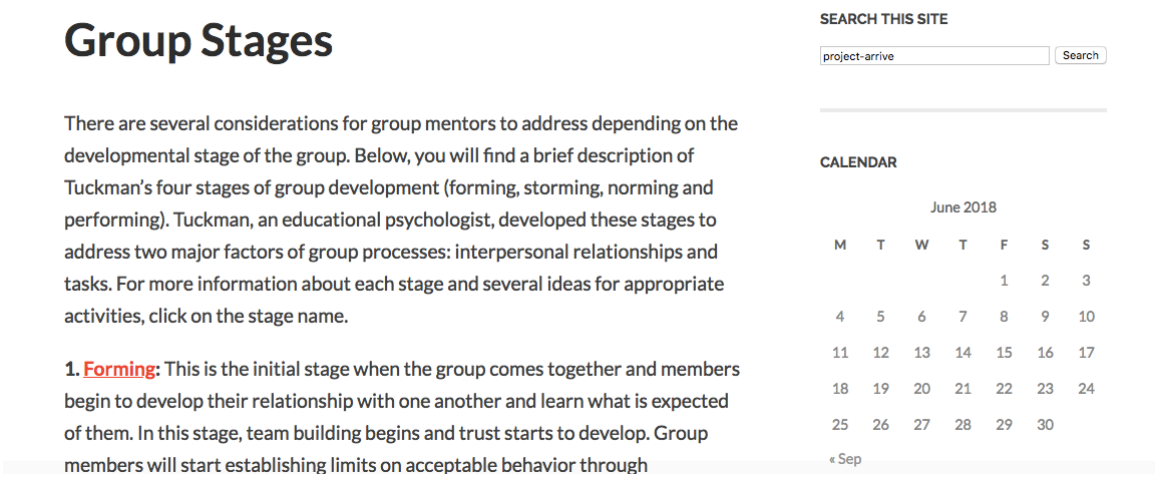

Figure 2.2.4 Screen shot from Activities page

Although the web-based operations manual has many benefits, some challenges arose through its development. Specifically, researchers and program coordinators wanted to ensure that the manual was useful to multiple audiences, including mentors, mentees, parents, and schools, in addition to other organizations looking to develop a group mentoring program. It proved difficult to address the different needs of these multiple audiences. Site developers endeavored to clearly label pages for specific audiences (see main toolbar in Figure 4.1); however, some users may find different sections of the site more or less relevant to their needs. Despite these difficulties,

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multiple users have identified the utility and convenience of the site. Readers are invited to visit the website at http://sites.gsu.edu/project-arrive/.

5 PROGRAM EVALUATION STUDY METHODS AND ANALYTICAL TECHNIQUES

The program evaluation component of this project aimed to answer five main research questions regarding program effectiveness, underlying change processes, and best practices.

Research question one addressed whether participation in group mentoring increased resilience and reduced risk factors for juvenile justice system involvement, with a focus on reduced truancy and disciplinary problems and improved academic performance. The focus was primarily on the individual level, specifically, the extent to which program participation contributed to increases in (a) short-term outcomes (internal and external resilience factors) and (b) intermediate outcomes (reductions in truancy, improved academic performance, and reduced juvenile offending). Furthermore, analyses examined whether improvements in short-term outcomes mediated the relation between program participation and intermediate outcomes.

Research question two addressed the role of group social processes (cohesion, mutual help, and connection with mentor) in contributing to both short-term and intermediate outcomes for group mentoring participants. Theory regarding whether these processes should be considered at the level of individual perception or as group-level processes remains underdeveloped (Kuperminc & Thomason, 2013); however, based on past research using measures similar to those proposed for this study (Kuperminc, 2012), we expected to find low ICC's for perceptions of connectedness with mentor (ICC = .03), suggesting greater variability between individuals than within groups in these perceptions. In contrast, we expected to find higher ICC's for perceptions of group cohesion and mutual help (ICC = .10). We used the partially clustered multilevel model to examine the role of group social processes as individual or group-level covariates as suggested by the ICC estimates.

Research question three focused on identifying programmatic, mentor, and mentee characteristics that contributed to positive group social processes. For these analyses, we focused on the data from mentors and youth demographics. After estimating initial models, subsequent models examined mentor, mentee, and program characteristics as predictors of change from mid-year to post-test in group social processes.

Research questions four and five focused on program practices and factors that influence implementation. For these analyses we focused primarily on qualitative data from focus groups, and mentor logs/meeting notes. We also sought external input from the advisory board on interpretation of qualitative and quantitative findings and translation of findings into practice.

5.1 Study Design Overview

To develop an operations manual and conduct effectiveness studies, Georgia State University researchers established a partnership with program administrators from SFUSD. A quasi-experimental project design was developed to compare Project Arrive program participants with demographically similar comparison students to examine several outcomes including development of resilience assets, academic achievement and school attendance, juvenile justice

encounters, and long-term duration of outcomes. Data collection was completed utilizing a sophisticated a web-based system for administering and collecting pre- and post-test surveys of participating youth and post-test mentor surveys.

The first year of the project was devoted to developing a draft interactive, web-based Operations Manual, utilizing experience to date in implementing Project Arrive, and establishing research protocols. Recruitment and data collection for the effectiveness study began in the fall of year one and continued through the spring of year three. Development of the Operations Manual occurred concurrently with the effectiveness study, through an iterative process starting in year one and involving input and feedback from mentors and mentees and external input from an expert advisory committee. Given that extensive implementation materials for the program already had been developed for this established program, the development of the Operations Manual was a process of systematic refinement rather than basic curriculum and program development. The final months of year three were devoted to analyzing and disseminating study findings, and to refining the Operations Manual. Data from focus groups with mentors and mentees, monthly logs and mentee self-reports were used to guide revisions to the Manual, and input from the advisory committee was obtained through teleconferences with an advisory board composed of expert researchers and practitioners in the field. The final Operations Manual was developed with an eye toward replication of the Project Arrive model in other school-based settings.

5.2 Program Implementation

All students in program schools identified via EWI were invited to participate in mentoring groups. Those who agreed to participate, obtained parental informed consent and provided informed assent, were enrolled in the study. Using similar procedures, researchers invited EWI identified students at other district high schools, to enroll as comparison students, paying particular attention to ensuring that comparisons shared a similar demographic and risk profile with the intervention group. As described in the findings section, we used statistical matching procedures, propensity scores, to reduce selection bias and ensure comparability of the intervention and comparison groups.

Prior to beginning the study, approval was obtained from the Georgia State University Institutional Review Board (IRB) and the SFUSD Research, Planning, and Accountability Department. All project staff and research collaborators completed research ethics training and certification (CITI Certification).

To ensure adherence to program goals, the program coordinator conducted a 4-hour new mentor training in the fall of each academic year. Experienced mentors either attended the training or met individually with the program coordinator before initiating their groups. End of year surveys from 40 mentors representing 30 groups indicated that 40% of mentors attended the training (in addition, 25% who were experienced mentors reported previously attending the training); the remainder had individual or small-group meetings with the coordinator. In addition, the program coordinator held monthly meetings with each school-based team of mentors, and communicated regularly via email and phone for ‘match support’ troubleshooting, and providing resources.

Mentoring groups met 25-30 times throughout the year with few cancellations (76.9% of groups had 2 or fewer cancellations). The researchers were not able to obtain complete attendance records; however, attendance within groups was somewhat variable, with only 66.7% of mentors reporting having full attendance in their groups more for more than half the sessions. Consistent with the flexible curriculum, most mentors (n = 35; 87.5%) reported using the curriculum, and 71% reported using it for at least half of their group sessions. The most common activities employed in group sessions included ice breakers (100%), academic check-ins (97.5%), games (97.5%), closing reflections (97.5%) and field trips (92.5%). The most frequent topics (addressed in half or more of the sessions) included academic achievement (92.5%), goal setting (85%), peer relationships (80%), transition to high school (70%), and family relationships (65%). Nearly all mentors (97.5%) reported that mentees helped decide group activities, with most (57.5%) reporting that decisions were shared evenly between mentors and mentees. Mentors reported high levels of cohesion among the members of their groups, M = 3.92, SD = 1.02 (1-5 scale).

5.3 Measures and Data Collection

Researchers collected data from school administrative records for intervention and comparison youth at 5 occasions, including end of year records for the year prior to program implementation, and end of (fall and spring) semester records for 2 subsequent years including the year of participation and a follow-up year. We also collected data on rates of juvenile offending and re-offending in the intervention and comparison groups from the local juvenile probation department. Intervention and Comparison students completed pre- and post-test surveys in fall and spring of their 9th grade year. Intervention students also completed a brief mid-year survey (Dec.) regarding perceptions of group social processes. These items were also added to the post-test for intervention students. Mentors were asked to provide ongoing data through monthly logs documenting attendance and group activities. They also completed a brief end of year survey reporting on their perceptions of group social processes and satisfaction with the program.

Researchers also gathered qualitative data to assess implementation issues (feasibility, usability, acceptability, and satisfaction) via focus groups with randomly selected groups of mentors and mentees. We conducted focus groups in Years 1-3 (i.e., mentors in the year prior to recruitment of cohort 1, and mentors and mentees of cohorts 1 and 2). Researchers conducted the mentor and mentee focus groups during participants' lunch periods and provided a free lunch as incentive. Focus groups generally followed a semi-structured interview guide that included open-ended questions such as "Tell us about your group" and "What challenges do you face?" All focus groups were recorded and transcribed. We coded the transcribed data using qualitative analysis software, and developed an inductive codebook based on the themes that emerged from the data. Combined with survey data from mentee and mentor reports of group social processes, the focus group data provided critical information needed to update and refine the Operations Manual.

Researchers supplemented the existing student pre- and post-test surveys with widely used self-report measures that have strong evidence of reliability and validity. To maximize comparability to district-wide data on risk and resilience factors, researchers used items from the California Healthy Kids Survey (Hanson & Kim, 2007) and the Centers for Disease Control and Prevention's Youth Risk Behavior Survey (Eaton et al., 2008). We also used validated scales from other sources. Student and mentor measures of group social processes (mentor-mentee

connectedness, group cohesion, mutual support) were adapted from measures developed for the PI's previous work that had adequate reliability and showed significant associations with short-term outcomes similar to those examined in this study (Kuperminc, 2012).

Mentor surveys assessed demographic characteristics and professional training, perceptions of training and support received, group processes, and program structure. These data were supplemented with information culled from mentor support meetings and focus groups. Mentors divulged information about participant attendance, topics/activities, and notes on impressions of challenges and successes in their mentoring sessions. Administrative data on academic performance, attendance/truancy, and disciplinary sanctions were collected from district records, and (aggregate) data on juvenile offending/reoffending were collected from juvenile justice records.

The current report focuses primarily on (1) data from student surveys, which provide demographic information, self-reports on internal and external resilience assets, and experiences in the Project Arrive mentoring groups, and (2) data from administrative records, which provide a roster of Project Arrive and Comparison students along with academic outcomes (i.e., attendance and achievement). These primary measures are described below (a summary of student survey measures and copies of survey instruments can be found in the appendices).

Resilience Assets. Program participants and comparisons completed surveys assessing their perceptions of internal and external resilience assets based on the Resilience Youth Development Module of the California Healthy Kids Survey- a self-report measure assessing student health strengths and risks (Benard, 2004). Internal consistency estimates for these measures were similar at baseline and post-test, thus, for brevity, we report only the post-test estimates.

Participants completed seven scales assessing external resilience assets, all rated on a scale ranging from 1 = "strongly disagree" to 4 = "strongly agree." *School Belonging* (α = .78) included five items assessing students' sense of connection to their school, safety, and happiness at school. *School Support* (α = .93) was assessed with six items examining whether participants felt they had a teacher or other adult at school who was supportive of their efforts, believed in them and cared about them. *School Meaningful Participation* (α = .90) included three items about participants' level of interest and participation in activities at school. *Peer caring relationships* (α = .90) included three items describing whether participants felt they had a caring friendship with someone who helped them during hard times. Two items about *Prosocial Peers* (α = .82) described whether participants had friends that do what is right and perform well in school. *Home support* (α = .86) included six items assessing the extent to which participants felt there was a parent or adult who cared about, encouraged, and believed in them. *Home meaningful participation* (α =.85) included two items assessing the extent to which participants felt they did things at home that make a difference and help make decisions in their families.

Participants completed 4 scales assessing internal resilience assets on a scale from 1 = "not at all true" to 4 = "very much true." *Self-efficacy* (α = .75) included 4 survey items about confidence in abilities to work with different people, to work out problems, and to complete tasks. *Empathy* (α = .84) included three items examining participants' attempts to understand others' perspectives and whether they feel bad when others' feelings are hurt. *Problem solving* (α = .74) included two

items about participants' problem-solving techniques of writing about or talking through their problems. *Self-awareness* (α = .86) included three items describing participants' awareness of purpose in life, their moods, feelings and behavior.

Quality of Mentor Relationship. Project Arrive participants completed four items, e.g., "My mentor(s) care about me." Mentees rate statements about how they feel about their mentor/group leader on a scale from (1) *Not at all true* to (4) *Very much true*. This measure has previously been used to assess mentor-mentee relationships (Kuperminc, 2012) and demonstrates adequate reliability in this study (α=.85).

Group Climate. Project Arrive participants completed 11items describing perceptions of how supportive their mentor group feels overall. These items were used in previous youth mentoring research (Brezina, Kuperminc, & Tekin, 2016; Kuperminc, 2012; Kuperminc & Lesesne, 2009). Items assess mentee feelings of connectedness and belonging (e.g. "Kids in this group care about each other"), mutual help (e.g. "How much did the group help you to deal with everyday problems?"), and engagement (e.g. "When you are with your group, how much do you enjoy the activities you participate in?"). This measure of overall group climate demonstrates adequate reliability in this study (α=.90).

Academic records. The school district provided all academic records for program participants and comparisons. The academic records included credits earned, attendance, and GPA. *Credits earned* for each grade (i.e., 9th and 10th grades) was calculated by averaging the total number of credits earned during the fall and spring semesters of the academic year. In order to receive academic credit for a course, students must have obtained a grade of "D" or better. Most courses are worth 5 credits. To be considered on track toward graduation, students are expected to earn 50 or more credits by the end of 9th grade and 110 or more credits by the end of 10th grade. *Attendance* was measured by the percentage of instructional time attended, taking into account the proportion of unexcused absences during the school year to the total number of days enrolled. Students who are present for less than 87.5% of instructional time are considered truant by the school district. *Grade point average (GPA*) was calculated by averaging students' fall and spring semester grades in 8th, 9th, and 10th grades respectively.

Additional Measures. Additional measures, including a dummy code signifying Project Arrive vs. Comparison participation, a group identifier for Project Arrive participants, demographic characteristics (e.g., sex, ethnicity, socioeconomic status, family composition), and characteristics of schools, were drawn from student surveys, student academic records, and publicly available data from the school district.

5.4 Sample

In addition to the planned quantitative sample of program participants and comparisons with informed consent that participated in all aspects of the study, we were able to draw a second sample that included academic records spanning grades 8 through 10 of <u>all</u> EWI-identified students in SFUSD. The former, which will be described in this report as the "Survey Sample," (N = 185) included survey data described above and enables in-depth examination of short-term (e.g., resilience assets) and intermediate (e.g., academic) outcomes as well as examination of

mentoring processes. The latter, which will be described as the "Academic Records Sample," (*N* = 1,219), affords greater statistical power for examination of academic outcomes related to participation in Project Arrive.

Survey Sample: Participants included 9th grade students identified via EWI as being at risk for high school dropout. Participating schools served predominantly low-income (72% - 79% qualify for free/reduced-price lunch), African American (14%-21%), and Latino (19%- 62%) students. Participants in the survey sample included 114 9th grade students attending one of five high schools in a large urban school district in the Western United States that offered group mentoring, and 71 9th grade students attending one of 3 high schools in the same district that did not offer the program. The overall sample was 53.0% male and had a median age of 14.0 years (ranging from 12.8 to 15.9 years). The majority of the sample identified as Hispanic or Latino (61.6%); other race/ethnic groups represented in the sample included Asian/Pacific Islander (15.1%), Black or African American (10.3%), White (non-Hispanic; 4.3%), and mixed-race (8.6%). More than three quarters (75.1%) reported eligibility for free-reduced price lunches at school and 38.4% reported living in a 2-parent family. Rates of attrition in the survey sample were similar for program (21.1%) and comparison students (15.5%), X^2 (1) = 0.88, ns. T-tests and chi-square analyses revealed no differences in baseline measures of study outcomes, or in demographic characteristics, although participants who completed post-tests were slightly older (14.11 years, SD = .72) than those who did not complete post-tests, $t = 1.83$, $p = .07$. With regard to risk variables, participants who completed post-tests had higher 8th grade attendance (94.04% of instructional time, SD = 5.86) than those who did not (91.26% of instructional time, SD = 7.92), $t = 2.08$, $p = .04$.

Academic Sample: The academic sample (*N* = 1,219) consisted of all students attending comprehensive high schools in the district that met EWI criteria for eligibility to participate in Project Arrive, including the 5 schools that offered Project Arrive and 13 schools that did not offer the program. All data were deidentified except for an identifier marking whether the student participated in Project Arrive (Note that we also obtained the same academic records, with identifiers, for students in the Survey Sample). This sample included 239 Project Arrive participants and 980 Comparisons. The largest race/ethnic group was Hispanic or Latino (43.4%); other race/ethnic groups represented in the sample included Asian/Pacific Islander (20.7%), Black or African American (19.4%), White (non-Hispanic; 6.9%), and mixed-race or other ethnicity (5.9%). Given that 9th grade was the index year for drawing this sample, data were available for all 1,219 participants at 9th grade, for 1,199 (98.36%) at 8th grade, and for 1,148 (94.18%) at 10th grade.

5.5 Propensity Scores and Sample Characteristics

In order to reduce potential effects of selection bias on estimates of the effects of program participation, we used inverse probability of treatment weighting (IPTW), which uses a propensity score to create sample weights such that treatment assignment is independent of measured baseline covariates (Austin & Stuart, 2015). Propensity scores were estimated separately for the Survey and Academic Records samples.

Survey Sample. The propensity score was estimated using a logistic regression model in which treatment assignment (Project Arrive vs. Comparison) was regressed on the 13 covariates listed

in Table 5.5.1. Stabilized weights were computed in order to reduce the influence of individuals assigned very large or very small weights using the following formula, where "w" denotes the stabilized weight, "z" denotes treatment assignment, and "e" denotes the propensity score:

$$w = [Z*Pr(Z=1)/e] + [(1-Z)*Pr(Z=0)/(1-e)]$$

Diagnostic procedures described by Austin and Stuart (2015) were used to assess whether, in the sample weighted by the inverse probability of treatment (using the stabilized weights), Project Arrive and Comparison students had similar distributions of the covariates listed in Table 5.5a, all of which are plausible predictors of key outcomes. The stabilized weight had a mean of 0.99 with a standard deviation of .40 and ranged between 0.47 and 2.62. Standardized mean differences for the unweighted and weighted samples were calculated to compare the means and prevalences of the continuous and categorical covariates, and the higher order moments and interactions of continuous covariates. Stuart, Lee, and Leacy (2013) offer that standardized mean differences of 10% or 25% represent reasonable cut-offs for acceptable standardized biases; larger standardized biases indicate that groups are too different from one another for reliable comparison. We used these cutoffs to evaluate bias estimates as "excellent" (≤ 10%) and "acceptable" (≤ 25%).

In the unweighted sample only 2 of the 13 covariates had standardized mean differences below 10% and ranged between 3.80% and 91.31% (average 41.60%). In the weighted sample, 12 of the 13 covariates had mean differences below 10% and ranged between 1.20 and 14.10% (average 4.65%, See Figure 5.5.1). Kolmogorov-Smirnoff tests assessing differences in the distributions of the 3 continuous variables were small and non-significant in both the unweighted (ranging between 0.79 and 1.04) and weighted (ranging between 0.67 and 1.01) samples. Further examination of higher order moments and interactions among the continuous covariates showed substantial improvements in the weighted compared to the unweighted sample, with standardized mean differences for the squares of the continuous variables averaging 25.71% (ranging between 19.21% and 30.74%) in the unweighted sample and 6.59% (ranging between 5.05% and 7.74%) in the weighted sample. Similarly, standardized mean differences for the interactions averaged 16.50% (ranging between 14.62% and 18.49%) in the unweighted sample and 6.15% (ranging between 0.49% and 11.81%) in the weighted sample. In sum, applying the propensity score weight appears to reduce bias in all of the observed covariates to within acceptable limits, with 16 of 18 standardized differences between Project Arrive and Comparison students falling below 10% and the remainder falling below 25% (see Figure 5.5.1).

Table 5.5.a
Baseline characteristics of Project Arrive and Comparison students in unweighted and weighted samples.

	Project Arrive (N=114) Mean (SD) or %	Comparison (N=71) Mean (SD) or %	Standardized Mean Difference (d *100%)
Unweighted Sample			
Age (years)	14.13 (0.74)	13.95 (0.64)	26.65%
Black/African American	13%	06%	90.78%
Hispanic/Latin@	59%	66%	31.76%

Asian/Pacific Islander	13%	18%	38.62%
Mixed Race	11%	06%	66.74%
Sex (female)	55%	34%	91.31%
Lives with Two Parents	46%	58%	49.17%
Free/Reduced Lunch	83%	85%	8.89%
Instructional Time % (Grade 8)	93.21 (5.12)	94.66 (4.24)	30.82%
Grade Point Average (Grade 8)	2.15 (0.67)	2.02 (0.66)	20.03%
Instructional Time * GPA	0.31 (3.81)	1.03 (3.95)	18.49%
Any suspensions (Grade 8)	09%	09%	3.80%
Attends high school w/high % EWI Students (Grade 9)	53%	65%	51.11%
Weighted Sample			
Age (years)	14.02 (0.74)	13.98 (0.64)	7.10%
Black/African American	11%	10%	4.33%
Hispanic/Latin@	61%	60%	5.87%
Asian/Pacific Islander	16%	15%	9.36%
Mixed Race	09%	09%	1.25%
Sex (female)	48%	48%	0.80%
Lives with Two Parents	50%	49%	1.20%
Free/Reduced Lunch	83%	83%	2.85%
Instructional Time % (Grade 8)	93.81 (4.91)	94.15 (4.03)	7.73%
Grade Point Average (Grade 8)	2.11 (0.69)	2.10 (0.63)	2.47%
Instructional Time * GPA	0.58 (3.84)	0.83 (3.48)	7.00%
Any suspensions (Grade 8)	09%	10%	14.10%
Attends high school w/high % EWI Students (Grade 9)	57%	57%	2.45%

Note: EWI = Early Warning Indicators (risk for school dropout); schools with high % of EWI identified students defined as above median for participating schools.

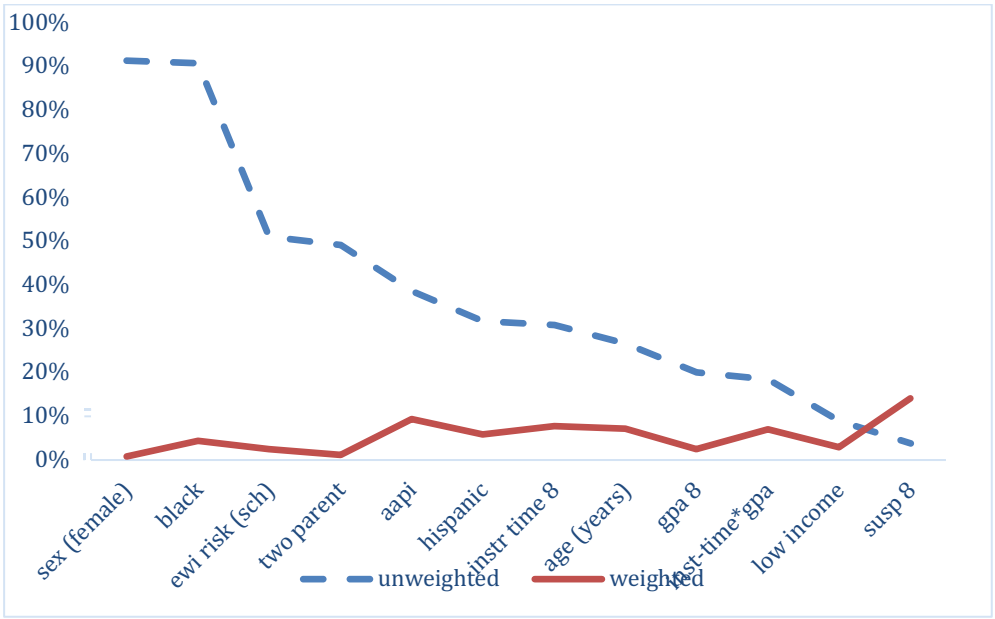

Figure 5.5.1 Standardized Mean Differences for Weighted and Unweighted Data

Academic Records Sample. Similar procedures were used to estimate a propensity score for the academic records sample: treatment assignment (mentoring program vs. comparison) was regressed on the 7 covariates listed in Table 5.5b. In the unweighted sample only 3 of the 7

covariates had standardized mean differences below 10% and ranged between 0.52% and 33.86% (average 16.86%). In the weighted sample, all of the 7 covariates had mean differences below 10% and ranged between 0 and 6.37% (average 2.29%). In sum, applying the propensity score weight appears to reduce bias in all of the observed covariates to within acceptable limits, with all standardized differences between program participants and comparisons falling below 10% (see Figure 5.5.2).

Table 5.5.b
Baseline characteristics of program and comparison students in unweighted and weighted samples.

	Project Arrive (*N*=240) Mean (*SD*) or %	Comparison (*N*=983) Mean (*SD*) or %	Standardized Mean Difference (d *100%)
Unweighted Sample			
Black/African American	23%	18%	30.80%
Sex (female)	43%	37%	25.09%
Unexcused Absences (Grade 8)	4.46 (8.14)	5.39 (13.65)	8.28%
Excused Absences (Grade 8)	3.65 (4.90)	4.30 (7.20)	10.55%
Instructional Time (Grade 8)	90.91 (10.92)	91.86 (10.36)	8.93%
Credits Earned (Grade 8)	26.59 (5.81)	26.56 (5.64)	0.52%
Attends high school w/high % EWI students (Grade 9)	65%	57%	33.86%
Weighted Sample			
Black/African American	20%	19%	6.37%
Sex (female)	38%	38%	0%
Unexcused Absences (Grade 8)	5.37 (11.66)	5.22 (12.80)	1.23%
Excused Absences (Grade 8)	4.05 (5.26)	4.17 (6.96)	1.95%
Instructional Time % (Grade 8)	91.65 (9.28)	91.76 (10.26)	1.12%
Credits Earned (Grade 8)	26.48 (5.71)	26.55 (5.66)	1.23%
Attends high school w/high % EWI students (Grade 9)	59%	58%	4.12%

Note: EWI = Early Warning Indicators (risk for school dropout); schools with high % of EWI identified students defined as above median for participating schools.

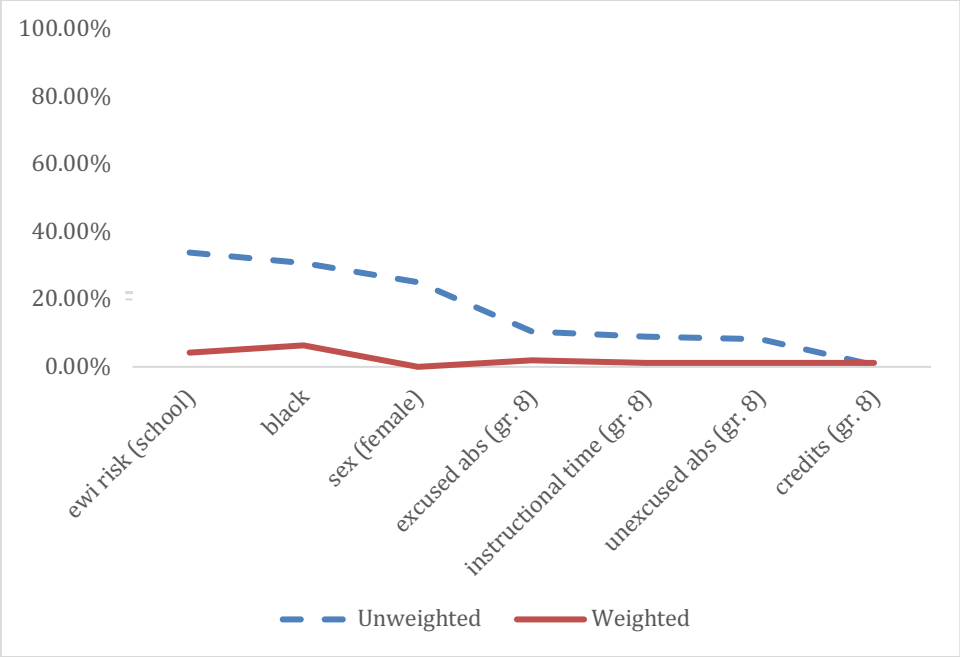

Figure 5.5.2 Standardized Mean Differences for Weighted and Unweighted Data

Partially Clustered Design for Treatment vs. Comparison Analysis. In order to account for the clustering of program participants in small groups alongside a comparison group that is not clustered, we used a partially nested multi-level model (Sterba, 2017) to separate within and between group variance in the data for program participants. This enabled us to examine the extent to which group membership is linked to changes in internal and external resilience assets (i.e., by estimating the intraclass correlation [ICC] for each outcome), and also to derive estimates of program effects without violating assumptions of independence of observations. Sterba (2017) recommends the use of partially nested models for designs such as the current study, even when ICC = 0.

Missing Data. Missing data due to non-response were imputed using Mplus Version 7.1 via multiple imputation using 20 datasets for the Survey Sample and 10 datasets for the Academic Records sample.

6 FINDINGS

6.1 Does participation increase resilience and reduce risk factors for juvenile justice system involvement - reduced truancy, disciplinary problems and improved academic performance?

Primary Analysis. Sterba's (2017) partially clustered model for assessing intervention effects was used to assess effects of Project Arrive participation on improvements in resilience assets by program exit. This model was also used to assess academic outcomes at the end of 9th and 10th grades. These models accounted for selection bias via weighting on the propensity score; models also adjusted for any pre-test differences in the dependent variables that were not fully balanced using propensity score weights. To examine program-related associations with juvenile justice

system involvement, we calculated relative risk ratios; It should be noted that these analyses were limited to simple descriptive statistics because we were able to obtain only aggregate data on the rates of justice system involvement in the Project Arrive and Comparison groups for students' 8th, 9th, and 10th grade years.

Resilience Assets. Results of analysis of Internal and External resilience assets are shown in Table 6.1a.

Table 6.1.a
Adjusted means at post-test and program effects for external resources and internal assets.

	Comparison	Project Arrive			
	Mean (SD)	Mean (SD)	ICC	t	d
External Resources					
School Support	2.85 (0.75)	3.27 (0.37)	0.08	3.31***	0.56
School Belonging	3.14 (0.62)	3.53 (0.77)	@0.00	3.55***	0.64
School Meaningful Participation	2.09 (0.79)	2.61 (0.87)	0.03	3.66***	0.66
Peer Caring Relationships	2.85 (0.76)	3.23 (0.77)	@0.00	2.97***	0.50
Prosocial Peers	2.73 (0.62)	3.06 (0.74)	@0.00	3.09***	0.52
Home Support	3.18 (0.52)	3.22 (0.61)	0.10	0.18	0.03
Home Meaningful Participation	2.61 (0.84)	2.91 (0.94)	@0.00	2.25*	0.35
Internal Assets					
Self-Efficacy	3.08 (0.46)	3.13 (0.58)	0.02	0.54	0.10
Empathy	3.13 (0.61)	3.13 (0.70)	0.08	0.03	0.00
Problem Solving	2.38 (0.70)	2.84 (0.77)	@0.00	3.87***	0.66
Self-Awareness	3.36 (0.07)	3.24 (0.07)	@0.00	-1.19	-0.20

*Note: Baseline characteristics for Project Arrive (PA) and comparison samples balanced using inverse probability of treatment weighting (IPTW). Estimates adjusted for pre-test scores on each dependent variable. Due to near-zero between group variance in the treatment group, the intraclass correlation coefficient (ICC) was fixed at 0 for some variables (indicated with "@") in order for models to converge. Standard deviations calculated for PA as the sum of between and within group variance; standardized effect sizes (Cohen's d) calculated using comparison group standard deviations. * p < .05; ** p < .01; *** p < .001*

External Assets. There were significant differences at post-test, all favoring Project Arrive participants, on 6 of the 7 external resilience assets See Table #). Standardized effect sizes for the differences that reached significance ranged from *d* =.35 to *d* =.66. Participants reported more positive perceptions of assets in the contexts of school (i.e., school belonging, school support, and meaningful participation at school), peers (i.e., caring relationships and association with prosocial peers), and home (meaningful participation at home). The only exception was that Project Arrive participants and comparisons did not differ in their perceptions of support at home.

Internal Assets. With regard to internal assets, a significant difference was found only for problem solving skills, with an effect size of $d = .66$. Differences were not significant for self-efficacy, empathy, or self-awareness.

Academic Outcomes. Results of analysis of Internal and External resilience assets are shown in Table 6.1b.

Table 6.1.b
Adjusted means and program effects for instructional time, grade point average, and progress toward graduation at the end of 9th grade and 10th grade

	Comparison	Program			
	Mean (SD)	Mean (SD)	ICC	t	d
9th Grade					
Instructional Time	87.92 (10.23)	89.24 (8.74)	0.15	2.10*	0.13
Grade Point Average	1.86 (0.84)	1.89 (0.87)	0.24	0.28	0.03
Credits Earned	48.04 (17.91)	53.50(19.23)	0.25	2.80**	0.31
10th Grade					
Instructional Time	81.09 (18.17)	82.88 (17.15)	0.19	1.03	0.10
Grade Point Average	1.90 (0.94)	1.97 (0.97)	0.18	0.71	0.07
Credits Earned	49.70 (21.54)	56.12 (20.64)	0.14	3.23***	0.30

Note: Baseline characteristics for program and comparison samples balanced using inverse probability of treatment weighting (IPTW). Estimates adjusted for pre-test scores on each dependent variable. Standard deviations calculated for program sample as the sum of between and within group variance; standardized effect sizes (Cohen's D) calculated using comparison group standard deviations.
* $p < .05$; ** $p < .01$; *** $p < .001$

Credits Earned. Project Arrive participants earned significantly more credits relative to comparisons by the end of 9th grade, $d = .31$, and by the end of 10th grade, $d = .30$. Of note, by the end of 10th grade 60% of Project Arrive participants were on-track toward graduation, in contrast to only 49% of comparisons.

Instructional Time. By the end of 9th grade, Project Arrive students received more instructional time than comparisons, $d = .13$. However, despite a similar difference in the means for Project Arrive vs. comparisons, the difference in instructional time did not reach significance by the end of 10th grade. The 10th grade null finding appears to reflect an increase in the variance for instructional time in the comparison group; although similar proportions of comparison (43.3%) and Project Arrive (42.8%) students fell below the district's cutoff for truancy 87.5%, a larger proportion of comparison students (12.2%) received very low – less than 50% - instructional time than did Project Arrive students (7.1%), X^2 (1) = 4.82, $p = .03$.

Grade Point Average. Differences in GPA between program students and comparison students did not reach significance by the end of either 9th grade or 10th grade. Average GPA for both groups was below 2.0 throughout the study period.

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Juvenile Justice System Contact. Through an agreement with the San Francisco Juvenile Probation and School Departments, we were able to obtain aggregate records of the number of records of juvenile offences during the 3-year period from 8th through 10th grade for Project Arrive and Comparison students. Analysis was limited to simple comparisons of rates for the two groups. Overall, 13% of Project Arrive students and 10% of comparisons had a juvenile justice record at any time during that period. In order to examine risk of juvenile justice involvement, we calculated relative risk ratios, defined as the ratio of the probability of having a juvenile justice record during a specified period in the Project Arrive group to the probability of having a juvenile justice record during the same period in the comparison group. A value of 1.0 indicates that there is no difference in the probability of a juvenile justice contact; a value < 1.0 means that there is a *lower* likelihood of a juvenile contact in the Project Arrive group; and a value >1.0 means that there is a *higher* likelihood of a juvenile contact in the Project Arrive group.

Table 6.1c displays the proportion of Project Arrive and Comparison students that had juvenile justice records, as well as the relative risk of a juvenile offense and Figure 6.1.1 displays the relative risk data. As expected, the relative risk indices indicate that Project Arrive students had 32% higher relative risk of ever having a juvenile offense during the 3-year period from 8th through 10th grades. Relative risk was also higher for the 8th grade and 10th grade years. In contrast, the risk of a juvenile offense was about the same for Project Arrive and Comparison students for 9th grade year, the year in which Project Arrive students were participating in the program. Thus, although these risk ratios did not reach statistical significance, there is some indication that Project Arrive may have contributed to short term reduction in risk for juvenile justice involvement.

Table 6.1.c
Incidence and relative risk of juvenile offenses on record with the Juvenile Probation Department for Project Arrive and Comparison Students.

	Project Arrive (*n* = 241)	Comparison (n = 976)	Relative Risk	95% CI	z	p
Any Year (Ever)	13.28%	10.04%	1.32	0.91-1.92	1.47	0.14
8th Grade	3.73%	2.87%	1.30	0.62-2.72	0.71	0.48
9th Grade	2.90%	3.07%	0.94	0.42-2.13	0.14	0.89
10th Grade	5.39%	4.20%	1.28	0.70-2.35	0.79	0.43

Note: Relative risk (RR) is the ratio of the probability of having a juvenile record or offense for Project Arrive participants vs. Comparison students. A RR of 1.0 indicates that the two groups have equal likelihood of a juvenile record or offense; a RR >1 indicates that Project Arrive participants have greater likelihood of a juvenile record or offense; and a RR < 1 indicates that Comparison students had a greater likelihood of a juvenile record or offense.

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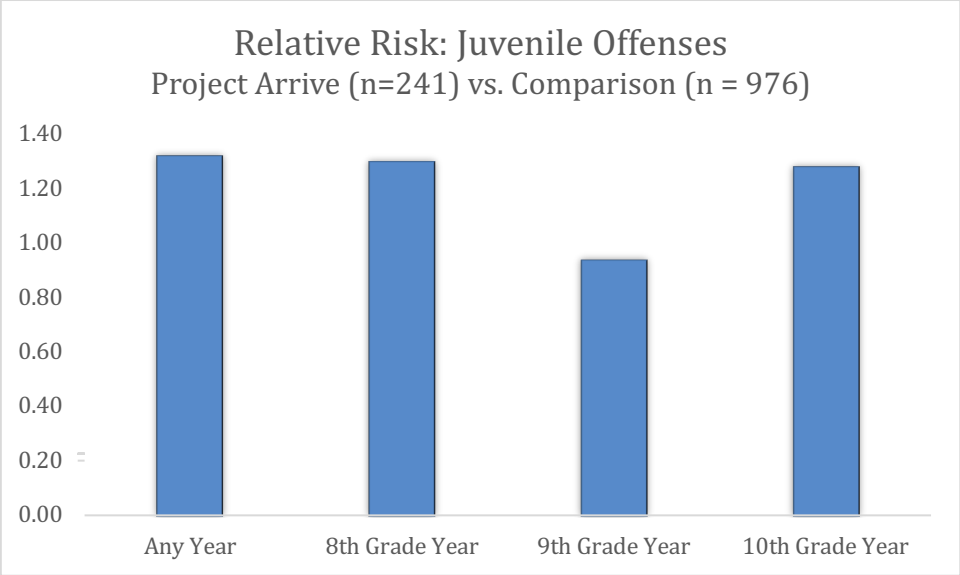

Figure 6.1.1

SUMMARY AND IMPLICATIONS FOR RESEARCH QUESTION #1.
Research question #1 focused on overall effects of participation in Project Arrive on increasing resilience assets and reducing key academic risk factors for Juvenile Justice Involvement (i.e., academic achievement and truancy). Key findings were the following:

(1) Strong effects favoring Project Arrive on 6 of 7 external resilience assets (school support, school belonging, meaningful participation at school, caring relationships with peers, engagement with prosocial peers, and meaningful participation at home).
(2) A strong effect favoring Project Arrive on problem solving skills.
(3) Moderate effects favoring Project Arrive on credits earned toward graduation by the end of 9th and 10th grades
(4) A small effect favoring Project Arrive on instructional time by the end of 9th grade.
(5) An apparent reduction in juvenile justice system involvement for Project Arrive participants during the 9th grade year.

Overall, these findings suggest that Project Arrive is a promising strategy for reducing academic risk factors for juvenile justice involvement with some effects that persist a full year after program exit. Project Arrive also appears to be a promising strategy for increasing sense of belonging and support at school, as well as in peer and home settings, resilience factors that have been linked to reduced likelihood of school dropout and academic failure.

6.2 What is the role of group social processes (cohesion, mutual help, connection with mentor) in contributing to outcomes for Project Arrive participants?

The first step in this analysis was to examine the properties of the mentor relationship and group process measures, with a focus on the means at mid-year and post-test, retest (stability) correlations, and intraclass correlations (See Table 6.2a). Intraclass correlations ranged from .07 to .47 at midyear, and from .07 to .17 at post-test. Individual participant ratings on these scales indicated little change in the means from mid-year to post-test with the exception of a significant

increase in perceptions of mutual help ($p < .05$). Overall, groups reported positive relationships with mentors, high levels of cohesive group climate, and low levels of conflict.

Table 6.2.a
Means, Standard Deviations, Retest Correlations, and Intraclass correlations for mentee ratings of relationship with mentors and of group process

	Mean (SD)		Retest Correlation	Intraclass Correlation (ICC)	
	Mid-Year	**Post-Test**	***R***	**Mid-Year**	**Post-Test**
Relationship Quality with Mentors	3.53 (0.76)	3.41 (0.71)	.23	.07	.17
Group Climate (overall)	3.11 (0.72)	3.22 (0.89)	.31	.34	.10
Mutual Help[+]	2.90 (0.92)	3.16 (0.89)	.15	.47	.13
Engagement with Group Activities	3.24 (0.75)	3.28 (0.83)	.36	.10	.07
Belonging/Cohesion	3.17 (0.81)	3.28 (0.74)	.27	.27	.10
Conflict	1.76 (1.09)	1.89 (1.21)	.42	.28	.08

Note: Overall group climate includes all items from mutual help, engagement, and belonging/cohesion subscales; conflict item is not included in total score. All measures on a 1-4 scale. [+]Significant increase from mid-year to post-test, t(1 df) = 2.16, p = .03 .

Multiple regression analysis accounting for clustering of participants in mentoring groups was used to examine associations of Mentor relationship quality and group climate with external and internal resilience assets. These models included controls for baseline scores on each dependent variable.

Table 6.2b shows results of the regression analyses for external resilience assets. The quality of relationship with mentors was associated with increases in students' perceived support at school and perceived support from peers. Positive perceptions of group climate were associated with increases in school support, meaningful participation at school and meaningful participation at home.

Table 6.2.b
Youth reports of Relationship Quality with Mentors and Overall Group Climate predicting change in external resilience assets.

	School Belonging	**School Support**	**School Meaningful Participation**	
Rel. Quality with Mentors	.26 (.22)	**.44 (.14)**	.11 (.13)	
Group Climate (overall)	.31 (.22)	**.36 (.17)**	**.26 (.13)**	
	Peer Support	**Prosocial Peers**	**Home Support**	**Home Meaningful Participation**
Rel. Quality with Mentors	**.23 (.10)**	.06 (.14)	.15 (.09)	.22 (.18)
Group Climate (overall)	.26 (.18)	.29 (.17)	.14 (.14)	**.23 (.12)**

Note: Regression models account for clustering in groups. Mid-year and post-test measures of relationship quality with mentors and group climate were averaged to create scores used in analysis. Unstandardized estimates for regression of external resilience assets (post-test) on relationship quality with mentors and overall group climate estimated in separate models that controlled for pre-test measures of resilience assets. Estimates that reached significance (p ≤ .05) are bolded.

Table 6.2c shows results of the regression analyses for internal resilience assets. The quality of relationship with mentors was unrelated to internal resilience assets. Positive perceptions of group climate were associated with increases in self efficacy and self-awareness.

Table 6.2.c
Youth reports of Relationship Quality with Mentors and Overall Group Climate predicting change in internal resilience assets.

	Self-Efficacy	Empathy	Problem Solving	Self Awareness
Rel. Quality with Mentors	.22 (.14)	.15 (.15)	.11 (.09)	.22 (.13)
Group Climate (overall)	**.37 (.14)**	.31 (.19)	.16 (.17)	**.52 (.15)**

Note: Regression models account for clustering in groups. Mid-year and post-test measures of relationship quality with mentors and group climate were averaged to create scores used in analysis. Unstandardized estimates for regression of internal resilience assets (post-test) on relationship quality with mentors and overall group climate estimated in separate models that controlled for pre-test measures of resilience assets. Estimates that reached significance (p ≤ .05) are bolded.

Multiple regression analysis accounting for clustering of participants in mentoring groups was used to examine associations of mentor relationship quality and group climate with academic outcomes. These models included controls for baseline scores on each dependent variable.

Table 6.2d shows results of the regression analyses for academic outcomes. The quality of relationship with mentors was associated with increases in students' grades at the end of 9th and 10th grades and with increases in credits earned at the end of 9th and 10th grades. Positive perceptions of group climate were associated with increases in school grades at the end of 10th grade.

Table 6.2.d
Youth reports of Relationship Quality with Mentors and Overall Group Climate predicting change in academic outcomes at the end of 9th and 10th grades.

	Grade Point Avg. (9)	Instructional Time (9)	Credits Earned (9)
Rel. Quality with Mentors	**0.34 (0.15)**	2.27 (2.13)	**4.46 (2.08)**
Group Climate (overall)	0.28 (0.18)	-1.02 (2.22)	3.41 (2.17)
	Grade Point Avg. (10)	**Instructional Time (10)**	**Credits Earned (10)**
Rel. Quality with Mentors	**0.53 (0.17)**	0.20 (0.14)	**4.71 (2.12)**
Group Climate (overall)	**0.26 (0.12)**	0.13 (0.12)	0.18 (0.12)

Note: Regression models account for clustering in groups. Mid-year and post-test measures of relationship quality with mentors and group climate were averaged to create scores used in analysis.

Unstandardized estimates for regression of outcomes (end of 9th and 10th grades) on relationship quality with mentors and overall group climate estimated in separate models that controlled for 8th grade academic variables. Estimates that reached significance (p ≤ .05) are bolded.

SUMMARY AND IMPLICATIONS FOR RESEARCH QUESTION #2.

Research Question #2 focused on the role of the quality of the relationship with mentors and group climate in contributing to outcomes for Project Arrive participants.

Descriptive statistics indicated that participants reported:

(1) Positive relationships with mentors at mid-year and post-test assessments.
(2) A positive overall group climate and low levels of conflict at mid-year and post-test.
(3) Increases from mid-year to post-test only for the mutual help subscale of group climate.

Key findings indicated:

(4) Project Arrive participants with more positive relationships with mentors showed increases in school support and caring relationships with peers by the end of 9th grade.
(5) Project Arrive participants who reported a more positive group climate showed increases in meaningful participation at home, self-efficacy, and self-awareness by the end of 9th grade.
(6) Project Arrive participants with more positive relationships with mentors showed increases in grades and credits earned by the end of both 9th and 10th grades.
(7) Project Arrive participants who reported a more positive group climate showed increases in grades only at 10th grade.

Relationships with mentors and group climate appear to play important, but distinct, roles in youth outcomes. Relationships with mentors may be more important for building external resilience assets and reducing academic risks. In contrast, group climate may play a greater role in building internal resilience assets, and interestingly, with generalizing to other settings (e.g., home). It is notable that although overall effects (relative to a comparison group) were not found for internal resilience assets and grades, variations in relationship quality with mentors and in group climate contributed to explaining variance in these outcomes, suggesting that improved implementation of mentoring groups could result in stronger effects in these areas.

6.3 What program, mentor, and mentee characteristics contribute to positive group processes?

For this analysis, we focused on three characteristics of mentoring groups group size, gender composition, and ethnic diversity, and one mentor characteristic – years of experience. We focused on the sample of Project Arrive participants who completed surveys (N = 114, number of groups, K = 32). Data on these group and mentor characteristics were drawn from several sources. We used a roster of all Project Arrive participants (not only those that completed surveys, N = 249) to construct the measures of group size, gender composition, and ethnic diversity. As shown in Table 6.3a, groups ranged in size from 2 to 9 members with a mean of 6.28. given that most groups had two mentors the typical ratio of mentors to mentees was between 3:1 and 4:1. There were 10 all-male groups, 10 all-female groups, and 12 mixed-gender groups. Ethnic diversity of groups was calculated using the Inverse Simpson Index, which takes into account both the number of ethnic groups represented in each mentoring group and how evenly distributed the ethnic groups were within each mentoring group. The value of the index represents the probability that any two members drawn from the group would represent a

different ethnic group (i.e., 0 = no diversity; 1 = maximum diversity, see http://countrysideinfo.co.uk/simpsons.htm).

Mentor experience was taken from the end of year mentor survey that was completed by 40 mentors representing 30 different groups. Mentors reported their years of experience working with youth on a scale from 1 = *less than 1 year* to 6 = *16 or more years.* When more than one mentor from a given group responded to the mentor survey, we averaged this rating. Mentors reported having between 1-2 years of experience to more than 16 years of experience, with a mean of 3.80, which corresponds to roughly 6-10 years of experience.

Table 6.3.a
Descriptive statistics for group and mentor characteristics.

	Mean (sd)	Frequency	Range (min-max)
Group Size	6.28 (1.86)		2 – 9
Gender Composition			
• Male Only		10	
• Female Only		10	
• Mixed Gender		12	
Group Ethnic Diversity	0.63 (0.28)		0 – 1
Mentor Experience	3.80 (1.22)		2 – 6

Note: Group diversity calculated using the Inverse Simpson's diversity index (1 = maximum diversity); Mentor experience rated on a scale from 1 = less than 1 year to 6 = 16 or more years.

Multilevel regression analyses were used to examine the role of group size, gender composition, ethnic diversity, and mentor experience in predicting change from mid-year to post-test in participant ratings of relationship quality with mentors and group climate. Given the small overall sample size and small cluster size, it was necessary to examine each of group and mentor characteristics in a separate model. As shown in Table 6.3b, participants in smaller groups rated both relationship quality with mentors and overall group climate more positively than those in larger groups. There were no significant associations of gender composition, ethnic diversity, or mentor experience with relationship quality with mentors and group climate.

Table 6.3.b
Multilevel regression of relationship quality with mentors and overall group climate on group size, gender composition, ethnic diversity, and mentor experience (N = 114; K = 32).

	Relationship Quality with Mentor	Group Climate
Group Size	**-0.54 (0.23)**	**-0.62 (0.22)**
Gender		
• Female Only	-0.57 (0.43)	-0.80 (1.76)

• Mixed (Male and Female)	0.23 (0.38)	-0.05 (0.50)
• Male Only (Reference Group)	n/a	n/a
Group Ethnic Diversity	-0.09 (0.35)	-0.16 (0.53)
Mentor Experience	0.01 (0.07)	0.40 (0.93)

Note: Unstandardized regression coefficients from separate multilevel regression models. Group and mentor characteristics measured at level 2. Each model examines post-test scores on the dv controlling for mid-year scores. Models that reached significance (p < .05) are bolded.

SUMMARY AND IMPLICATIONS FOR RESEARCH QUESTION #3.
Research Question #3 focused on program, mentor, and mentee characteristics that contribute to the quality of the relationship with mentors and group climate.
(1) Participants in smaller groups reported more positive relationships with mentors and a more positive group climate.
(2) Gender composition, ethnic diversity, and mentor experience working with youth were unrelated to perceptions of the quality of the relationship with mentors and group climate.
The lack of findings for gender composition, ethnic diversity, and mentor experience suggest that positive group experiences and relationships can emerge from a wide variety of group characteristics. However, it appears to be important to limit the size of groups, even in programs that emphasize co-mentoring or mentoring teams.

6.4 What critical program practices (e.g., structured activities, student choice/influence on group activities) increase the likelihood of positive outcomes for the group and its members? How do structural, mentor, and mentee characteristics influence implementation and fidelity?

The last two study questions were primarily qualitative and focused on gaining a deeper understanding of program practices, and insights from mentor and mentee experiences in the program. Project Arrive specifically targets academics and attendance; thus, it was important to identify how mentors were addressing academic concerns. Several mentors indicated that academic achievement was an important part of their weekly group meetings, and they used various tactics to address the academic needs of their mentees including binder check, personal accountability, goal setting and group incentives. One mentor described her group's rituals surrounding academics:

> *So each week they check in about academics for the last week and make a goal for the following week…They pick one class and they brain storm a list of things that they can practice to do well. And so, they pick one of those practices in one of those classes at least, or they come up with their own and they write it on a piece of paper with the name, the date, the class, and the practice. Then each week they check in about whether they were able to do that from the last week, and they set a new goal for the following week. That's the second go 'round and that's been effective.*

Creating rituals and weekly routines likely fosters a sense of group identity and cohesion that supports mentees' sense of belonging. In addition, setting weekly expectations to which students know they will be held accountable may be a motivating factor to improve academic performance. One mentee stated, "They give us advice to help us get our grades up."

Almost every mentor described the benefits of close adult and peer connections that group participation facilitates. One mentor explained how these relationships foster a sense of school belonging that mentees had not experienced before:

> *I think it's creating that sense of belonging and relationship when they're at school. And so, when they're in the group, they're building that relationship with us. So, I think all of us have kids that are in our groups and come talk to us outside of group time, like, "I need to talk to you about this thing!" Like, there's an adult there that they can come to that they can bounce off anything from "I'm failing math," to you know, "My family might become homeless," or like boy trouble or whatever. Also having a sense of cohesiveness and connection with other peers, which is obviously very important to them. So, I think they get into that sense of like "This is our group."*

One mentee described the relationship her group has with their mentors, "We trust them. A lot of the students come to the mentors." Another stated, "Well, if you're having a bad day then you go to them." Mentors and mentees seem to identify the benefits of social relationships, connectedness, and group cohesion as a critical driving force in positive outcomes for mentees.

Mentors and mentees reported valuing open and organic discussion over utilizing the provided curriculum. They generally felt that allowing students to talk about whatever was on their minds often lead to more meaningful interactions. Open discussions allowed mentees to receive support from the group for the issues with which they were struggling. A mentee reported, "Well, we're friends here so, you know, if I'm getting bugged about something, I could ask them for help." Another mentee described the mutual help and support of his group, stating, "Because, here, I don't know…to me, I like the conversations that we have because they help me and give me advice" (translated from original Spanish). One school administrator discussed the shift from a curriculum focus to a more open dialogue within his group:

> *The teacher in me tends to be more biased towards, you know, the curriculum piece- that has some writing involved, you can make something, or we're reading something. But, then some of our most powerful groups have been when we've left some space for students to say what's on their mind. Because then we build on that, and we push on that, and we see, "Oh, there's an opportunity to teach more about this and to teach more about this."*

Some differences in implementation emerged from the data regarding mentor experience. Mentors with a lot experience and training reported feeling more comfortable allowing their groups to be discussion-based. The curriculum seemed to be helpful for beginning mentors, but one experienced mentor described using the curriculum as a back-up:

> *To me the curriculum is there if you're not getting what you really want. Because, usually, if it's a really innovative group, they're basically saying, "I want to talk about this and that." The curriculum is there…if you don't know where to go if you are a group leader. Or you don't know what to do. That's how I look at it.*

Structuring groups with co-mentors also seemed to have a positive influence. Groups with mentors holding different specialties (i.e. academic advising, mental health counseling) were able to balance academic and socio-developmental needs of the group as well as create buy-in from the large school community. One conversation between two co-mentors described this dynamic:

> *I really like having an [academic] counselor and wellness staff. Like, I think that we really complement each other. Like, I think having people that work in different departments and have different strengths as mentors is really helpful. Like [Name] can go over all of the grade stuff and the credits and blahblahblah; and, I can talk more about resources and mental-emotional health support that students might need outside the group. And just having, I mean I run a lot of groups, and [Name]'s run some groups—so having that combination of skills has been really really helpful. Cause she makes sure it's not just like a process fun group. Cause she's like "no, we're keeping it on track with the academics". We just have like different strengths that we put into it, which is good."*

Co-mentors from different departments also helped create awareness of the various resources available to students to build school engagement. One mentor mentioned utilizing interdisciplinary co-mentor skills, knowledge, and resources:

> *I also had other resources too. My co-facilitator, she's a ASAP, an after school program coordinator, so we've talked to kids about internships like for summer jobs and internships. So we have that conversation too about providing them with connections with outside internships and jobs.*

Several mentors reflected on the energy and enthusiasm mentees had for Project Arrive, and this energy helped mentors maintain a positive view of their groups, describing their mentees as honest, diverse, and receptive. Mentees described their mentors as friendly, helpful, and trustworthy.

Mentors also discussed the challenges regarding structuring groups. Specifically, matching students based on schedules and interests was difficult, but adding in social dynamics and individual preferences seemed impossible to several of the site coordinators. When matches failed, conflicts arose in groups, which resulted in tension and attrition. One mentor/site coordinator expressed her frustration about creating compatible groups:

> *And the one girl just stopped coming. She said she wanted to get her grade up in that class, but I don't know if that's why. There were two different segments of the group. I think that part of the challenge, and I might have more of this because I do a lot of the coordinating of the groups and putting them together and who's in what group, and it's hard. You know normally when you're structuring a group, you're thinking about the different, unique personalities and how they might gel together and different group readiness factor type stuff. I'm not really able to do that because it starts so early in the year. So, it's just kind of like, "Ok, we'll just put all these kids in this group. And, it happened that in our group there was kind of like two packs of friends that I had no*

> *awareness of, and we worked through some aspects of it, but there's been some fall out. It's not the easiest thing to negotiate.*

Another challenge that nearly every mentor reported experiencing was feeling pulled across several roles they play in the school. Mentors reported struggling to prioritize Project Arrive in the daily stress of their regular job responsibilities. Because mentoring is a volunteer position, schools often see it as "extra" and less valued than paid positions. One mentor described his effort to reconcile his regular job with his mentoring role:

> *I think what doesn't work so well is that we're all so busy, and so its expected and can be challenging…But, I was thinking about it this morning, and I was like, "Do I want to do this next year?" because I am so busy. But, what I get in return and what they get in return is more important. They have somewhere that they are able to be free and speak about whatever they want.*

Despite mentors' demanding schedules and other challenges, they expressed a firm commitment to their groups. One mentor provided this description of her group's commitment to one another:

> *My group is like a little family. We spend a lot of time together. We joke around. We help each other out. You can tell when someone's having a bad day and we gather around and support that person. In the beginning, it took a while to get there. And, that's why I didn't want to let go. You know, we did all this work and they're asking to continue. And that's a good feeling. Now, I see them at lunch helping each other out, and kind of building their own communities.*

SUMMARY AND IMPLICATIONS FOR RESEARCH QUESTIONS #4 and #5.

Research Questions #4 and #5 focused on program practices that influence implementation and fidelity. Key themes from focus groups with mentors and mentees include the following:

(1) Rituals and regular routines related to program and group goals contribute to a sense of group identity and cohesion.
(2) Relationships with mentors and other students are key to forming a sense of belonging to the group and to school. An important feature of these relationships is a shared sense of ownership and influence in determining group discussions and activities.
(3) Co-mentoring can have a powerful influence, particularly when mentors bring different and complementary skills to their groups.
(4) A structured curriculum may be most beneficial to relatively inexperienced mentors
(5) Key challenges to effective implementation include difficulties integrating the program into the school schedule, and role conflicts experienced by mentors who must balance their positions of authority in the school with the more informal mentoring role.

7 CONCLUSION, DISCUSSION, & IMPLICATIONS

Overall, Project Arrive appears to be a promising strategy for young people at risk for dropping out of school. The data revealed positive effects of participation for several resilience assets and reducing academic risk factors. Findings also pointed to the role of positive relationships with mentors and group climate in contributing to these outcomes. Researchers found that smaller group sizes were related to development of relationships with mentors and group climate, but other group characteristics such as gender and ethnic diversity of mentees was less important.

Mentors and mentees reported several critical program practices including rituals and routines, relationally focused sessions, co-mentors, and a flexible curriculum. These findings have important implications for group mentoring theory and application.

Project arrive is building external resilience assets, including school support, school belonging, school meaningful participation, peer caring relationships, prosocial peers, and home meaningful participation, which have been found to be related to school dropout (Benard, 2004). Further, the results reveal larger effect sizes (*d= .35 - .66)* for these outcomes than is typical in mentoring literature (Dubois et al., 2011), indicating that group mentoring may be particularly effective at promoting resilience for this population. These findings are consistent with previous research on group mentoring showing that reports of closeness with mentors and group discussions about personal issues were associated with improved relationships with parents, teachers, and peers (Herrera, Vang, & Gale, 2002). There is compelling evidence that the complex social structure of group mentoring may offer opportunities to develop relationships and a sense of connection with peers and adults. Within these relationships, mentees may also begin to develop skills needed to maintain relationships. For example, mentors can model effective communication and teamwork as well as guide the group as a whole in resolving conflicts that arise. Youth are able to observe and practice these interpersonal skills in a safe environment.

There were significant findings for one internal asset- problem solving. This may be due to Project Arrive's focus on building skills and resources to navigate academic and social challenges. Other hypothesized gains in internal assets possibly did not pan out given the developmental nature of resilience. Constantine and colleagues (1999) propose that the development of internal resilience assets occurs as a result of a transactional process between an individual and positive environmental contexts (e.g. family, school, peers, community). As such, increases in external assets are thought to lead to increases in internal assets. The measures used in this study were taken from the Resilience and Youth Development Module of the California Healthy Kids Survey, which utilizes the developmental model of resilience as a theoretical framework (Hanson & Kim, 2007). It is possible that Project Arrive may play a role in promoting external assets in the short term, which will eventually lead to increases in internal assets. More longitudinal research with longer follow-up is needed to know for sure. Future projects may also build on these findings by incorporating specific strategies to target internal assets. For example, brief interventions to promote mastery motivation, often referred to as a "growth mindset" have proven to be effective for youth experiencing academic risk factors and could be implemented within the context of mentoring programs (Paunesku et al., 2015). Also, interventions to build skills in effective help-seeking and expanding social capital networks can be incorporated as a strategy to enhance long-term effects (Schwartz & Rhodes, 2016).

This study revealed moderate effects favoring Project Arrive on credits earned toward graduation by the end of 9th and 10th grades, and a small positive effect of Project Arrive on instructional time by the end of 9th grade. Additionally, 60% of participants were on track to graduate compared to less than half of the comparison group. Although drastic improvements in academic performance were not found, program participation seems to be slowing the rate of academic decline that is often seen in the transition to high school. Overall, findings suggest that Project Arrive contributes to reducing educational inequalities for youth at risk for dropping out of school.

In general, Project Arrive participants had higher risk for juvenile justice system contact than comparisons; however, examining the numbers by year revealed an interesting pattern (albeit not statistically significant) of lower risk during the year of program participation. This pattern was revealed through the use of the concept of relative risk, which is often utilized to measure variables with low incidence rates. Unfortunately, researchers did not have individual level data, so they could not perform detailed analyses, which may have shed more light on this finding.

Quality of relationships with mentors and group climate appear to contribute to positive outcomes for group-mentored youth. Mentee reports of the quality of relationships with mentors were related to increases in school support, caring relationships with peers, grades and credits earned with effects lasting one year after program participation in some cases. It seems that relationships with mentors may be more important for building external resilience assets and reducing academic risks. In contrast, group climate was related to increases in meaningful participation at home, self-efficacy, and self-awareness as well as improvements in grades at 10th grade. Group climate may play a greater role in building internal resilience assets, and interestingly, with generalizing to other settings (e.g., home). Group climate includes feelings of connectedness and belonging, mutual help, and engagement. Participants who experience these characteristics in one intimate social circle may be better equipped to generalize them to another. Notably, whereas overall effects for participation in Project Arrive were not found for internal resilience assets and grades, variations in relationship quality with mentors and group climate did contribute to explaining variance in these outcomes, suggesting that improved implementation of mentoring groups could result in stronger effects in these areas.

Given the importance of quality of relationship with mentors and group climate, researchers examined program, mentee, and mentor characteristics that may influence these variables. There were no significant findings related to gender or ethnic make-up of groups, suggesting that meaningful relationships and positive group processes can develop within a wide variety of group demographics. Participants in smaller groups reported more positive relationships with mentors and positive group climate. These findings indicate that it is less important for groups to be structured around gender or ethnic make-up and more important for mentor to mentee ratios to be limited. Establishing smaller groups may help foster the processes of building interpersonal connections and developing meaningful experiences within the group.

Focus groups with mentors and mentees revealed additional valuable information related to program practices that influence implementation and fidelity. Structuring groups with co-mentors who bring different knowledge and skills to the group helped keep balance between academic and socioemotional development goals. Mentors also found it helpful to prioritize appropriate matches among mentees and with mentors; however, the logistics of meeting everyone's preferences were difficult. Beginning to form groups as early in the year as possible may make achieving these goals more realistic; however, in order to do so, an onsite program coordinator is likely needed given the taxed schedules of mentors. To build a sense of group belonging and cohesion, groups may benefit from incorporating rituals and weekly routines (reading covenant, academic check-ins) into meetings as well as a focus on relational aspects of group like trust, mutual help, and support fostered through discussion-based activities. Mentors also noted that it was helpful to have buy-in from the larger school community, which supported

and reinforced mentoring roles. More research is needed to develop effective practices for optimizing program structure.

Group mentoring is a promising approach to reducing risk for school dropout. In particular, Project Arrive has many strengths including the infrastructure of a school setting, engaging professional mentors with insider access to the school system and human services training, and generally enthusiastic and willing school environments. Given these specific features of Project Arrive, it is possible that the findings of this study would not generalize to a non-school setting or programs that do not recruit mentors with professional backgrounds. Additionally, Project Arrive co-mentors collaboratively generated group activities with mentees, which led to some deviations from provided curriculum. Mentors seemed careful to follow general principles of the program, but a lack of thorough attendance and activity logs made it difficult to evaluate program fidelity. There were also difficulties achieving the desired response rate given that the project targeted an already disengaged sample of youth (i.e. EWI identified). To supplement survey and focus group data, researchers negotiated access to additional data that enabled analysis of short-term and intermediate academic outcomes, but more in-depth analyses of potential mediators and moderators of those effects were limited..

Future research should strive to develop a more structured curriculum that still incorporates flexibility for collaboration and relational activities. In addition, more creative and effective practices are needed for tracking program fidelity. Building on current findings, Project Arrive may begin to incorporate preliminary best practices related to structuring groups and focusing curriculum. Specifically, next steps include efforts to target internal resilience assets such as implementing activities related to growth mindset and youth initiated mentoring. The program is also being expanded to middle schools expanding the need for further research to address necessary adaptations to meet the needs of a younger population.

In conclusion, the findings indicate that Project Arrive is an auspicious approach to building resilience and reducing risk for young people vulnerable to school dropout and juvenile justice involvement. Building on these findings, future research should continue studying the potential of group mentoring programs, both in school and community settings.

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9 APPENDICES (RESEARCH PROTOCOLS, SURVEYS)

Appendix A.
Variable list for Student Surveys.

VAR NAME	VARIABLE LABEL	VALUES	# ITEMS	ALPHA	CONSTRUCT	SOURCE
HO_Num	Student ID		1	N/A		
cohort	Cohort 1 (2014-15) 2 (2015-16)	1 to 2	1	N/A		
school	School Attended		1	N/A		
partic	Project Arrive participant vs comparison	1=Project Arrive; 0=Comparison	1	N/A		
ageyears	Age in years (from post if missing pre)			N/A	socio-demographic	
agemnths	Age in months (from post if missing pre)			N/A	socio-demographic	
lowinc	Low income (from post if missing pre)	1=free/reduced lunch, 0=no free/reduced lunch	1	N/A	socio-demographic	
agemo_1	Age in months			N/A	socio-demographic	
ageyr_1	Age in years			N/A	socio-demographic	
sex_1	Sex Male (1) Female (2)	1=Male, 2=Female	1	N/A	socio-demographic	
hisp_1	Ethnic Hispanic (1) Not Hispanic (0)	1=Hispanic, 0=Not Hispanic (any race)	1	N/A	socio-demographic	California Healthy Kids Survey
race_1	Race (regardless of whether Hispanic)	1=Am Ind, 2=Asian, 3=Black/AfrAm, 4=Hawaiian/PacIsl, 5=White, 6=Mixed	1	N/A	socio-demographic	California Healthy Kids Survey
home_1	Home living situation	1=both par, 2=one par,3=oth rel, 4=mult fam, 5=friends home, 6=foster home, 7=hotel/motel, 9=other	1	N/A	socio-demographic	California Healthy Kids Survey
lowinc_1	Low income (free or reduced lunch)	1=free/reduced lunch, 0=no free/reduced lunch	1	N/A	socio-demographic	
raceth_1	Race/Ethnicity (combined from race_1/hisp_1)	1=Am Ind, 2=Asian, 3=Black/AfrAm, 4=Hawaiian/PacIsl, 5=White, 6=Mixed, 7=Hispanic/Latino	2	N/A	socio-demographic	
dstres_1	WAI Distress	1 to 5	12	0.84	emotional adjustment and problem behavior	Weinberger & Schwartz (1990)
anx_1	WAI Anxiety	1 to 5	3	0.69	emotional adjustment and problem behavior	Weinberger & Schwartz (1990)
depres_1	WAI Depression	1 to 5	3	0.72	emotional adjustment and problem behavior	Weinberger & Schwartz (1990)
slfest_1	WAI Self-Esteem	1 to 5	3	0.61	emotional adjustment and problem behavior	Weinberger & Schwartz (1990)
wellbe_1	WAI Wellbeing	1 to 5	3	0.76	emotional adjustment and problem behavior	Weinberger & Schwartz (1990)
anxdep_1	WAI Anxiety/Depression	1 to 5	6	0.82	emotional adjustment and problem behavior	Weinberger & Schwartz (1990)
sewell_1	WAI Self-Esteem/Wellbeing	1 to 5	6	0.71	emotional adjustment and problem behavior	Weinberger & Schwartz (1990)
dstrsum_1	WAI Distress Total Sum Score	12 to 60	12	0.84	emotional adjustment and problem behavior	Weinberger & Schwartz (1990)
hidstr_1	WAI High Distress (above cut-off).	0=below cutoff, 1=above cutoff	12	N/A	emotional adjustment and problem behavior	Weinberger & Schwartz (1990)
slfeff_1	CHKS Self-efficacy	1 to 4	4	0.71	internal resilience assets	California Healthy Kids Survey
empath_1	CHKS empathy	1 to 4	3	0.82	internal resilience assets	California Healthy Kids Survey
prbsol_1	CHKS problem solving	1 to 4	2	0.67	internal resilience assets	California Healthy Kids Survey
slfawr_1	CHKS Self Aware	1 to 4	3	0.70	internal resilience assets	California Healthy Kids Survey
aggres_1	Aggression Sum (frequency)	0 to 71.5	11	0.88	emotional adjustment and problem behavior	Orpinas (1998) cf Dahlberg et al (2005)
acasp_1	Acad Aspiration	1=9-11th gr, 2=Grad HS, 3=Post HS training, 4=Some college, 5=Bus Coll/2yr Degree, 6=Grad 4yr Coll, 7=MA/Teaching Cred, 8=Law Deg, PhD, MD	1	N/A	internal resilience assets	Stevens et al (1992)
acexp_1	Acad Expectation	1=9-11th gr, 2=Grad HS, 3=Post HS training, 4=Some college, 5=Bus Coll/2yr Degree, 6=Grad 4yr Coll, 7=MA/Teaching Cred, 8=Law Deg, PhD, MD	1	N/A	internal resilience assets	Stevens et al (1992)
ethexp_1	MEIM Exploration	1 to 5	3	0.83	cultural factors	Phinney & Ong (2007)

ethcom_1	MEIM Commitment	1 to 5	3	0.77	cultural factors	Phinney & Ong (2007)
ethtot_1	MEIM Eth ID Total	1 to 5	6	0.88	cultural factors	Phinney & Ong (2007)
ethfr_1	MEIM Friends in Ethnic Group	1 to 5	1	N/A	cultural factors	Phinney & Ong (2007)
scholas_1	Scholastic Competence	1 to 4	5	0.69	internal resilience assets	Harter (1988)
schbel_1	CHKS School Belonging	1 to 5	5	0.78	positive social connections	California Healthy Kids Survey
schbelhml_1	CHKS Sch Belong (HiMidLow Scoring)	1=Low, 2=Mid, 3=High	5	N/A	positive social connections	California Healthy Kids Survey
cigev_1	YRBS Ever smoked cigarettes	0 to 1	1	N/A	emotional adjustment and problem behavior	Youth Risk Behavior Survey
cig30_1	YRBS Days smoked last 30 days	0 to 30	1	N/A	emotional adjustment and problem behavior	Youth Risk Behavior Survey
cign30_1	YRBS Cigarettes smoked last 30 days	0 to 20	1	N/A	emotional adjustment and problem behavior	Youth Risk Behavior Survey
alcev_1	YRBS Ever had 1+ drinks alcohol	0 to 1	1	N/A	emotional adjustment and problem behavior	Youth Risk Behavior Survey
alcday_1	YRBS Alcohol days ever	0 to 100	1	N/A	emotional adjustment and problem behavior	Youth Risk Behavior Survey
alc30_1	YRBS Alcohol past 30 days	0 to 30	1	N/A	emotional adjustment and problem behavior	Youth Risk Behavior Survey
bnge30_1	YRBS Days 5+ drinks (past 30)	0 to 20	1	N/A	emotional adjustment and problem behavior	Youth Risk Behavior Survey
marev_1	YRBS Ever used marijuana	0 to 1	1	N/A	emotional adjustment and problem behavior	Youth Risk Behavior Survey
martm_1	YRBS Marijuana # times ever used	0 to 100	1	N/A	emotional adjustment and problem behavior	Youth Risk Behavior Survey
mar30_1	YRBS Marijuana # times past 30 days	0 to 40	1	N/A	emotional adjustment and problem behavior	Youth Risk Behavior Survey
weapn_1	YRBS Weapon at school last 12 months	0 to 12	1	N/A	emotional adjustment and problem behavior	Youth Risk Behavior Survey
fight_1	YRBS Fight at school last 12 months	0 to 12	1	N/A	emotional adjustment and problem behavior	Youth Risk Behavior Survey
skip_1	YRBS Skip school last 12 months	0 to 40	1	N/A	emotional adjustment and problem behavior	Youth Risk Behavior Survey
arrest_1	Arrested last 12 months	0 to 5	1	N/A	emotional adjustment and problem behavior	
gang_1	Gang Member	0 to 1	1	N/A	emotional adjustment and problem behavior	
prcare_1	CHKS Peer caring relationships	1 to 4	3	0.91	positive social connections	California Healthy Kids Survey
socpr_1	CHKS Prosocial peers	1 to 4	2	0.82	positive social connections	California Healthy Kids Survey
sclsup_1	CHKS School support	1 to 4	6	0.93	positive social connections	California Healthy Kids Survey
sclpar_1	CHKS School meaningful participation	1 to 4	3	0.88	positive social connections	California Healthy Kids Survey
homsup_1	CHKS Home support	1 to 4	6	0.86	positive social connections	California Healthy Kids Survey
hompar_1	CHKS Home meaningful participation	1 to 4	2	0.83	positive social connections	California Healthy Kids Survey
sclsuphml_1	CHKS School Support (HiMidLow Scoring)	1=Low, 2=Mid, 3=High	6	N/A	positive social connections	California Healthy Kids Survey
sclparhml_1	CHKS School Meaningful partic (HiMidLow Scoring)	1=Low, 2=Mid, 3=High	3	N/A	positive social connections	California Healthy Kids Survey
scathl_1	School Athletic Team	0 to 1	1	N/A	activity involvement	Fredricks & Eccles (2006)
scclub_1	School Clubs/Student Govt	0 to 1	1	N/A	activity involvement	Fredricks & Eccles (2006)
comact_1	Community Activities	0 to 1	1	N/A	activity involvement	Fredricks & Eccles (2006)
orgsp_1	Organized sports or rec programs	0 to 1	1	N/A	activity involvement	Fredricks & Eccles (2006)
volun_1	Volunteer service	0 to 1	1	N/A	activity involvement	Fredricks & Eccles (2006)
civrt_1	Civic rights activities	0 to 1	1	N/A	activity involvement	Fredricks & Eccles (2006)
hobby_1	Hobbies or other activities	0 to 1	1	N/A	activity involvement	Fredricks & Eccles (2006)
fment_1	Ever been in formal mentoring program	0 to 1	1	N/A	activity involvement	Fredricks & Eccles (2006)

hvment_1	Have current Mentor	0 to 1	1	N/A	activity involvement	
acttot_1	Activities total (not incl mentoring questions)	0 to 7	7	N/A	activity involvement	
hope_1	Hope total score	1 to 6	6	0.90	internal resilience assets	Snyder (1997)
hpagn_1	Hope Agency	1 to 6	3	0.83	internal resilience assets	Snyder (1997)
hppath_1	Hope Pathways	1 to 6	3	0.83	internal resilience assets	Snyder (1997)
qrment_2	Quality of Relationship with Mentors	1 to 4	4	0.85	group social process/engagement	Kuperminc & Cummings (2010)
muthlp_2	Mentoring Group Mutual Help	1 to 4	4	0.84	group social process/engagement	Kuperminc & Cummings (2010)
greng_2	Mentoring Group Engagement	1 to 4	3	0.77	group social process/engagement	Kuperminc (2009)
grcoh_2	Mentoring Group Cohesion	1 to 4	5	0.78	group social process/engagement	Kuperminc & Cummings (2010)
grconf_2	Mentoring Group Conflict	1 to 4	1	N/A	group social process/engagement	Kuperminc & Cummings (2010)
grtot_2	Mentoring Group Total (MH,Eng,Coh,-Conf)	1 to 4	13	0.90	group social process/engagement	Kuperminc & Cummings (2010)
agemo_3	Age in months			N/A	socio-demographic	
ageyr_3	Age in years			N/A	socio-demographic	
lowinc_3	Low income (free or reduced lunch)	1=free/reduced lunch, 0=no free/reduced lunch	1	N/A	socio-demographic	
wellctr_3	Wellness Center Use (# times)	0 to 10	1	N/A		Stone et al. (2013)
qrment_3	Quality of Relationship with Mentors	1 to 4	4	0.84	group social process/engagement	Kuperminc & Cummings (2010)
muthlp_3	Mentoring Group Mutual Help	1 to 4	4	0.90	group social process/engagement	Kuperminc & Cummings (2010)
greng_3	Mentoring Group Engagement	1 to 4	3	0.80	group social process/engagement	Kuperminc (2009)
grcoh_3	Mentoring Group Cohesion	1 to 4	5	0.76	group social process/engagement	Kuperminc & Cummings (2010)
grconf_3	Mentoring Group Conflict	1 to 4	1	N/A	group social process/engagement	Kuperminc & Cummings (2010)
grtot_3	Mentoring Group Total (MH,Eng,Coh,-Conf)	1 to 4	13	0.89	group social process/engagement	Kuperminc & Cummings (2010)
dstres_3	WAI Distress	1 to 5	12	0.86	emotional adjustment and problem behavior	Weinberger & Schwartz (1990)
anx_3	WAI Anxiety	1 to 5	3	0.70	emotional adjustment and problem behavior	Weinberger & Schwartz (1990)
depres_3	WAI Depression	1 to 5	3	0.81	emotional adjustment and problem behavior	Weinberger & Schwartz (1990)
slfest_3	WAI Self-Esteem	1 to 5	3	0.60	emotional adjustment and problem behavior	Weinberger & Schwartz (1990)
wellbe_3	WAI Wellbeing	1 to 5	3	0.78	emotional adjustment and problem behavior	Weinberger & Schwartz (1990)
anxdep_3	WAI Anxiety/Depression	1 to 5	6	0.86	emotional adjustment and problem behavior	Weinberger & Schwartz (1990)
sewell_3	WAI Self-Esteem/Wellbeing	1 to 5	6	0.74	emotional adjustment and problem behavior	Weinberger & Schwartz (1990)
dstrsum_3	WAI Distress Total Sum Score	12 to 60	12	0.86	emotional adjustment and problem behavior	Weinberger & Schwartz (1990)
hidstr_3	WAI High Distress (above cut-off).	0=below cutoff, 1=above cutoff	12	N/A	emotional adjustment and problem behavior	Weinberger & Schwartz (1990)
slfeff_3	CHKS Self-efficacy	1 to 4	4	0.75	internal resilience assets	California Healthy Kids Survey
empath_3	CHKS empathy	1 to 4	3	0.84	internal resilience assets	California Healthy Kids Survey
prbsol_3	CHKS problem solving	1 to 4	2	0.74	internal resilience assets	California Healthy Kids Survey
slfawr_3	CHKS Self Aware	1 to 4	3	0.76	internal resilience assets	California Healthy Kids Survey
aggres_3	Aggression Sum (frequency)	0 to 71.5	11	0.83	emotional adjustment and problem behavior	Orpinas (1998) cf Dahlberg et al (2005)
acasp_3	Acad Aspiration	1=9-11th gr, 2=Grad HS, 3=Post HS training, 4=Some college, 5=Bus Coll/2yr Degree, 6=Grad 4yr Coll, 7=MA/Teaching Cred, 8=Law Deg, PhD, MD	1	N/A	internal resilience assets	Stevens et al (1992)

acexp_3	Acad Expectation	1=9-11th gr, 2=Grad HS, 3=Post HS training, 4=Some college, 5=Bus Coll/2yr Degree, 6=Grad 4yr Coll, 7=MA/Teaching Cred, 8=Law Deg, PhD, MD	1	N/A	internal resilience assets	Stevens et al (1992)
ethexp_3	MEIM Exploration	1 to 5	3	0.87	cultural factors	Phinney & Ong (2007)
ethcom_3	MEIM Commitment	1 to 5	3	0.83	cultural factors	Phinney & Ong (2007)
ethtot_3	MEIM Eth ID Total	1 to 5	6	0.92	cultural factors	Phinney & Ong (2007)
ethfr_3	MEIM Friends in Ethnic Group	1 to 5	1	N/A	cultural factors	Phinney & Ong (2007)
scholas_3	Scholastic Competence	1 to 4	5	0.54	internal resilience assets	Harter (1988)
schbel_3	CHKS School Belonging	1 to 5	5	0.78	positive social connections	California Healthy Kids Survey
schbelhml_3	CHKS Sch Belong (HiMidLow Scoring)	1=Low, 2=Mid, 3=High	5	N/A	positive social connections	California Healthy Kids Survey
cigev_3	YRBS Ever smoked cigarettes	0 to 1	1	N/A	emotional adjustment and problem behavior	Youth Risk Behavior Survey
cig30_3	YRBS Days smoked last 30 days	0 to 30	1	N/A	emotional adjustment and problem behavior	Youth Risk Behavior Survey
cign30_3	YRBS Cigarettes smoked last 30 days	0 to 20	1	N/A	emotional adjustment and problem behavior	Youth Risk Behavior Survey
alcev_3	YRBS Ever had 1+ drinks alcohol	0 to 1	1	N/A	emotional adjustment and problem behavior	Youth Risk Behavior Survey
alcday_3	YRBS Alcohol days ever	0 to 100	1	N/A	emotional adjustment and problem behavior	Youth Risk Behavior Survey
alc30_3	YRBS Alcohol past 30 days	0 to 30	1	N/A	emotional adjustment and problem behavior	Youth Risk Behavior Survey
bnge30_3	YRBS Days 5+ drinks (past 30)	0 to 20	1	N/A	emotional adjustment and problem behavior	Youth Risk Behavior Survey
marev_3	YRBS Ever used marijuana	0 to 1	1	N/A	emotional adjustment and problem behavior	Youth Risk Behavior Survey
martm_3	YRBS Marijuana # times ever used	0 to 100	1	N/A	emotional adjustment and problem behavior	Youth Risk Behavior Survey
mar30_3	YRBS Marijuana # times past 30 days	0 to 40	1	N/A	emotional adjustment and problem behavior	Youth Risk Behavior Survey
weapn_3	YRBS Weapon at school last 12 months	0 to 12	1	N/A	emotional adjustment and problem behavior	Youth Risk Behavior Survey
fight_3	YRBS Fight at school last 12 months	0 to 12	1	N/A	emotional adjustment and problem behavior	Youth Risk Behavior Survey
skip_3	YRBS Skip school last 12 months	0 to 40	1	N/A	emotional adjustment and problem behavior	Youth Risk Behavior Survey
arrest_3	Arrested last 12 months	0 to 5	1	N/A	emotional adjustment and problem behavior	
gang_3	Gang Member	0 to 1	1	N/A	emotional adjustment and problem behavior	
prcare_3	CHKS Peer caring relationships	1 to 4	3	0.90	positive social connections	California Healthy Kids Survey
socpr_3	CHKS Prosocial peers	1 to 4	2	0.82	positive social connections	California Healthy Kids Survey
sclsup_3	CHKS School support	1 to 4	6	0.93	positive social connections	California Healthy Kids Survey
sclpar_3	CHKS School meaningful participation	1 to 4	3	0.90	positive social connections	California Healthy Kids Survey
homsup_3	CHKS Home support	1 to 4	6	0.86	positive social connections	California Healthy Kids Survey
hompar_3	CHKS Home meaningful participation	1 to 4	2	0.85	positive social connections	California Healthy Kids Survey
sclsuphml_3	CHKS School Support (HiMidLow Scoring)	1=Low, 2=Mid, 3=High	6	N/A	positive social connections	California Healthy Kids Survey
sclparhml_3	CHKS School Meaningful partic (HiMidLow Scoring)	1=Low, 2=Mid, 3=High	3	N/A	positive social connections	California Healthy Kids Survey
scathl_3	School Athletic Team	0 to 1	1	N/A	activity involvement	Fredricks & Eccles (2006)
scclub_3	School Clubs/Student Govt	0 to 1	1	N/A	activity involvement	Fredricks & Eccles (2006)
comact_3	Community Activities	0 to 1	1	N/A	activity involvement	Fredricks & Eccles (2006)
orgsp_3	Organized sports or rec programs	0 to 1	1	N/A	activity involvement	Fredricks & Eccles (2006)
volun_3	Volunteer service	0 to 1	1	N/A	activity involvement	Fredricks & Eccles (2006)

civrt_3	Civic rights activities	0 to 1	1	N/A	activity involvement	Fredricks & Eccles (2006)
hobby_3	Hobbies or other activities	0 to 1	1	N/A	activity involvement	Fredricks & Eccles (2006)
fment_3	Ever been in formal mentoring program	0 to 1	1	N/A	activity involvement	Fredricks & Eccles (2006)
hvment_3	Have current Mentor	0 to 1	1	N/A	activity involvement	
acttot_3	Activities total (not incl mentoring questions)	0 to 7	7	N/A	activity involvement	
hope_3	Hope total score	1 to 6	6	0.92	internal resilience assets	Snyder (1997)
hpagn_3	Hope Agency	1 to 6	3	0.86	internal resilience assets	Snyder (1997)
hppath_3	Hope Pathways	1 to 6	3	0.85	internal resilience assets	Snyder (1997)

Note: Number at end of variable name indicates time when data collected (1 = fall survey; 2 = mid-year survey; 3 = spring survey)

Appendix B
Program Participant Survey: Beginning of Year

Supporting Student Success/Fall

Welcome to the Supporting Student Success Survey! Georgia State University and the San Francisco Unified School District are working together to conduct a research study about factors that affect the development of young people like you through the 9th grade year. With your help we will be able to create better programs that help students like you succeed in the future.

First, please answer a few questions about yourself.

1. What year were you born?
    a. 1998 or before
    b. 1999
    c. 2000
    d. 2001

2. What month were you born?
    a. January
    b. February
    c. March
    d. April
    e. May
    f. June
    g. July
    h. August
    i. September
    j. October
    k. November
    l. December

3. What is your sex?
    a. Male
    b. Female

4. Are you of Hispanic or Latino origin?
    a. Yes
    b. No

5. What is your race?
    a. American Indian or Alaska Native
    b. Asian
    c. Black or African American
    d. Native Hawaiian or Pacific Islander
    e. White
    f. Mixed (two or more) races

6. What best describes where you live? A home includes a house, apartment, trailer, or mobile home.
    a. A home with both parents
    b. A home with only one parent
    c. Other relative's home
    d. A home with more than one family
    e. Friend's home
    f. Foster home, group care, or waiting placement
    g. Hotel or motel
    h. Other living arrangement

7. Do you get or are you eligible for a free or reduced-price lunch at your school?
    a. Free lunch
    b. Reduced-price lunch
    c. Neither

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These next questions are about how you feel about yourself.

For each statement, indicate how true you feel these statements are about you.

	False	Somewhat False	Not Sure	Somewhat True	True
1. I usually think of myself as a happy person.	1	2	3	4	5
2. In reality I don't like myself very much.	1	2	3	4	5
3. I'm not very sure of myself.	1	2	3	4	5
4. I'm the kind of person who has a lot of fun.	1	2	3	4	5
5. I worry too much about things that aren't important.	1	2	3	4	5
6. I often feel sad or unhappy.	1	2	3	4	5
7. I usually feel I'm the kind of person I want to be.	1	2	3	4	5

For each statement, indicate how often you experience the following emotions.

	Never	Not Often	Sometimes	Often	Almost Always
8. I feel nervous or afraid that things won't work out the way I would like them to.	1	2	3	4	5
9. I feel lonely.	1	2	3	4	5
10. I get into such a bad mood that I just feel like sitting around and doing nothing.	1	2	3	4	5
11. In recent years, I have felt more nervous or worried about things than I have needed to.	1	2	3	4	5
12. I feel very happy.	1	2	3	4	5

The next questions are about how you feel about yourself and others.

For each statement, indicate how true you feel these statements are about you.

	Not at all true	A little true	Pretty much true	Very much true
1. I can work with someone who has different opinions than mine.	1	2	3	4
2. I can work out my problems.	1	2	3	4
3. I can do most things I try.	1	2	3	4
4. There are many things I do well.	1	2	3	4
5. I feel bad when someone gets their feelings hurt.	1	2	3	4
6. I try to understand what other people go through.	1	2	3	4
7. I try to understand what other people feel and think.	1	2	3	4
8. When I need help I find someone to talk with.	1	2	3	4
9. I try to work out my problems by talking or writing about them.	1	2	3	4
10. There is purpose to my life.	1	2	3	4
11. I understand my moods and feelings.	1	2	3	4
12. I understand why I do what I do.	1	2	3	4

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Please indicate how many times you did each of these things in the last 7 days.

	None	1 Time	2-3 Times	4-5 Times	6+ Times
1. I teased students to make them angry.	0	1	2-3	4-5	6+
2. I got angry very easily with someone.	0	1	2-3	4-5	6+
3. I fought back when someone hit me first.	0	1	2-3	4-5	6+
4. I said things about a kid to make other students laugh.	0	1	2-3	4-5	6+
5. I encouraged other students to fight.	0	1	2-3	4-5	6+
6. I pushed or shoved other kids.	0	1	2-3	4-5	6+
7. I was angry most of the day.	0	1	2-3	4-5	6+
8. I got into a physical fight because I was angry.	0	1	2-3	4-5	6+
9. I slapped or kicked someone.	0	1	2-3	4-5	6+
10. I called other students bad names.	0	1	2-3	4-5	6+
11. I threatened to hurt or hit someone.	0	1	2-3	4-5	6+

The next questions are about your academic future.

1. If you could do exactly what you wanted, how far would you go in school?
    a. 9^{th} – 11^{th} grade
    b. Graduate high school
    c. Post high school, vocational, or tech training
    d. Some college
    e. Business college, or two-year associates degree
    f. Graduate from a four-year college
    g. Get a Master's degree or teaching credential
    h. Get a law degree, PhD, or medical doctor's degree

2. We can't always do what we most want to do. How far do you think you will <u>actually</u> go in school?
    a. 9^{th} – 11^{th} grade
    b. Graduate high school
    c. Post high school, vocational, or tech training
    d. Some college
    e. Business college, or two-year associates degree
    f. Graduate from a four-year college
    g. Get a Master's degree or teaching credential
    h. Get a law degree, PhD, or medical doctor's degree

These next questions are about your ethnic group membership. Think about the ethnic group you belong to and indicate how much you agree with each statement.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I have spent time trying to find out more about my ethnic group, such as history, traditions, and customs.	1	2	3	4	5
2. I have a strong sense of belonging to my own ethnic group.	1	2	3	4	5
3. I understand pretty well what my ethnic group membership means to me.	1	2	3	4	5

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
4. I have often done things that will help me understand my ethnic background better.	1	2	3	4	5
5. I have often talked to other people in order to learn more about my ethnic group.	1	2	3	4	5
6. I feel a strong sense of attachment towards my own ethnic group.	1	2	3	4	5
7. Most of my friends belong to my ethnic group.	1	2	3	4	5

The next questions are about how you think feel about yourself academically. For each statement, indicate how true you feel these statements are about you.

	Not true	A little true	Often true	Always true
1. I am good at my schoolwork.	1	2	3	4
2. I am just as smart as other people my age.	1	2	3	4
3. I am slow in finishing my schoolwork.	1	2	3	4
4. I do my class work well.	1	2	3	4
5. I have trouble figuring out the answers in school.	1	2	3	4

For these next questions, please indicate how strongly you agree or disagree with the following statements about your school.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I feel close to people at this school.	1	2	3	4	5
2. I am happy to be at this school.	1	2	3	4	5
3. I feel like I am part of this school.	1	2	3	4	5
4. The teachers at this school treat students fairly.	1	2	3	4	5
5. I feel safe in my school.	1	2	3	4	5

These next questions ask about cigarette smoking. For each question, please remember to answer honestly.

1. Have you ever tried cigarette smoking, even one or two puffs?
    a. Yes
    b. No

If you responded "Yes" to the previous question, please answer the following two questions:

2. During the past 30 days, on how many days did you smoke cigarettes?
    a. 0 days
    b. 1 or 2 days
    c. 3 to 5 days
    d. 6 to 9 days
    e. 10 to 19 days
    f. 20 to 29 days
    g. All 30 days

3. During the past 30 days, how many cigarettes did you smoke per day?
    a. I did not smoke cigarettes during the past 30 days
    b. Less than 1 cigarette per day
    c. 1 cigarette per day
    d. 2 to 5 cigarettes per day
    e. 6 to 10 cigarettes per day
    f. 11 to 20 cigarettes per day
    g. More than 20 cigarettes per day

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These next questions ask about drinking alcohol. This includes drinking beer, wine, wine coolers, liquor such as rum, gin, vodka, or whiskey. For these questions, drinking alcohol does not include drinking a few sips or wine for religious purposes. Please remember to answer honestly.

4. During your life, on how many days have you had at least one drink of alcohol?
   a. 0 days
   b. 1 or 2 days
   c. 3 to 9 days
   d. 10 to 19 days
   e. 20 to 39 days
   f. 40 – 99 days
   g. 100 or more days

If you responded "Yes" to the previous question, please answer the following two questions:

5. During the past 30 days, on how many days did you have at least one drink of alcohol?
   a. 0 days
   b. 1 or 2 days
   c. 3 to 5 days
   d. 6 to 9 days
   e. 10 to 19 days
   f. 20 to 29 days
   g. All 30 days

6. During the past 30 days, on how many days did you have 5 or more drinks of alcohol in a row, that is, within a couple of hours?
   a. 0 days
   b. 1 day
   c. 2 days
   d. 3 to 5 days
   e. 6 to 9 days
   f. 10 to 19 days
   g. 20 or more days

These next questions ask about marijuana use. Marijuana is also called grass or pot. Please remember to answer honestly.

7. During your life, how many times have you used marijuana?
   a. 0 times
   b. 1 or 2 times
   c. 3 to 9 times
   d. 10 to 19 times
   e. 20 to 39 times
   f. 40 to 99 times
   g. 100 or more times

If you responded "Yes" to the previous question, please answer the following question:

8. During the past 30 days, how many times did you use marijuana?
   a. 0 times
   b. 1 or 2 times
   c. 3 to 9 times
   d. 10 to 19 times
   e. 20 to 39 times
   f. 40 or more times

These next questions ask about some other behaviors. Please remember to answer honestly.

9. During the past 12 months, on how many days did you carry a weapon such as a gun, knife, or club on school property?
   a. 0 times
   b. 1 time
   c. 2 or 3 times
   d. 4 or 5 times
   e. 6 or 7 times
   f. 8 or 9 times
   g. 10 or 11 times
   h. 12 or more times

10. During the past 12 months, how many times were you in a physical fight on school property?
    a. 0 times
    b. 1 time
    c. 2 or 3 times
    d. 4 or 5 times
    e. 6 or 7 times
    f. 8 or 9 times
    g. 10 or 11 times
    h. 12 or more times

11. During the past 12 months, about how many times did you skip school or cut classes?
    a. 0 times
    b. 1–2 times
    c. A few times
    d. Once a month
    e. Once a week
    f. More than once a week

12. During the past 12 months have you been arrested for a crime, offence, and/or a violation?
    a. Never
    b. Yes, 1-2 times
    c. Yes, 3-4 times
    d. Yes, 5 or more times
    e. I prefer not to answer

13. Do you consider yourself a member of a gang?
    a. No
    b. Yes

These next questions are about the people in your life. For each statement, indicate how true you feel these statements are about your personally.

14. During the past 12 months have you been arrested for a crime, offence, and/or a violation?
    a. Never
    b. Yes, 1-2 times
    c. Yes, 3-4 times
    d. Yes, 5 or more times
    e. I prefer not to answer

15. Do you consider yourself a member of a gang?
    a. No
    b. Yes

These next questions are about the people in your life. For each statement, indicate how true you feel these statements are about your personally.

	Not at all true	A little true	Pretty much true	Very much true
1. I have a friend my own age who really cares about me.	1	2	3	4
2. I have a friend my own age who talks with me about my problems.	1	2	3	4
3. I have a friend my own age who helps me when I'm having a hard time.	1	2	3	4
4. My friends try to do what is right.	1	2	3	4
5. My friends do well in school.	1	2	3	4
6. At my school, there is a teacher or some other adult who really cares about me.	1	2	3	4
7. At my school, there is a teacher or some other adult who tells me when I do a good job.	1	2	3	4
8. At my school, there is a teacher or some other adult who notices when I'm not there.	1	2	3	4
9. At my school, there is a teacher or some other adult who always wants me to do my best.	1	2	3	4
10. At my school, there is a teacher or some other adult who listens to me when I have something to say.	1	2	3	4
11. At my school, there is a teacher or some other adult who believes that I will be a success.	1	2	3	4
12. At school, I do interesting activities.	1	2	3	4
13. At school, I help decide things like class activities or rules.	1	2	3	4
14. At school, I do things that make a difference.	1	2	3	4
15. At home there is a parent or some other adult who expects me to follow the rules.	1	2	3	4

	Not at all true	A little true	Pretty much true	Very much true
16. At home there is a parent or some other adult who is interested in my schoolwork.	1	2	3	4
17. At home there is a parent or some other adult who believes that I will be a success.	1	2	3	4
18. At home there is a parent or some other adult who talks with me about my problems.	1	2	3	4
19. At home there is a parent or some other adult who always wants me to do my best.	1	2	3	4
20. At home there is a parent or some other adult who listens to me when I have something to say.	1	2	3	4
21. I do things at home that make a difference.	1	2	3	4
22. I help make decisions with my family.	1	2	3	4

These next questions are about activities you do during your free time (at school or in your neighborhood). For each activity, indicate whether you have been involved in the past 12 months.

	Yes	No
1. School athletic team	Y	N

2. School activities such as clubs or student government	Y	N
3. Activities in the community such as scouts, service, hobby, and clubs	Y	N
4. Organized sport or recreational programs outside of school	Y	N
5. Volunteer service activities	Y	N
6. Civic rights activities	Y	N
7. Other hobbies or activities	Y	N
8. Have you ever been a part of a formal mentoring program?	Y	N
9. I have an adult, other than my parents or guardian that I can go to for support and guidance.	Y	N

The next questions are about how you think about yourself and how you do things in general. For each sentence, think about how you are in most situations and indicate which response describes you the best.

	None of the time	A little of the time	Some of the time	A lot of the time	Most of the time	All of the time
1. I think I am doing pretty well.	1	2	3	4	5	6
2. I can think of many ways to get the things in life that are most important to me.	1	2	3	4	5	6
3. I am doing just as well as other kids my age.	1	2	3	4	5	6
4. When I have a problem, I can come up with lots of ways to solve it.	1	2	3	4	5	6
5. I think the things I have done in the past will help me in the future.	1	2	3	4	5	6
6. Even when others want to quit, I know that I can find ways to solve the problem.	1	2	3	4	5	6

Appendix C
Program Participant Survey: Mid-year

Project Arrive Student Survey/Mid-Year

Welcome to the Project Arrive Student Survey! Georgia State University and the San Francisco Unified School District are working together to conduct a research study about Project Arrive. Your information will help us learn about how being part of Project Arrive affects your development through your 9th grade year. With your help we will be able to make the program even better in the future.

These next questions are about how you feel about your mentor/group leader. Please rate your level of agreement with the following statements:

	Not at all true	A little true	Pretty much true	Very much true
1. I like to meet with my mentor(s).	1	2	3	4
2. My mentor(s) care about me.	1	2	3	4
3. My mentor(s) help me do better in school	1	2	3	4
4. Time spent with my mentor(s) is worthwhile.	1	2	3	4

These next questions are about your thoughts and feelings about being a group member.

	Not a lot	A little bit	Somewhat	Very much
1. How much did the group help you to deal with everyday problems?	1	2	3	4
2. How much did you help others to deal with everyday problems?	1	2	3	4
3. How much did the group help you make better decisions?	1	2	3	4
4. How much did you help others make better decisions?	1	2	3	4
5. When you are with your group, how much do you enjoy the activities you participate in?	1	2	3	4
6. Do you think the activities you do in your group are interesting?	1	2	3	4
7. How hard do you concentrate on the activities you do in your group?	1	2	3	4

These next questions are about your thoughts and feelings about the members of your group.

	Not a lot	A little bit	Somewhat	Very much
1. Kids in this group care about each other.	1	2	3	4
2. Kids in this group make each other feel good.	1	2	3	4
3. When someone says something in the group, it stays in the group (nobody will repeat it outside of the group).	1	2	3	4
4. If kids in the group are really mad or upset about something, they can talk about it in the group.	1	2	3	4
5. Kids in this group argue or fight with each other.	1	2	3	4
6. I feel like I am part of this group.	1	2	3	4

Appendix D
Program Participant Survey: End of Year

Project Arrive Student Survey/Post-Test

Welcome to the Project Arrive Student Survey! Georgia State University and the San Francisco Unified School District are working together to conduct a research study about Project Arrive. Your information will help us learn about how being part of Project Arrive affects your development through your 9th grade year. With your help we will be able to make the program even better in the future.

First, please answer a few questions about yourself.

1. What year were you born?
    a. 1995 or before
    b. 1996
    c. 1997
    d. 1998
    e. 1999
    f. 2000
    g. 2001
    h. 2002
    i. 2003
    j. 2004

2. What month were you born?
    a. January
    b. February
    c. March
    d. April
    e. May
    f. June
    g. July
    h. August
    i. September
    j. October
    k. November
    l. December

3. What is your sex?
    a. Male
    b. Female

4. OTHER THAN going to Project Arrive, during the past school year, how often have you visited your school's Wellness Program for information or services?
    a. Never
    b. One or two times
    c. Three to five times
    d. Six to 10 times
    e. More than 10 times

These next questions are about how you feel about your mentor/group leader. Please rate your level of agreement with the following statements:

	Not at all true	A little true	Pretty much true	Very much true
1. I like to meet with my mentor(s).	1	2	3	4
2. My mentor(s) care about me.	1	2	3	4
3. My mentor(s) help me do better in school	1	2	3	4
4. Time spent with my mentor(s) is worthwhile.	1	2	3	4

These next questions are about your thoughts and feelings about being a group member.

	Not a lot	A little bit	Somewhat	Very much
1. How much did the group help you to deal with everyday problems?	1	2	3	4
2. How much did you help others to deal with everyday problems?	1	2	3	4
3. How much did the group help you make better decisions?	1	2	3	4
4. How much did you help others make better decisions?	1	2	3	4
5. When you are with your group, how much do you enjoy the activities you participate in?	1	2	3	4
6. Do you think the activities you do in your group are interesting?	1	2	3	4
7. How hard do you concentrate on the activities you do in your group?	1	2	3	4

These next questions are about your thoughts and feelings about the members of your group.

	Not a lot	A little bit	Somewhat	Very much
1. Kids in this group care about each other.	1	2	3	4
2. Kids in this group make each other feel good.	1	2	3	4
3. When someone says something in the group, it stays in the group (nobody will repeat it outside of the group).	1	2	3	4
4. If kids in the group are really mad or upset about something, they can talk about it in the group.	1	2	3	4
5. Kids in this group argue or fight with each other.	1	2	3	4
6. I feel like I am part of this group.	1	2	3	4

These next questions are about how you feel about yourself. For each statement, indicate how true you feel these statements are about your personally.

	False	Somewhat False	Not Sure	Somewhat True	True
1. I usually think of myself as a happy person.	1	2	3	4	5
2. In reality I don't like myself very much.	1	2	3	4	5
3. I'm not very sure of myself.	1	2	3	4	5
4. I'm the kind of person who has a lot of fun.	1	2	3	4	5
5. I worry too much about things that aren't important.	1	2	3	4	5
	False	**Somewhat False**	**Not Sure**	**Somewhat True**	**True**
6. I often feel sad or unhappy.	1	2	3	4	5
7. I usually feel I'm the kind of person I want to be.	1	2	3	4	5
	Never	**Not Often**	**Sometimes**	**Often**	**Almost Always**
8. I feel nervous or afraid that things won't work out the way I would like them to.	1	2	3	4	5
9. I feel lonely.	1	2	3	4	5
10. I get into such a bad mood that I just feel like sitting around and doing nothing.	1	2	3	4	5

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11. In recent years, I have felt more nervous or worried about things than I have needed to.	1	2	3	4	5
12. I feel very happy.	1	2	3	4	5

The next questions are about how you feel about yourself and others. For each statement, indicate how true you feel these statements are about your personally.

	Not at all true	A little true	Pretty much true	Very much true
1. I can work with someone who has different opinions than mine.	1	2	3	4
2. I can work out my problems.	1	2	3	4
3. I can do most things I try.	1	2	3	4
4. There are many things I do well.	1	2	3	4
5. I feel bad when someone gets their feelings hurt.	1	2	3	4
6. I try to understand what other people go through.	1	2	3	4
7. I try to understand what other people feel and think.	1	2	3	4
8. When I need help I find someone to talk with.	1	2	3	4
9. I try to work out my problems by talking or writing about them.	1	2	3	4
10. There is purpose to my life.	1	2	3	4
11. I understand my moods and feelings.	1	2	3	4
12. I understand why I do what I do.	1	2	3	4

Please indicate how many times you did each of these things in the last 7 days.

	None	1 Time	2-3 Times	4-5 Times	6-7 Times
1. I teased students to make them angry.	0	1	2-3	4-5	6-7
2. I got angry very easily with someone.	0	1	2-3	4-5	6-7
3. I fought back when someone hit me first.	0	1	2-3	4-5	6-7
4. I said things about a kid to make other students laugh.	0	1	2-3	4-5	6-7
5. I encouraged other students to fight.	0	1	2-3	4-5	6-7
6. I pushed or shoved other kids.	0	1	2-3	4-5	6-7
7. I was angry most of the day.	0	1	2-3	4-5	6-7
8. I got into a physical fight because I was angry.	0	1	2-3	4-5	6-7
9. I slapped or kicked someone.	0	1	2-3	4-5	6-7
10. I called other students bad names.	0	1	2-3	4-5	6-7
11. I threatened to hurt or hit someone.	0	1	2-3	4-5	6-7

The next questions are about your academic future.

3. If you could do exactly what you wanted, how far would you go in school?
    a. 9^{th} – 11^{th} grade
    b. Graduate high school
    c. Post high school, vocational, or tech training
    d. Some college
    e. Business college, or two-year associates degree
    f. Graduate from a four-year college
    g. Get a Master's degree or teaching credential
    h. Get a law degree, PhD, or medical doctor's degree

4. We can't always do what we most want to do. How far do you think you will <u>actually</u> go in school?

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a. 9th – 11th grade
b. Graduate high school
c. Post high school, vocational, or tech training
d. Some college
e. Business college, or two-year associates degree
f. Graduate from a four-year college
g. Get a Master's degree or teaching credential
h. Get a law degree, PhD, or medical doctor's degree

These next questions are about your ethnic group membership.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I have spent time trying to find out more about my ethnic group, such as history, traditions, and customs.	1	2	3	4	5
2. I have a strong sense of belonging to my own ethnic group.	1	2	3	4	5
3. I understand pretty well what my ethnic group membership means to me.	1	2	3	4	5
4. I have often done things that will help me understand my ethnic background better.	1	2	3	4	5
5. I have often talked to other people in order to learn more about my ethnic group.	1	2	3	4	5
6. I feel a strong sense of attachment towards my own ethnic group.	1	2	3	4	5
7. Most of my friends belong to my ethnic group.	1	2	3	4	5

The next questions are about how you think feel about yourself academically. For each statement, indicate how true you feel these statements are about your personally.

	Not true	A little true	Often true	Always true
1. I am good at my schoolwork.	1	2	3	4
2. I am just as smart as other people my age.	1	2	3	4
3. I am slow in finishing my schoolwork.	1	2	3	4
4. I do my class work well.	1	2	3	4
5. I have trouble figuring out the answers in school.	1	2	3	4

For these next questions, please indicate how strongly you agree or disagree with the following statements about your school.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I feel close to people at this school.	1	2	3	4	5
2. I am happy to be at this school.	1	2	3	4	5
3. I feel like I am part of this school.	1	2	3	4	5
4. The teachers at this school treat students fairly.	1	2	3	4	5
5. I feel safe in my school.	1	2	3	4	5

These next questions ask about cigarette smoking. For each question, please remember to answer honestly.

16. Have you ever tried cigarette smoking, even one or two puffs?
    a. Yes

b. No

If you responded "Yes" to the previous question, please answer the following two questions:

17. During the past 30 days, on how many days did you smoke cigarettes?
    a. 0 days
    b. 1 or 2 days
    c. 3 to 5 days
    d. 6 to 9 days
    e. 10 to 19 days
    f. 20 to 29 days
    g. All 30 days

18. During the past 30 days, how many cigarettes did you smoke per day?
    a. I did not smoke cigarettes during the past 30 days
    b. Less than 1 cigarette per day
    c. 1 cigarette per day
    d. 2 to 5 cigarettes per day
    e. 6 to 10 cigarettes per day
    f. 11 to 20 cigarettes per day
    g. More than 20 cigarettes per day

These next questions ask about drinking alcohol. This includes drinking beer, wine, wine coolers, liquor such as rum, gin, vodka, or whiskey. For these questions, drinking alcohol does not include drinking a few sips or wine for religious purposes. Please remember to answer honestly.

19. During your life, on how many days have you had at least one drink of alcohol?
    a. 0 days
    b. 1 or 2 days
    c. 3 to 9 days
    d. 10 to 19 days
    e. 20 to 39 days
    f. 40 – 99 days
    g. 100 or more days

If you responded "Yes" to the previous question, please answer the following two questions:

20. During the past 30 days, on how many days did you have at least one drink of alcohol?
    a. 0 days
    b. 1 or 2 days
    c. 3 to 5 days
    d. 6 to 9 days
    e. 10 to 19 days
    f. 20 to 29 days
    g. All 30 day

21. During the past 30 days, on how many days did you have 5 or more drinks of alcohol in a row, that is, within a couple of hours?
    a. 0 days
    b. 1 day
    c. 2 days
    d. 3 to 5 days
    e. 6 to 9 days
    f. 10 to 19 days
    g. 20 or more days

These next questions ask about marijuana use. Marijuana is also called grass or pot. Please remember to answer honestly.

22. During your life, how many times have you used marijuana?
    a. 0 times
    b. 1 or 2 times
    c. 3 to 9 times
    d. 10 to 19 times
    e. 20 to 39 times
    f. 40 to 99 times
    g. 100 or more times

If you responded "Yes" to the previous question, please answer the following question:

23. During the past 30 days, how many times did you use marijuana?
    a. 0 times
    b. 1 or 2 times

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c. 3 to 9 times
d. 10 to 19 times
e. 20 to 39 times
f. 40 or more times

These next questions ask about some other behaviors that could get you in trouble. Please remember to answer honestly.

24. During the past 12 months, on how many days did you carry a weapon such as a gun, knife, or club on school property?
    a. 0 times
    b. 1 time
    c. 2 or 3 times
    d. 4 or 5 times
    e. 6 or 7 times
    f. 8 or 9 times
    g. 10 or 11 times
    h. 12 or more times

25. During the past 12 months, how many times were you in a physical fight on school property?
    a. 0 times
    b. 1 time
    c. 2 or 3 times
    d. 4 or 5 times
    e. 6 or 7 times
    f. 8 or 9 times
    g. 10 or 11 times
    h. 12 or more times

26. During the past 12 months, about how many times did you skip school or cut classes?
    a. 0 times
    b. 1–2 times
    c. A few times
    d. Once a month
    e. Once a week
    f. More than once a week

27. During the past 12 months have you been arrested for a crime, offence, and/or a violation?
    a. Never
    b. Yes, 1-2 times
    c. Yes, 3-4 times
    d. Yes, 5 or more times
    e. I prefer not to answer

28. Do you consider yourself a member of a gang?
    a. No
    b. Yes

These next questions are about the people in your life. For each statement, indicate how true you feel these statements are about your personally.

	Not at all true	A little true	Pretty much true	Very much true
1. I have a friend my own age who really cares about me.	1	2	3	4
2. I have a friend my own age who talks with me about my problems.	1	2	3	4
3. I have a friend my own age who helps me when I'm having a hard time.	1	2	3	4
4. My friends try to do what is right.	1	2	3	4
5. My friends do well in school.	1	2	3	4
6. At my school, there is a teacher or some other adult who really cares about me.	1	2	3	4
7. At my school, there is a teacher or some other adult who tells me when I do a good job.	1	2	3	4
8. At my school, there is a teacher or some other adult who notices when I'm not there.	1	2	3	4
9. At my school, there is a teacher or some other adult who always wants me to do my best.	1	2	3	4
10. At my school, there is a teacher or some other adult who listens to me when I have something to say.	1	2	3	4
11. At my school, there is a teacher or some other adult who believes that I will be a success.	1	2	3	4
12. At school, I do interesting activities.	1	2	3	4
13. At school, I help decide things like class activities or rules.	1	2	3	4
14. At school, I do things that make a difference.	1	2	3	4
15. At home there is a parent or some other adult who expects me to follow the rules.	1	2	3	4
16. At home there is a parent or some other adult who is interested in my schoolwork.	1	2	3	4
17. At home there is a parent or some other adult who believes that I will be a success.	1	2	3	4
18. At home there is a parent or some other adult who talks with me about my problems.	1	2	3	4
19. At home there is a parent or some other adult who always wants me to do my best.	1	2	3	4
20. At home there is a parent or some other adult who listens to me when I have something to say.	1	2	3	4
21. I do things at home that make a difference.	1	2	3	4

22. I help make decisions with my family.	1	2	3	4

These next questions are about activities you do during your free time (at school or in your neighborhood). For each activity, indicate whether you have been involved in the past 12 months.

	Yes	No	Not sure
1. School athletic team	Y	N	
2. School activities such as clubs or student government	Y	N	
3. Activities in the community such as scouts, service, hobby, and clubs	Y	N	
4. Organized summer after-school or sport recreational programs	Y	N	
5. Volunteer service activities	Y	N	
6. Civic rights activities	Y	N	
7. Other hobbies or activities	Y	N	
8. Have you ever been a part of a formal mentoring program?	Y	N	NS
9. I have an adult, other than my parents or guardian that I can go to for support and guidance.	Y	N	NS

The next questions are about how you think about yourself and how you do things in general. For each sentence, think about how you are in most situations and indicate which response describes you the best.

	None of the time	A little of the time	Some of the time	A lot of the time	Most of the time	All of the time
1. I think I am doing pretty well.	1	2	3	4	5	6
2. I can think of many ways to get the things in life that are most important to me.	1	2	3	4	5	6
3. I am doing just as well as other kids my age.	1	2	3	4	5	6
4. When I have a problem, I can come up with lots of ways to solve it.	1	2	3	4	5	6
5. I think the things I have done in the past will help me in the future.	1	2	3	4	5	6
6. Even when others want to quit, I know that I can find ways to solve the problem.	1	2	3	4	5	6

Appendix E
Comparison Group Survey: Beginning of Year

Supporting Student Success/Fall

Welcome to the Supporting Student Success Survey! Georgia State University and the San Francisco Unified School District are working together to conduct a research study about factors that affect the development of young people like you through the 9th grade year. With your help we will be able to create better programs that help students like you succeed in the future.

First, please answer a few questions about yourself.

8. What year were you born?
    a. 1998 or before
    b. 1999
    c. 2000
    d. 2001

9. What month were you born?
    a. January
    b. February
    c. March
    d. April
    e. May
    f. June
    g. July
    h. August
    i. September
    j. October
    k. November
    l. December

10. What is your sex?
    a. Male
    b. Female

11. Are you of Hispanic or Latino origin?
    a. Yes
    b. No

12. What is your race?
    a. American Indian or Alaska Native
    b. Asian
    c. Black or African American
    d. Native Hawaiian or Pacific Islander
    e. White
    f. Mixed (two or more) races

13. What best describes where you live? A home includes a house, apartment, trailer, or mobile home.
    a. A home with both parents
    b. A home with only one parent
    c. Other relative's home
    d. A home with more than one family
    e. Friend's home
    f. Foster home, group care, or waiting placement
    g. Hotel or motel
    h. Other living arrangement

14. Do you get or are you eligible for a free or reduced-price lunch at your school?
    a. Free lunch
    b. Reduced-price lunch
    c. Neither

These next questions are about how you feel about yourself.

For each statement, indicate how true you feel these statements are about you.

	False	Somewhat False	Not Sure	Somewhat True	True
1. I usually think of myself as a happy person.	1	2	3	4	5
2. In reality I don't like myself very much.	1	2	3	4	5
3. I'm not very sure of myself.	1	2	3	4	5
4. I'm the kind of person who has a lot of fun.	1	2	3	4	5
5. I worry too much about things that aren't important.	1	2	3	4	5
6. I often feel sad or unhappy.	1	2	3	4	5
7. I usually feel I'm the kind of person I want to be.	1	2	3	4	5

For each statement, indicate how often you experience the following emotions.

	Never	Not Often	Sometimes	Often	Almost Always
8. I feel nervous or afraid that things won't work out the way I would like them to.	1	2	3	4	5
9. I feel lonely.	1	2	3	4	5
10. I get into such a bad mood that I just feel like sitting around and doing nothing.	1	2	3	4	5
11. In recent years, I have felt more nervous or worried about things than I have needed to.	1	2	3	4	5
12. I feel very happy.	1	2	3	4	5

The next questions are about how you feel about yourself and others.

For each statement, indicate how true you feel these statements are about you.

	Not at all true	A little true	Pretty much true	Very much true
1. I can work with someone who has different opinions than mine.	1	2	3	4
2. I can work out my problems.	1	2	3	4
3. I can do most things I try.	1	2	3	4
4. There are many things I do well.	1	2	3	4
5. I feel bad when someone gets their feelings hurt.	1	2	3	4
6. I try to understand what other people go through.	1	2	3	4
7. I try to understand what other people feel and think.	1	2	3	4
8. When I need help I find someone to talk with.	1	2	3	4
9. I try to work out my problems by talking or writing about them.	1	2	3	4
10. There is purpose to my life.	1	2	3	4
11. I understand my moods and feelings.	1	2	3	4
12. I understand why I do what I do.	1	2	3	4

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Please indicate how many times you did each of these things in the last 7 days.

	None	1 Time	2-3 Times	4-5 Times	6+ Times
1. I teased students to make them angry.	0	1	2-3	4-5	6+
2. I got angry very easily with someone.	0	1	2-3	4-5	6+
3. I fought back when someone hit me first.	0	1	2-3	4-5	6+
4. I said things about a kid to make other students laugh.	0	1	2-3	4-5	6+
5. I encouraged other students to fight.	0	1	2-3	4-5	6+
6. I pushed or shoved other kids.	0	1	2-3	4-5	6+
7. I was angry most of the day.	0	1	2-3	4-5	6+
8. I got into a physical fight because I was angry.	0	1	2-3	4-5	6+
9. I slapped or kicked someone.	0	1	2-3	4-5	6+
10. I called other students bad names.	0	1	2-3	4-5	6+
11. I threatened to hurt or hit someone.	0	1	2-3	4-5	6+

The next questions are about your academic future.

5. If you could do exactly what you wanted, how far would you go in school?
    a. 9^{th} – 11^{th} grade
    b. Graduate high school
    c. Post high school, vocational, or tech training
    d. Some college
    e. Business college, or two-year associates degree
    f. Graduate from a four-year college
    g. Get a Master's degree or teaching credential
    h. Get a law degree, PhD, or medical doctor's degree

6. We can't always do what we most want to do. How far do you think you will <u>actually</u> go in school?
    a. 9^{th} – 11^{th} grade
    b. Graduate high school
    c. Post high school, vocational, or tech training
    d. Some college
    e. Business college, or two-year associates degree
    f. Graduate from a four-year college
    g. Get a Master's degree or teaching credential
    h. Get a law degree, PhD, or medical doctor's degree

These next questions are about your ethnic group membership. Think about the ethnic group you belong to and indicate how much you agree with each statement.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I have spent time trying to find out more about my ethnic group, such as history, traditions, and customs.	1	2	3	4	5
2. I have a strong sense of belonging to my own ethnic group.	1	2	3	4	5
3. I understand pretty well what my ethnic group membership means to me.	1	2	3	4	5

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	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
4. I have often done things that will help me understand my ethnic background better.	1	2	3	4	5
5. I have often talked to other people in order to learn more about my ethnic group.	1	2	3	4	5
6. I feel a strong sense of attachment towards my own ethnic group.	1	2	3	4	5
7. Most of my friends belong to my ethnic group.	1	2	3	4	5

The next questions are about how you think feel about yourself academically. For each statement, indicate how true you feel these statements are about you.

	Not true	A little true	Often true	Always true
1. I am good at my schoolwork.	1	2	3	4
2. I am just as smart as other people my age.	1	2	3	4
3. I am slow in finishing my schoolwork.	1	2	3	4
4. I do my class work well.	1	2	3	4
5. I have trouble figuring out the answers in school.	1	2	3	4

For these next questions, please indicate how strongly you agree or disagree with the following statements about your school.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I feel close to people at this school.	1	2	3	4	5
2. I am happy to be at this school.	1	2	3	4	5
3. I feel like I am part of this school.	1	2	3	4	5
4. The teachers at this school treat students fairly.	1	2	3	4	5
5. I feel safe in my school.	1	2	3	4	5

These next questions ask about cigarette smoking. For each question, please remember to answer honestly.

29. Have you ever tried cigarette smoking, even one or two puffs?
    a. Yes
    b. No

If you responded "Yes" to the previous question, please answer the following two questions:

30. During the past 30 days, on how many days did you smoke cigarettes?
    a. 0 days
    b. 1 or 2 days
    c. 3 to 5 days
    d. 6 to 9 days
    e. 10 to 19 days
    f. 20 to 29 days
    g. All 30 days

31. During the past 30 days, how many cigarettes did you smoke per day?
    a. I did not smoke cigarettes during the past 30 days
    b. Less than 1 cigarette per day
    c. 1 cigarette per day
    d. 2 to 5 cigarettes per day
    e. 6 to 10 cigarettes per day
    f. 11 to 20 cigarettes per day
    g. More than 20 cigarettes per day

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These next questions ask about drinking alcohol. This includes drinking beer, wine, wine coolers, liquor such as rum, gin, vodka, or whiskey. For these questions, drinking alcohol does not include drinking a few sips or wine for religious purposes. Please remember to answer honestly.

32. During your life, on how many days have you had at least one drink of alcohol?
    a. 0 days
    b. 1 or 2 days
    c. 3 to 9 days
    d. 10 to 19 days
    e. 20 to 39 days
    f. 40 – 99 days
    g. 100 or more days

If you responded "Yes" to the previous question, please answer the following two questions:

33. During the past 30 days, on how many days did you have at least one drink of alcohol?
    a. 0 days
    b. 1 or 2 days
    c. 3 to 5 days
    d. 6 to 9 days
    e. 10 to 19 days
    f. 20 to 29 days
    g. All 30 days

34. During the past 30 days, on how many days did you have 5 or more drinks of alcohol in a row, that is, within a couple of hours?
    a. 0 days
    b. 1 day
    c. 2 days
    d. 3 to 5 days
    e. 6 to 9 days
    f. 10 to 19 days
    g. 20 or more days

These next questions ask about marijuana use. Marijuana is also called grass or pot. Please remember to answer honestly.

35. During your life, how many times have you used marijuana?
    a. 0 times
    b. 1 or 2 times
    c. 3 to 9 times
    d. 10 to 19 times
    e. 20 to 39 times
    f. 40 to 99 times
    g. 100 or more times

If you responded "Yes" to the previous question, please answer the following question:

36. During the past 30 days, how many times did you use marijuana?
    a. 0 times
    b. 1 or 2 times
    c. 3 to 9 times
    d. 10 to 19 times
    e. 20 to 39 times
    f. 40 or more times

These next questions ask about some other behaviors. Please remember to answer honestly.

37. During the past 12 months, on how many days did you carry a weapon such as a gun, knife, or club on school property?
    a. 0 times
    b. 1 time
    c. 2 or 3 times
    d. 4 or 5 times
    e. 6 or 7 times
    f. 8 or 9 times
    g. 10 or 11 times
    h. 12 or more times

38. During the past 12 months, how many times were you in a physical fight on school property?
    a. 0 times
    b. 1 time
    c. 2 or 3 times
    d. 4 or 5 times
    e. 6 or 7 times
    f. 8 or 9 times
    g. 10 or 11 times
    h. 12 or more times

39. During the past 12 months, about how many times did you skip school or cut classes?
    a. 0 times
    b. 1–2 times
    c. A few times
    d. Once a month
    e. Once a week
    f. More than once a week

40. During the past 12 months have you been arrested for a crime, offence, and/or a violation?
    a. Never
    b. Yes, 1-2 times
    c. Yes, 3-4 times
    d. Yes, 5 or more times
    e. I prefer not to answer

41. Do you consider yourself a member of a gang?
    a. No
    b. Yes

These next questions are about the people in your life. For each statement, indicate how true you feel these statements are about your personally.

	Not at all true	A little true	Pretty much true	Very much true
1. I have a friend my own age who really cares about me.	1	2	3	4
2. I have a friend my own age who talks with me about my problems.	1	2	3	4
3. I have a friend my own age who helps me when I'm having a hard time.	1	2	3	4
4. My friends try to do what is right.	1	2	3	4
5. My friends do well in school.	1	2	3	4
6. At my school, there is a teacher or some other adult who really cares about me.	1	2	3	4
7. At my school, there is a teacher or some other adult who tells me when I do a good job.	1	2	3	4
8. At my school, there is a teacher or some other adult who notices when I'm not there.	1	2	3	4
9. At my school, there is a teacher or some other adult who always wants me to do my best.	1	2	3	4
10. At my school, there is a teacher or some other adult who listens to me when I have something to say.	1	2	3	4
11. At my school, there is a teacher or some other adult who believes that I will be a success.	1	2	3	4
12. At school, I do interesting activities.	1	2	3	4
13. At school, I help decide things like class activities or rules.	1	2	3	4
14. At school, I do things that make a difference.	1	2	3	4
15. At home there is a parent or some other adult who expects me to follow the rules.	1	2	3	4

	Not at all true	A little true	Pretty much true	Very much true
16. At home there is a parent or some other adult who is interested in my schoolwork.	1	2	3	4
17. At home there is a parent or some other adult who believes that I will be a success.	1	2	3	4
18. At home there is a parent or some other adult who talks with me about my problems.	1	2	3	4
19. At home there is a parent or some other adult who always wants me to do my best.	1	2	3	4

20. At home there is a parent or some other adult who listens to me when I have something to say.	1	2	3	4
21. I do things at home that make a difference.	1	2	3	4
22. I help make decisions with my family.	1	2	3	4

These next questions are about activities you do during your free time (at school or in your neighborhood). For each activity, indicate whether you have been involved in the past 12 months.

	Yes	No
1. School athletic team	Y	N
2. School activities such as clubs or student government	Y	N
3. Activities in the community such as scouts, service, hobby, and clubs	Y	N
4. Organized sport or recreational programs outside of school	Y	N
5. Volunteer service activities	Y	N
6. Civic rights activities	Y	N
7. Other hobbies or activities	Y	N
8. Have you ever been a part of a formal mentoring program?	Y	N
9. I have an adult, other than my parents or guardian that I can go to for support and guidance.	Y	N

The next questions are about how you think about yourself and how you do things in general. For each sentence, think about how you are in most situations and indicate which response describes you the best.

	None of the time	A little of the time	Some of the time	A lot of the time	Most of the time	All of the time
1. I think I am doing pretty well.	1	2	3	4	5	6
2. I can think of many ways to get the things in life that are most important to me.	1	2	3	4	5	6
3. I am doing just as well as other kids my age.	1	2	3	4	5	6
4. When I have a problem, I can come up with lots of ways to solve it.	1	2	3	4	5	6
5. I think the things I have done in the past will help me in the future.	1	2	3	4	5	6
6. Even when others want to quit, I know that I can find ways to solve the problem.	1	2	3	4	5	6

Appendix F
Comparison Group Survey: End of Year

Supporting Student Success/Post-Test

Welcome to the Supporting Student Success Survey! Georgia State University and the San Francisco Unified School District are working together to conduct a research study about factors that affect the development of young people like you through the 9th grade year. With your help we will be able to create better programs that help students like you succeed in the future.

First, please answer a few questions about yourself.

5. What year were you born?
   a. 1995 or before
   b. 1996
   c. 1997
   d. 1998
   e. 1999
   f. 2000
   g. 2001
   h. 2002
   i. 2003
   j. 2004

6. What month were you born?
   a. January
   b. February
   c. March
   d. April
   e. May
   f. June
   g. July
   h. August
   i. September
   j. October
   k. November
   l. December

7. What is your sex?
   a. Male
   b. Female

8. During the past school year, how often have you visited your school's Wellness Program for information or services?
   a. Never
   b. One or two times
   c. Three to five times
   d. Six to 10 times
   e. More than 10 times

These next questions are about how you feel about yourself. For each statement, indicate how true you feel these statements are about you personally.

	False	Somewhat False	Not Sure	Somewhat True	True
1. I usually think of myself as a happy person.	1	2	3	4	5
2. In reality I don't like myself very much.	1	2	3	4	5
3. I'm not very sure of myself.	1	2	3	4	5
4. I'm the kind of person who has a lot of fun.	1	2	3	4	5
5. I worry too much about things that aren't important.	1	2	3	4	5
6. I often feel sad or unhappy.	1	2	3	4	5
7. I usually feel I'm the kind of person I want to be.	1	2	3	4	5
	Never	**Not Often**	**Sometimes**	**Often**	**Almost Always**

8. I feel nervous or afraid that things won't work out the way I would like them to.	1	2	3	4	5
9. I feel lonely.	1	2	3	4	5
10. I get into such a bad mood that I just feel like sitting around and doing nothing.	1	2	3	4	5
11. In recent years, I have felt more nervous or worried about things than I have needed to.	1	2	3	4	5
12. I feel very happy.	1	2	3	4	5

The next questions are about how you feel about yourself and others. For each statement, indicate how true you feel these statements are about you personally.

	Not at all true	A little true	Pretty much true	Very much true
1. I can work with someone who has different opinions than mine.	1	2	3	4
2. I can work out my problems.	1	2	3	4
3. I can do most things I try.	1	2	3	4
4. There are many things I do well.	1	2	3	4
5. I feel bad when someone gets their feelings hurt.	1	2	3	4
6. I try to understand what other people go through.	1	2	3	4
7. I try to understand what other people feel and think.	1	2	3	4
8. When I need help I find someone to talk with.	1	2	3	4
9. I try to work out my problems by talking or writing about them.	1	2	3	4
10. There is purpose to my life.	1	2	3	4
11. I understand my moods and feelings.	1	2	3	4
12. I understand why I do what I do.	1	2	3	4

Please indicate how many times you did each of these things in the last 7 days.

	None	1 Time	2-3 Times	4-5 Times	6-7 Times
1. I teased students to make them angry.	0	1	2-3	4-5	6-7
2. I got angry very easily with someone.	0	1	2-3	4-5	6-7
3. I fought back when someone hit me first.	0	1	2-3	4-5	6-7
4. I said things about a kid to make other students laugh.	0	1	2-3	4-5	6-7
5. I encouraged other students to fight.	0	1	2-3	4-5	6-7
6. I pushed or shoved other kids.	0	1	2-3	4-5	6-7
7. I was angry most of the day.	0	1	2-3	4-5	6-7
8. I got into a physical fight because I was angry.	0	1	2-3	4-5	6-7
9. I slapped or kicked someone.	0	1	2-3	4-5	6-7
10. I called other students bad names.	0	1	2-3	4-5	6-7
11. I threatened to hurt or hit someone.	0	1	2-3	4-5	6-7

The next questions are about your academic future.

7. If you could do exactly what you wanted, how far would you go in school?
    a. 9^{th} – 11^{th} grade
    b. Graduate high school
    c. Post high school, vocational, or tech training
    d. Some college
    e. Business college, or two-year associates degree

f. Graduate from a four-year college
g. Get a Master's degree or teaching credential
h. Get a law degree, PhD, or medical doctor's degree

8. We can't always do what we most want to do. How far do you think you will actually go in school?
   a. 9th – 11th grade
   b. Graduate high school
   c. Post high school, vocational, or tech training
   d. Some college
   e. Business college, or two-year associates degree
   f. Graduate from a four-year college
   g. Get a Master's degree or teaching credential
   h. Get a law degree, PhD, or medical doctor's degree

These next questions are about your ethnic group membership.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I have spent time trying to find out more about my ethnic group, such as history, traditions, and customs.	1	2	3	4	5
2. I have a strong sense of belonging to my own ethnic group.	1	2	3	4	5
3. I understand pretty well what my ethnic group membership means to me.	1	2	3	4	5
4. I have often done things that will help me understand my ethnic background better.	1	2	3	4	5
9. I have often talked to other people in order to learn more about my ethnic group.	1	2	3	4	5
	Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
6. I feel a strong sense of attachment towards my own ethnic group.	1	2	3	4	5
7. Most of my friends belong to my ethnic group.	1	2	3	4	5

The next questions are about how you think feel about yourself academically. For each statement, indicate how true you feel these statements are about your personally.

	Not true	A little true	Often true	Always true
1. I am good at my schoolwork.	1	2	3	4
2. I am just as smart as other people my age.	1	2	3	4
3. I am slow in finishing my schoolwork.	1	2	3	4
4. I do my class work well.	1	2	3	4
5. I have trouble figuring out the answers in school.	1	2	3	4

For these next questions, please indicate how strongly you agree or disagree with the following statements about your school.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I feel close to people at this school.	1	2	3	4	5
2. I am happy to be at this school.	1	2	3	4	5

3. I feel like I am part of this school.	1	2	3	4	5
4. The teachers at this school treat students fairly.	1	2	3	4	5
5. I feel safe in my school.	1	2	3	4	5

These next questions ask about cigarette smoking. For each question, please remember to answer honestly.

42. Have you ever tried cigarette smoking, even one or two puffs?
    a. Yes
    b. No

If you responded "Yes" to the previous question, please answer the following two questions:

43. During the past 30 days, on how many days did you smoke cigarettes?
    a. 0 days
    b. 1 or 2 days
    c. 3 to 5 days
    d. 6 to 9 days
    e. 10 to 19 days
    f. 20 to 29 days
    g. All 30 days

44. During the past 30 days, how many cigarettes did you smoke per day?
    a. I did not smoke cigarettes during the past 30 days
    b. Less than 1 cigarette per day
    c. 1 cigarette per day
    d. 2 to 5 cigarettes per day
    e. 6 to 10 cigarettes per day
    f. 11 to 20 cigarettes per day
    g. More than 20 cigarettes per day

These next questions ask about drinking alcohol. This includes drinking beer, wine, wine coolers, liquor such as rum, gin, vodka, or whiskey. For these questions, drinking alcohol does not include drinking a few sips or wine for religious purposes. Please remember to answer honestly.

45. During your life, on how many days have you had at least one drink of alcohol?
    a. 0 days
    b. 1 or 2 days
    c. 3 to 9 days
    d. 10 to 19 days
    e. 20 to 39 days
    f. 40 – 99 days
    g. 100 or more days

If you responded "Yes" to the previous question, please answer the following two questions:

46. During the past 30 days, on how many days did you have at least one drink of alcohol?
    a. 0 days
    b. 1 or 2 days
    c. 3 to 5 days
    d. 6 to 9 days
    e. 10 to 19 days
    f. 20 to 29 days
    g. All 30 days

47. During the past 30 days, on how many days did you have 5 or more drinks of alcohol in a row, that is, within a couple of hours?
    a. 0 days
    b. 1 day
    c. 2 days
    d. 3 to 5 days
    e. 6 to 9 days
    f. 10 to 19 days
    g. 20 or more days

These next questions ask about marijuana use. Marijuana is also called grass or pot. Please remember to answer honestly.

48. During your life, how many times have you used marijuana?

a. 0 times
b. 1 or 2 times
c. 3 to 9 times
d. 10 to 19 times
e. 20 to 39 times
f. 40 to 99 times
g. 100 or more times

If you responded "Yes" to the previous question, please answer the following question:

49. During the past 30 days, how many times did you use marijuana?
    a. 0 times
    b. 1 or 2 times
    c. 3 to 9 times
    d. 10 to 19 times
    e. 20 to 39 times
    f. 40 or more times

These next questions ask about some other behaviors that could get you in trouble. Please remember to answer honestly.

50. During the past 12 months, on how many days did you carry a weapon such as a gun, knife, or club on school property?
    a. 0 times
    b. 1 time
    c. 2 or 3 times
    d. 4 or 5 times
    e. 6 or 7 times
    f. 8 or 9 times
    g. 10 or 11 times
    h. 12 or more times

51. During the past 12 months, how many times were you in a physical fight on school property?
    a. 0 times
    b. 1 time
    c. 2 or 3 times
    d. 4 or 5 times
    e. 6 or 7 times
    f. 8 or 9 times
    g. 10 or 11 times
    h. 12 or more times

52. During the past 12 months, about how many times did you skip school or cut classes?
    a. 0 times
    b. 1–2 times
    c. A few times
    d. Once a month
    e. Once a week
    f. More than once a week

53. During the past 12 months have you been arrested for a crime, offence, and/or a violation?
    a. Never
    b. Yes, 1-2 times
    c. Yes, 3-4 times
    d. Yes, 5 or more times
    e. I prefer not to answer

54. Do you consider yourself a member of a gang?
    a. No
    b. Yes

These next questions are about the people in your life. For each statement, indicate how true you feel these statements are about your personally.

	Not at all true	A little true	Pretty much true	Very much true
1. I have a friend my own age who really cares about me.	1	2	3	4
2. I have a friend my own age who talks with me about my problems.	1	2	3	4
3. I have a friend my own age who helps me when I'm having a hard time.	1	2	3	4
4. My friends try to do what is right.	1	2	3	4
5. My friends do well in school.	1	2	3	4
6. At my school, there is a teacher or some other adult who really cares about me.	1	2	3	4
7. At my school, there is a teacher or some other adult who tells me when I do a good job.	1	2	3	4
8. At my school, there is a teacher or some other adult who notices when I'm not there.	1	2	3	4
9. At my school, there is a teacher or some other adult who always wants me to do my best.	1	2	3	4
10. At my school, there is a teacher or some other adult who listens to me when I have something to say.	1	2	3	4
11. At my school, there is a teacher or some other adult who believes that I will be a success.	1	2	3	4
12. At school, I do interesting activities.	1	2	3	4
13. At school, I help decide things like class activities or rules.	1	2	3	4

	Not at all true	A little true	Pretty much true	Very much true
14. At school, I do things that make a difference.	1	2	3	4
15. At home there is a parent or some other adult who expects me to follow the rules.	1	2	3	4
16. At home there is a parent or some other adult who is interested in my schoolwork.	1	2	3	4
17. At home there is a parent or some other adult who believes that I will be a success.	1	2	3	4
18. At home there is a parent or some other adult who talks with me about my problems.	1	2	3	4
19. At home there is a parent or some other adult who always wants me to do my best.	1	2	3	4

20. At home there is a parent or some other adult who listens to me when I have something to say.	1	2	3	4
21. I do things at home that make a difference.	1	2	3	4
22. I help make decisions with my family.	1	2	3	4

These next questions are about activities you do during your free time (at school or in your neighborhood). For each activity, indicate whether you have been involved in the past 12 months.

	Yes	No	Not sure
1. School athletic team	Y	N	
2. School activities such as clubs or student government	Y	N	
3. Activities in the community such as scouts, service, hobby, and clubs	Y	N	
4. Organized summer after-school or sport recreational programs	Y	N	
5. Volunteer service activities	Y	N	
6. Civic rights activities	Y	N	
7. Other hobbies or activities	Y	N	
8. Have you ever been a part of a formal mentoring program?	Y	N	NS
9. I have an adult, other than my parents or guardian that I can go to for support and guidance.	Y	N	NS

The next questions are about how you think about yourself and how you do things in general. For each sentence, think about how you are in most situations and indicate which response describes you the best.

	None of the time	A little of the time	Some of the time	A lot of the time	Most of the time	All of the time
1. I think I am doing pretty well.	1	2	3	4	5	6
2. I can think of many ways to get the things in life that are most important to me.	1	2	3	4	5	6
3. I am doing just as well as other kids my age.	1	2	3	4	5	6
4. When I have a problem, I can come up with lots of ways to solve it.	1	2	3	4	5	6
5. I think the things I have done in the past will help me in the future.	1	2	3	4	5	6
6. Even when others want to quit, I know that I can find ways to solve the problem.	1	2	3	4	5	6

Appendix G
Group Mentor End of Year Survey

Mentoring For Success: Project Arrive
Group Mentor End-of-Year Survey

1. How long have you worked at this school?
- o 1-2 years
- o 3-4 years
- o 5-7 years
- o More than 8 years

2. How many years of experience do you have in education and/or youth development?
- o Less than 1 year
- o 1-2 years
- o 3-5 years
- o 6-10 years
- o 11-15 years
- o More than 16 years

3. Did you attend the 4 hour "Group Mentor Boot Camp" in September 2014?
- o Yes
- o No
- o I attended the training in a previous year

4. How helpful was the training for making you feel prepared?

1	2	3	4	5
Not at all		Somewhat helpful		Extremely helpful

5. How long do your group sessions typically last?
- o Less than 40 minutes
- o 40-50 minutes
- o Over 50 minutes

6. Check any of the following activities that your group participated in at least once.
- o Ice breakers/opener
- o Games
- o Closing/reflection/debrief
- o Journaling
- o Other (please specify)

7. Did you group participate in any of the following activities?

Guest speakers	Yes ____	No ____
Field trips	Yes ____	No ____
Academic check-in	Yes _____	No_____

8. How often did you use the Project Arrive group curriculum provided at the beginning of the year?

1	2	3	4	5
Never		About half of the sessions		Almost every session

9. How helpful did you find the curriculum in helping you plan/prepare for your group activities?

1	2	3	4	5
Not at all		Somewhat helpful		Extremely helpful

10. How much of a role do mentees have in deciding what will be done in a group?

1	2	3	4	5
Mentors always Decide		Decide together or split 50/50		Mentees always decide

11. How often did you cover the following topics in your group?

1	**2**	**3**	**4**	**5**
Never		About half of the sessions		Every session

Transitioning to high school	**1**	**2**	**3**	**4**	**5**
Goal setting	**1**	**2**	**3**	**4**	**5**
Academic achievement	**1**	**2**	**3**	**4**	**5**
Conflict resolution	**1**	**2**	**3**	**4**	**5**
Jobs/career planning	**1**	**2**	**3**	**4**	**5**
Peer relationships	**1**	**2**	**3**	**4**	**5**
Family relationships	**1**	**2**	**3**	**4**	**5**
Other (please specify)	**1**	**2**	**3**	**4**	**5**

12. Please rate the overall sense of cohesion that characterizes your group at this point in the year

1	2	3	4	5
Not at all cohesive		Somewhat cohesive		Very cohesive

13. How important are the following factors in supporting cohesion in your group?

1	**2**	**3**	**4**	**5**
Not at all		Somewhat Important		Extremely Important

Having structured activities	**1**	**2**	**3**	**4**	**5**
Having unstructured activities (such as games, sports)	**1**	**2**	**3**	**4**	**5**
Providing a safe, supportive space for students to talk	**1**	**2**	**3**	**4**	**5**
Having positive peer relationships	**1**	**2**	**3**	**4**	**5**
Snacks	**1**	**2**	**3**	**4**	**5**
Incentives	**1**	**2**	**3**	**4**	**5**
Other (please specify) _____	**1**	**2**	**3**	**4**	**5**

14. Would you consider yourself someone that your mentees would turn to if they needed help?

- Yes, most of them would come to me for anything
- Maybe some of them would, depending on what they needed
- No, they don't turn to me outside of our group time

15. How often did you encounter the following challenges?

1 Never	2	3 About half of the sessions	4	5 Almost every session

Personal conflicts between mentees	**1**	**2**	**3**	**4**	**5**
One of two mentee(s) dominating discussion (drowning out other mentees)	**1**	**2**	**3**	**4**	**5**
One of two mentee(s) not actively participating	**1**	**2**	**3**	**4**	**5**
Inconsistent attendance by mentees	**1**	**2**	**3**	**4**	**5**
Inconsistent attendance by mentor (s)	**1**	**2**	**3**	**4**	**5**
Other (please specify)	**1**	**2**	**3**	**4**	**5**

_____

16. If any of your assigned mentees withdrew from your group, what are the reason(s) you believe they stopped attending? (check all that apply)

- Opted out within first month
- Switched to a different mentoring group at this school
- Transferred out of this school
- Chronically absent from school
- Other school related obligations (teacher objections/academic obligations)
- Interpersonal conflict (between mentees)
- Interpersonal conflict (between mentee and mentor)
- Does not apply – no students withdrew
- Other (please specify) _____

17. Aside from the time you spent meeting with you group, how much time would you estimate you spent on Project Arrive activities within a typical week?

- Less than 30 minutes a week
- 30-60 minutes a week
- 1-2 hours a week
- 3-4 hours a week
- More than 4 hours a week

18. What level of support have you had from your school administrator(s) for taking the time to be a group mentor?

1	2	3	4	5
No support		Some support	A high level of support	

19. How important is it to have a co-facilitator/mentor?

1	2	3	4	5
Not at all		Somewhat Important		Extremely Important

20. How well did you work with your co-facilitator?

1	2	3	4	5
Not at all		Somewhat Well		Extremely Well

6 Did not have a co-facilitator

21. How much support have you received from the Project Arrive district coordinator (consultation, logging, peer sharing, field trips, etc)?

1	2	3	4	5
No support		Some support		A high level of support

22. How many students did you have at the start of the year?

23. How many students did you have at the end of the year?

24. How often did you have a full group (no more than 2 students absent)?

0	10	20	30	40	50	60	70	80	90	100
No sessions				About half of the sessions					All sessions	

25. How many times did the group session have to be canceled?

- Never
- 1-2 times
- 3-4 times
- 5-6 times
- 7-8 times
- 9 or more times

26. How much personal money have you spent on your group (i.e., good, incentives, field trips)?

27. What is the likelihood that you will choose to be a group mentor again next year?

1	2	3	4	5
Extremely Unlikely		Maybe		Extremely Likely

28. Based on your experience this year, would you encourage colleagues at your school to become a group mentor next year?

1	2	3	4	5
Extremely Unlikely		Maybe		Extremely Likely

29. Please rate your overall group mentoring experience.

1	2	3	4	5
Bad experience		OK experience		Excellent experience

30. What recommendations for possible program improvements do you have?

Appendix H
Mentee Focus Group Protocol

Hello and welcome. Our names are _____. We are part of the GSU Research Team working with Project Arrive.

Thank you for taking the time to meet with us today. We have invited you here today because of your participation with Project Arrive.

Taking part in today´s discussion is voluntary. You don't have to answer any of the questions if you don't want to. You will have a chance to decide if you want to take part in today´s focus group or not after we review what it is all about.

We would like to record the conversation and take notes. This helps us remember what you said. We will record only if you are OK with it. Please let us know if you would prefer that we don´t record the interview. The notes and recordings will be kept private in our office.

We would like to assure you that everything we talk about today will be confidential. We will not use your name or any information that will identify you. After we get the required information from the recordings, we will destroy them. You can let us know what you really think.

In general we would like to discuss your experiences in Project Arrive, how you feel while in your group, and your relationship with your mentors and group members.

Before we get started do you have any questions?

First, let's go around the room and introduce ourselves.

Thinking back, tell me about the first couple of meetings with the group. (Forming)
- What was it like first getting to know one another?
- How did you know what was expected of you?
- How did you start trusting one another?

How did your group come up with a group agreement? (Storming)
- (If there is no group agreement, how did your group decide on the ways you were going to treat one another while in group)
- What kinds of disagreements did you have when trying to create the group agreement?
- How did you resolve the conflicts?

What kinds of things did you include in your agreement? (Norming)
- What are the most important aspects of the group agreement?
- What happens if someone doesn't follow the agreement?
- How does your group respond to members who talk too much or too little?

How does you group work together now? (Performing…maybe)

- What kinds of personal things do you share with your group?
- How do group members support one another?
- Can you think of a time when things worked really well in your group? Was everyone involved?
- How has being in the group helped you with things like organizing time, interacting with teachers, getting assignments done, and improving your grades?
- How has being in group helped you get along with other students? What about feeling like you really belong in this school?
-

What happens when new people join or regular members leave the group?

How is the group important to you? Why?

If you could talk to a current eighth grader who is planning to participate in Project Arrive next year, what would you tell him or her about the program?

- What advice would you give them about joining Project Arrive?
- What about your group helped you the most with being a 9th grader?
- What do you wish your group could have done to help you more?

Closing:
Is there anything else you want to share about your group?

Thank you so much for coming and sharing your thoughts with us!

Appendix I
Mentor Focus Group Protocol

Hello and welcome. Our names are _____. We are part of the GSU Research Team working with Project Arrive.

Thank you for taking the time to meet with us today. Some of you may remember us from last year. We have invited you here today because of your work as a mentor with Project Arrive.

We would like to record the conversation and take notes. This helps us remember what you said. We will record only if you are OK with it. Please let us know if you would prefer that we don´t record the interview. The notes and recordings will be kept private in our office.

We would like to assure you that everything we talk about today will be confidential. We will not use your name or any information that will identify you. After we get the required information from the recordings, we will destroy them. You can let us know what you really think. Today, we would like to discuss your experiences as a Project Arrive mentor, training you may have attended before you started mentoring, and additional resources that may make your position as a mentor more effective.

Before we get started do you have any questions?

First, let's go around the room and introduce ourselves.

School specific questions:
School 1 (how to improve):
The program coordinator has told us how impressed she is with the big strides you've taken this year, could you share how and what steps were taken to reach this point?

- **Any new challenges you are now facing?**

School 2 (how to start):
This is the first year of Project Arrive. What are some things that helped get it off the ground?

- **What worked well, what didn't?**

Schools 3 and 4 (how to maintain):
So far you've done a great job with your groups in Project Arrive. How do keep up the momentum and stay committed?

- **What needs to happen to keep the program going?**

All Schools-
Mentor Training/Preparedness:
To get started we want to ask some questions about training before the year started. This may be different for new mentors and those who have been around for a while. Later we will ask about ongoing training throughout the year.

- Who is new, and who has been a mentor for a while?
- What trainings were you able to attend prior to becoming a PA mentor?
- What aspects of the training were helpful?

- Anything you could have used more of?
- If ongoing training was available throughout the year, would you be interested?
- What would make them easier to attend?
- What kinds of ongoing training or support would be helpful to you?

School Integration:
How is Project Arrive perceived in the school?

- Is it viewed as contributing to students' academic success? (If no, what would be needed to convey this message)
- Is it viewed as a program that is needed in the school? (why/why not?)
- Is it seen as sustainable and worth sustaining? (why/why not?)
- How does the school support you in your mentor role?

Website Use:
As I'm sure you know, we have launched a website for Project Arrive that has a lot of resources and activities for mentors and mentees. I want to talk with you all about your experience using this site. For those of you who have used it, tell me about your experience.

- If you haven't used it, what has stopped you?
- What did you use the website for? Was it useful?
- Which pages are the most useful?
- What is missing? What could we add to help you more?
- The website has a discussion section function, but it is not often used. What's keeping you from using the function?

Group structure:
If you could construct the ideal group, what would it look like?

- How many people would be in it?
- Who would be in it?
- How would you include people with different skills/talents? Different challenges?
- What types of students would not be suited for your ideal group?

Importance of co-mentors:
What has it been like working with a co-mentor?

- How important is Teamwork?
- How do you utilize any complementary skills/talents?
- What happens if one of you is busy with other things and can't prioritize group that week?

Sustainability:
What does it take to maintain a viable group?

- What skills do mentors need? (Are they the same skills as mentoring 1:1?)
- What about logistical constraints or opportunities in the school?

What is the most important thing to you about being a group mentor?

Closing: **Is there anything else you want to share about your group?**

Appendix J.
Internal Resilience Assets Infographic

Project Arrive Research Highlights

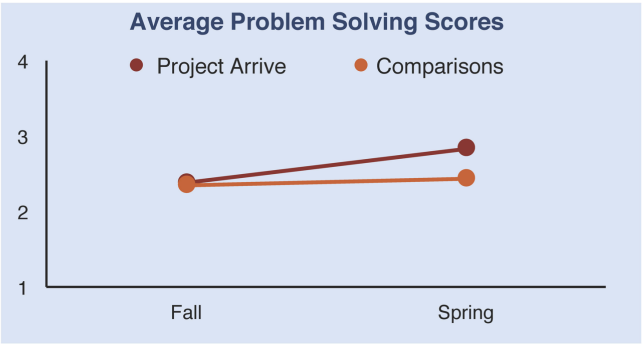
Using Research to Improve the Lives of SFUSD Students[1] – Fall 2016

Project Arrive, Resilience & Internal Assets

Project Arrive is a high school group mentoring program that is designed to prevent school dropout. Project Arrive works primarily with students identified through SFUSD's early warning indicator (EWI) system. The EWI system identifies 8th grade students who are at risk for high school dropout because of low attendance and/or low grades. One of the goals of Project Arrive is to improve resilience, or the ability to overcome adversity and achieve success.

One way Project Arrive seeks to improve resilience is by increasing **internal assets**, or positive characteristics that can facilitate youth's healthy development and promote youth's success in academics and other areas of life. In this research highlight, we examine how internal assets changed throughout an academic year for 114 Project Arrive students and 72 students from a comparison group with similar risk characteristics.[2]

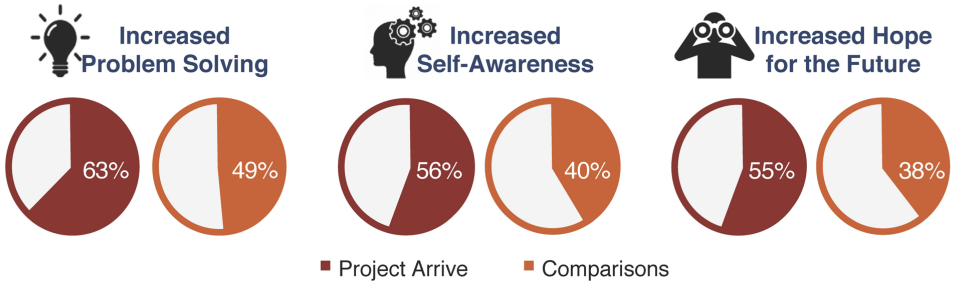
Are Internal Assets Increasing?



- On average, all internal assets increased throughout the school year for Project Arrive students.
- *Project Arrive* students showed larger increases in **problem solving skills** than comparisons.

How Many Project Arrive Students Experienced Increases?

Most Project Arrive students (52-63%) reported increases in their internal assets. Fewer comparison students reported increases (38-57%). Project Arrive students were twice as likely as comparisons to show increases in **problem solving**, **self-awareness**, and **hope for the future**.



Conclusion

Our findings indicate that **Project Arrive helps students develop internal assets**, especially problem solving, self-awareness, & hope for the future. Since internal assets can promote students' healthy development, these findings suggest that Project Arrive helps guide students toward a positive trajectory for success during their first year of high school.

What are Internal Assets?

Self-Efficacy
Feeling capable of completing tasks

Empathy
Caring about other people's well-being

Problem Solving
Able to find solutions to problems

Self-Awareness
Understanding one's thoughts, feelings, & behaviors

Scholastic Competence
Feeling capable of academic work

Hope for the Future
Feeling capable of finding ways to achieve goals

[1]Project Arrive Research Highlights are developed through a partnership of Georgia State University with SFUSD's Student, Family, & Community Support Department and Research, Planning, and Accountability Data Center to support, further develop, and evaluate the effectiveness of Project Arrive. For information about the Project Arrive program, contact Erin Farrell, LCSW (farrelle@sfusd.edu); for information about the research, contact Gabriel Kuperminc (gkuperminc@gsu.edu). Visit the Project Arrive website at http://sites.gsu.edu/project-arrive.
[2]For comparisons between Project Arrive and comparison students, statistical controls were included for gender, household stability, and race.

This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

Appendix K.
External Resilience Assets Infographic

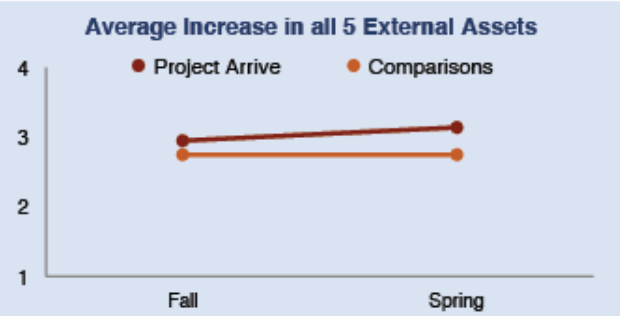
Project Arrive Research Highlights

Using Research to Improve the Lives of SFUSD Students[1] – Fall 2016

Project Arrive Promotes External Assets

Project Arrive is a high school group mentoring program that is designed to prevent school dropout. One way Project Arrive works to prevent school dropout is to improve resilience, or the ability to overcome adversity and achieve success. Resilience can be improved by promoting **External Assets**, or specific qualities of homes, schools, communities, and friend groups that include support, empowerment, and expectations. These assets function as building blocks for students to develop into caring and competent adults.

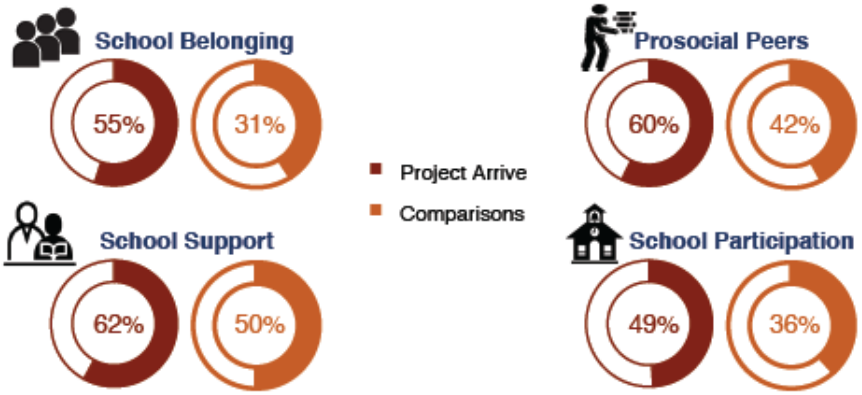
Are External Assets Increasing?



- Overall, Project Arrive students reported **increases** across all 5 external assets.
- Project Arrive students showed **larger increases** than comparisons in all external assets.

Project Arrive vs. Comparisons: Increases in External Assets

Most Project Arrive students (45-62%) reported increases in their external assets. Fewer comparison students reported increases (31-50%). Project Arrive students were twice as likely as comparisons to show increases in **School Belonging, School Support, School Meaningful Participation,** and **Prosocial Peers**.



What are External Assets?

School Belonging
Teachers care, listen, and notice when students are absent

School Support
School provides a caring & encouraging environment

School Meaningful Participation
Student has an interest and impact in school activities

Peer Relationships
Friends care and provide help during hard times

Prosocial Peers
Friends make healthy choices and do well in school

Conclusion

Overall, students in the Project Arrive program showed larger improvements than comparison students in all External Assets. Specifically, significant increases were found in the areas of School Belonging, School Support, School Meaningful Participation, and Prosocial Peers. This finding supports the added benefits that students gain through participation in Project Arrive through their 9th grade year.

[1]Project Arrive Research Highlights are developed through a partnership of Georgia State University with SFUSD's Student, Family, & Community Support Department and Research, Planning, and Accountability Data Center to support, further develop, and evaluate the effectiveness of Project Arrive. For information about the Project Arrive program, contact Erin Farrell, LCSW (farrelle@sfusd.edu); for information about the research, contact Gabriel Kuperminc (gkuperminc@gsu.edu). Visit the Project Arrive website at http://sites.gsu.edu/project-arrive.
[2]For comparisons between Project Arrive and comparison students, statistical controls were included for gender, household stability, and race.

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Appendix L.
Group Processes Infographic

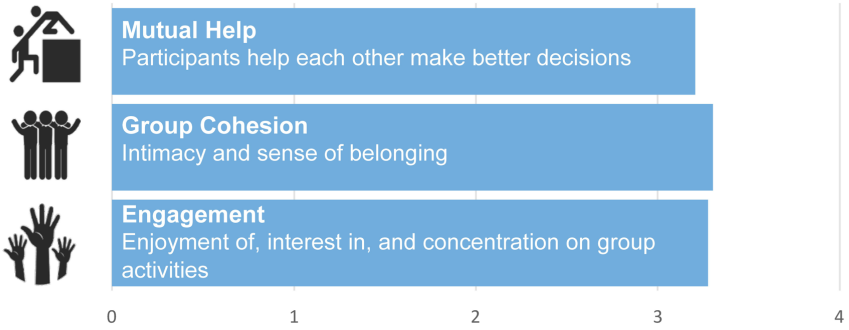
Project Arrive Research Highlights

Using Research to Improve the Lives of SFUSD Students[1] – Summer 2017

Project Arrive Builds Positive Climate in Mentor Groups

Group mentoring can harness the positive influence of peers to build a positive climate within mentor groups. Project Arrive mentors and student participants work together to foster an atmosphere where youth are empowered to help one another, where they feel a sense of belonging and where they are engaged in group activities. Since Project Arrive is designed to prevent school dropout by building resilience assets, in this highlight we examine how such group dynamics are related to growth in internal and external resilience assets for youth participants.

What is the climate of the Project Arrive mentor groups?



On average, by the end of the school year, mentees reported that their *Project Arrive* groups have positive group climates, including strong ratings of mutual help, group cohesion, and mentee engagement.

Is group climate related to mentee gains in Resilience Assets?

Resilience Assets	Mutual Help	Group Cohesion	Engagement
Empathy	★		★
Self-efficacy		★	
Hope for the future	★	★	
Meaningful school participation		★	
School support	★	★	

This table shows that perceiving a positive group climate is related to gains in internal and external resilience assets for *Project Arrive* mentees.[2]

★ Stars indicate which group process is associated with gains in which resilience assets. For example, participants in groups with stronger ratings of mutual help were more likely to report increased empathy, self-efficacy, and sense of school support.

Conclusion

The group climate distinguishes group mentoring from one-on-one mentoring, and can help facilitate positive outcomes for participants. These findings suggest that groups with a stronger sense of mutual help, group cohesion, and participant engagement are more likely to foster growth in some internal and external resilience assets. Fostering a positive group climate—where youth work to help one another, feel a sense of belonging, and are engaged in group activities—appears to be an essential component of the program to promote youth development.

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[2]For comparisons between Project Arrive and comparison students, statistical controls were included for baseline internal and external resilience assets and participant ethnicity (White or Hispanic).

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Appendix M.
Academic Outcomes Infographic

Project Arrive Research Highlights

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Academic Achievement Outcomes

SFUSD's early warning indicator (EWI) system identifies 8th grade students who are at risk for high school dropout because of poor attendance and/or low grades. Project Arrive is a high school-based group mentoring program that is designed to prevent school dropout. Project Arrive works primarily with students identified through the EWI system. Here, we summarize some of the academic outcomes and compare data from 124 Project Arrive students with data from 116 students from a comparison group with similar risk characteristics.

EWI Risk Factors

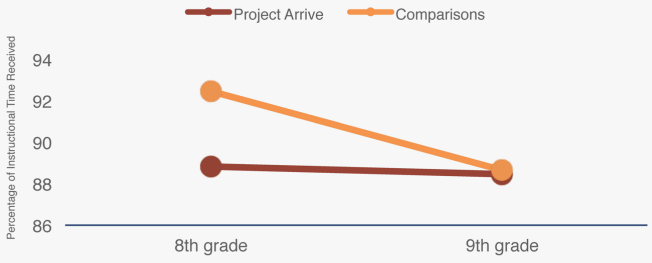
8th grade

	Attendance Risk (<87.5% Instruc. Time)	Academic Risk (<2.00 GPA)	Both Risks
Project Arrive	57%	52%	12%
Comparisons	43%	50%	10%

Project Arrive participants and comparisons had similar rates of academic risk in the 8th grade, and Project Arrive students were more likely to exhibit attendance risk than comparison students.

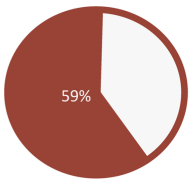
Instructional Time

Attendance is measured as the percentage of instructional time students received over the school year. Attendance rates for Project Arrive participants did not change from 8th grade to 9th grade, whereas attendance for comparisons declined from 8th grade to 9th grade.



Academic Success

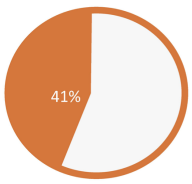
Percent of students that have earned 55+ credits*



Project Arrive

Avg. credits earned **52**

Avg. GPA **1.80**



Comparisons

Avg. credits earned **44**

Avg. GPA **1.70**

*In order to be on track to graduate, students need to have earned at least 55 credits by the end of 9th grade.

With regard to earned academic credits, Project Arrive participants were nearly 3 times as likely to be on track toward graduation than comparisons by the end of 9th grade. On average, Project Arrive participants were within about 1 course of earning enough credits to be "on track", whereas comparisons had fallen behind by more than 2 courses by the end of 9th grade. Although the average GPA for both groups was below 2.0, Project Arrive students earned higher grades than comparisons.

Conclusion

Project Arrive is reaching a group of students who are at significant risk for dropout. Participation in Project Arrive appears to prevent them from developing greater risk for falling behind academically in 9th grade. These findings indicate that Project Arrive may be changing the trajectory of students' academic success in their first year of high school. More data are needed to clarify whether this trend is sustained after ninth grade when students are no longer enrolled.

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