



OPENING DOORS

GETTING BACK ON TRACK

Effects of a Community College Program
for Probationary Students

Susan Scrivener
Colleen Sommo
Herbert Collado

APRIL 2009

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BUILDING KNOWLEDGE
TO IMPROVE SOCIAL POLICY
■

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April 2009

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Overview

Community colleges are often hailed as open-access institutions, and, arguably, no state has done more to ensure access than California. Unfortunately, community college completion rates are dismally low, in part because many students are underprepared for college-level work. In fact, tens of thousands of students in California are on probation, owing to poor grades or inadequate academic progress, or both, and face a high risk of not graduating. To date, little research has been done on how to help such students get back into good standing.

As part of MDRC's multisite Opening Doors demonstration, Chaffey College, a large community college in Southern California, ran two versions of a program that was designed to improve outcomes among students who are on probation. Both versions offered a "College Success" course, taught by a college counselor, which provided basic information on study skills and the requirements of college. As part of the course, students were expected to visit the college's "Success Centers" — which were established at Chaffey in response to the school's recognition that many of its entering students were not prepared for college-level work, and where students could receive supplementary individualized or group instruction in math, reading, and writing. The original program, called "Opening Doors," was a one-semester, voluntary program. The other version, called "Enhanced Opening Doors" in this report, was a two-semester program, in which students were told that they were required to take the College Success course.

MDRC collaborated with the college to evaluate Opening Doors and Enhanced Opening Doors. In 2005, students were randomly assigned either to a program group that was eligible for Opening Doors or to a control group that received standard college courses and services. Any subsequent substantial differences between the program and control groups' academic outcomes can be attributed to Opening Doors. In 2006, a second group of students was randomly assigned to estimate the impacts of Enhanced Opening Doors. This report describes the findings for both programs, which include the following:

- **Chaffey's original, voluntary Opening Doors program did not meaningfully affect students' academic outcomes.** Program group students were no more likely to get off probation than were control group students.
- **In contrast, the Enhanced Opening Doors program, with its message of required participation, improved students' academic outcomes.** It increased the average number of credits earned, the proportion of students who earned a grade point average of 2.0 or higher, and the proportion who moved off probation.
- **Analyses suggest that the greater success of Enhanced Opening Doors might have been driven by the higher rate of participation in the College Success course.** Only about half the original Opening Doors program group took the College Success course, compared with approximately three-fourths of the Enhanced Opening Doors program group.

Following the study, Chaffey committed to institutionalizing a revised version of Enhanced Opening Doors to more fully implement and enforce the college's probation and dismissal policies, and built upon its experiences in the Opening Doors demonstration to develop a voluntary program, called "Smart Start," for new students who are at risk of experiencing difficulties.

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Preface

For many low-income individuals, four-year colleges are out of reach — not just financially, but, just as important, academically. While community colleges have stepped into the breach and are seeing rising registration and enrollment rates, many students arrive at these schools underprepared for college-level work. In California, where the 110 community colleges located throughout the state have minimal entry requirements and the lowest tuition in the nation — meaning that virtually any resident who wants to attend college can do so — tens of thousands of students are on probation, owing to poor grades or inadequate academic progress, or both, and may not graduate. It is not enough, therefore, to help these students get into college; they need help staying there.

Many higher education institutions around the country offer services to probationary students, such as targeted advising and counseling and study skills courses. But what kind of an impact do these services have? Do they help students get back into good academic standing so they can finish school and earn a degree or certificate?

This report describes findings from a random assignment study of two versions of a program for students on probation at Chaffey College, a community college in Rancho Cucamonga, approximately 40 miles east of Los Angeles. Both versions offered students a “College Success” course, taught by a college counselor, that helped probationary students understand college rules and regulations and develop better study skills. As part of the course, students were expected to visit the college’s “Success Centers,” where individualized or group instruction in math, reading, and writing was available.

The original version of the program, called “Opening Doors,” was voluntary and lasted one semester. The second version, called “Enhanced Opening Doors” in this report, sought to improve upon the first; it lasted two semesters, and the students were told they had to attend the course. While the original version of the program had no discernible impact on academic outcomes, Enhanced Opening Doors increased both the number of credits that students earned and their grade point averages, as well as the proportion of students moving off of probation.

Given the documented positive relationship between attaining a postsecondary degree and higher earnings in the future, programs that might boost students’ chances of succeeding in community college deserve a close look. The Enhanced Opening Doors model described in this report is a promising example of one of those programs.

Gordon Berlin
President

Acknowledgments

The Opening Doors demonstration has received support from several foundations and government agencies, which are listed at the front of this report. We are grateful for their generous backing and ongoing commitment. We particularly thank The William and Flora Hewlett Foundation and The James Irvine Foundation, which provided special funding to support the Opening Doors programs at Chaffey College.

We are also grateful to the many administrators, faculty, and staff at Chaffey who made Opening Doors a success. There is not enough space to mention everyone who has played a role in the programs and the study, but we particularly want to acknowledge some individuals. Marie Kane, the president of Chaffey when the study was launched, provided crucial leadership and support. Craig Justice, former Dean of Instructional Programs and Services, served as MDRC's primary liaison at the administrative level, and provided valuable assistance. Robert Bell, former Vice President of Student Services, provided important leadership, as well.

Ricardo Diaz, the Opening Doors Coordinator at Chaffey, has been a terrific partner since the inception of the project. He collaborated with several others at the college to design the program and study, including Karen Sanders, currently the Assistant Dean of Student Services; Tim Arner, Greg Creel, Rob Rundquist, and Cindy Walker, the directors of the college's Success Centers; Laura Hope, currently the Interim Dean of Instructional Support; and counselors Laura Alvarado, Karina Jabalera, Monica Molina-Padilla, and Susan Starr.

Along with Ricardo and the counselors named above, the other participating counselors, the counselor apprentices, and the Success Center staff brought the program model to life. We cannot mention all these individuals by name, but greatly appreciate their commitment to the students and to the research. The counselor apprentices also provided invaluable assistance in recruiting students for the study.

Several people have been instrumental in providing student transcript and probation data to MDRC over the course of the study. Special thanks are due to Inge Pelzer, currently the Executive Assistant to the President, and Jim Fillpot, the Director of Institutional Research.

Many MDRC staff members have contributed to the Opening Doors project and to this report. Robert Ivry developed the demonstration, and Thomas Brock has led the evaluation of the Opening Doors programs. They, along with former MDRC employee Rogéair Purnell, helped Chaffey get its program up and running. Vanessa Martin was the day-to-day liaison with Chaffey throughout most of the study, led MDRC's operations and research efforts at the college, and wrote a draft of an unpublished paper that informed this report. Charles Michalopoulos advised us on the quantitative analyses presented in this report. Sarah Spell and Michael

Pih, a former MDRC employee, programmed the data. Jo Anna Hunter worked with Battelle Memorial Institute to conduct the 12-month survey at Chaffey. The current MDRC staff mentioned, along with Gordon Berlin, Lashawn Richburg-Hayes, and Margaret Bald, reviewed earlier drafts of this report and provided helpful comments. Erin Coghlan coordinated the report preparation process and conducted fact-checking. Joel Gordon, Galina Farberova, and Shirley James and her staff developed and monitored the random assignment and baseline data collection process. Alice Tufel edited the report, and Stephanie Cowell prepared it for publication.

Finally, we would like to thank the hundreds of students who participated in the study at Chaffey, and, in particular, those who answered surveys or participated in interviews or panel discussions. We hope that the findings from Chaffey and the other sites in Opening Doors will be used to improve college programs and services for them and others in the future.

The Authors

Executive Summary

Community colleges are often hailed as open-access institutions. Arguably, no state has done more to ensure access to community colleges than California. The state's 110 community colleges have minimal entry requirements and the lowest tuition of any state in the nation.¹ Unfortunately, recent analyses suggest that only one-fourth of students seeking a degree or certificate in California either transfer to a university or earn an associate's degree within six years.² One reason for this low rate of college completion is that many students are underprepared for college-level work. In fact, tens of thousands of students in California are on probation, owing to poor grades or inadequate academic progress, and face a high risk of not finishing school. Many colleges provide services to help probationary students succeed, but few studies have provided rigorous evidence on the effects of such services.

As part of MDRC's multisite Opening Doors demonstration, six community colleges across the country operated innovative programs to increase students' academic achievement and persistence. Chaffey College, a large community college in Southern California, operated two versions of a program that was designed to improve outcomes among students on probation. Referred to in this report as "Opening Doors," which was the original version, and "Enhanced Opening Doors," the programs offered a "College Success" course, taught by a college counselor, that provided instruction on topics designed to help students do well in school and get off probation. Students in the original Opening Doors program were encouraged to take the course, but it was voluntary. Students in the Enhanced Opening Doors program were told that they were required to take the course. As part of the course, students were expected to visit the college's "Success Centers" — which were established at Chaffey in response to the college's recognition that many of its students were not prepared for college-level work — where students could receive supplementary individualized or group instruction in math, reading, and writing. The one-semester Opening Doors program operated during fall 2005, and the two-semester Enhanced Opening Doors program operated during fall 2006 and spring 2007.

This report discusses the programs' implementation and their effects on students. To estimate the effects of the original Opening Doors program, MDRC randomly assigned students either to a program group that was eligible for Opening Doors or to a control group that re-

¹California Postsecondary Education Commission, "Average Annual Undergraduate Tuition, Fees, Room, and Board Charged for Full-Time Students in Public, 2-Year, Degree-Granting Institutions, 2005-06," *50 State Comparison — Postsecondary Education Data Graph: Average Annual Undergraduate Costs* (State of California, 2009). Web site: www.cpec.ca.gov.

²Nancy Shulock and Colleen Moore, *Rules of the Game: How State Policy Creates Barriers to Degree Completion and Impedes Student Success in the California Community Colleges* (Sacramento: California State University, Institute for Higher Education Leadership & Policy, 2007).

ceived Chaffey's standard college courses and services. Any subsequent substantial differences between the program and control groups' academic outcomes can be attributed to the Opening Doors program. Although it was not part of MDRC's original research plan, when Chaffey administrators decided to offer Enhanced Opening Doors — a revised version of the original program — MDRC and the college agreed that it warranted a separate evaluation, and they randomly assigned a second group of students to either a program or a control group.

In summary, the key findings from this report are:

- **Chaffey's original Opening Doors program did not meaningfully affect students' academic outcomes.** Program and control group members earned about the same number of credits and earned similar grades. Opening Doors did not help students get off probation.
- **In contrast, Chaffey's Enhanced Opening Doors program improved students' academic outcomes.** It increased the average number of credits earned, the proportion of students who earned a grade point average (GPA) of 2.0 or higher, and the proportion who moved off probation.
- **Analyses suggest that the greater success of Enhanced Opening Doors might have been driven by the higher rate of participation in the College Success course.** Approximately three-fourths of the Enhanced Opening Doors program group members took the course, compared with only about half of the Opening Doors program group members.

How Were Chaffey's Programs Developed?

The history of Chaffey's Opening Doors program begins with its Basic Skills Transformation Project. In 2000, concerned that more than 70 percent of its entering students were scoring at a pre-collegiate level on skills assessment tests, Chaffey used special funds from the State of California to establish math, reading, and writing Success Centers. Students in some developmental-level math and English classes were required to visit the centers; other students could visit on a voluntary basis. The centers, which provide one-on-one instruction, tutoring, workshops, and computer-based assistance, are led by a full-time faculty and are supported by other instructors and tutors. Students can make appointments or drop in, as the facilities are open early morning through evening on weekdays and some hours on weekends. The college's Institutional Research office found that students who visited the Success Centers often had better academic outcomes than students who visited rarely or not at all, and that students on probation were the students least likely to use the Success Centers.

College administrators, meanwhile, were concerned with the growing number of students on probation. In spring 2004, approximately 3,500 students were on probation, or about one of every five students enrolled. At the time, probationary students typically received a letter from the college notifying them about their status and recommending that they meet with a college counselor. Like other students, probationary students could use the college's supports, such as the Success Centers, but they were not required to do so.

Building upon its experiences and drawing lessons from its data, Chaffey developed an innovative one-semester Opening Doors program model with three main components: a College Success course, which provided basic information on study skills and the requirements of college; visits to the Success Centers; and extra counseling. The primary goals of the program were to help students succeed in their classes and move off probation. With funding from The William and Flora Hewlett Foundation and The James Irvine Foundation, MDRC provided a grant to Chaffey College to develop and operate its original Opening Doors program. After Opening Doors ended, the college assessed the program and decided that student outcomes might be improved with some changes. As noted above, the next school year, Chaffey offered a revised version of the program, Enhanced Opening Doors.

Whom Did the Programs Serve?

Chaffey targeted students who were on academic or progress probation, had earned fewer than 35 credits, did not have an associate's degree, had a high school diploma or General Educational Development (GED) certificate, and were 18 to 34 years of age. Students at Chaffey who have attempted 12 or more credits (since starting at Chaffey) are placed on *academic probation* if they have a cumulative GPA below 2.0 ("C") and on *progress probation* if they have not successfully completed 50 percent or more of the credits they attempted.

In 2005, 898 students were randomly assigned for the study of the original Opening Doors program, and, in 2006, 444 students were assigned for the study of the Enhanced Opening Doors program. Sixty percent of the Opening Doors and Enhanced Opening Doors sample members are women. Fifty-three percent identified themselves as Hispanic/Latino, 23 percent as white, and 14 percent as black (non-Hispanic). Most sample members were between 18 and 20 years of age when they were randomly assigned. Most were unmarried and did not have any children. Approximately half of the sample members said they were financially dependent on their parents when they entered the study.

How Were the Impacts of the Programs Evaluated?

As noted above, MDRC assigned students, at random, to either a program group or to a control group to estimate the effect, or "impact," of Chaffey's original Opening Doors program.

The study is tracking the Opening Doors program group and control group over time to estimate whether Chaffey’s original program resulted in better outcomes for students compared with standard classes and services. Random assignment ensures that the characteristics, including motivation levels and demographic characteristics, of students in the program group and control group are similar when a study begins; hence, any subsequent substantial differences in outcomes can be attributed to the program. Using the same rigorous research design, MDRC randomly assigned a second group of students to estimate the effects of Enhanced Opening Doors compared with standard classes and services, and is tracking their outcomes. The study, therefore, is estimating the *value added* of Opening Doors and Enhanced Opening Doors, above and beyond what probationary students normally would have received at Chaffey during the study period. The study also allows for a direct comparison of the effects of the two programs in which most circumstances were similar except for the variations in the two programs, and offers suggestive evidence about why those effects might differ.

It is important to note two limitations of the study. First, in terms of a program-to-program comparison, because Opening Doors and Enhanced Opening Doors were operated sequentially, not simultaneously, MDRC is not able to definitively attribute any differences in the programs’ impacts to the programs themselves. (To do so would have required that students be randomly assigned to one of the two programs or to the control group, which was not possible.) Second, the study cannot disentangle the effects of each program component (such as the effects of the College Success course separate from the effects of asking students to visit the Success Centers). Rather, the study examines whether the *package* of reforms in Opening Doors and Enhanced Opening Doors led to different outcomes compared with standard classes and services.

Opening Doors: How Was It Implemented and Did It Make a Difference for Students?

Table ES.1 describes the key components of the original Opening Doors program, the Enhanced Opening Doors program, and the standard college services and courses that were available to the study’s two control groups. Chaffey’s original program, Opening Doors, offered a College Success course. The course was the central component of the Opening Doors program; program group students who did not take the course did not receive any Opening Doors services. The college encouraged Opening Doors program group members to take the College Success course, but it did not require that they do so.

The College Success course provided instruction on how to set personal goals, manage time, study effectively, understand college rules and regulations, and other topics designed to help students do well in school. It used *On Course*, a curriculum developed to promote “innovative learner-centered strategies for empowering students to become active, responsible

**The Opening Doors Demonstration
Table ES.1
Opening Doors Program, Enhanced Opening Doors Program,
and Regular College Environment for Probationary Students: Comparison of Key Features
Chaffey College Report**

Feature	Opening Doors Program, Fall 2005	Enhanced Opening Doors Program, Fall 2006 - Spring 2007	Regular College Environment (Control Group)
Recruitment for services	Students met with Opening Doors counselor, who encouraged them to take College Success course.	Students met with Enhanced Opening Doors counselor, who told them College Success course required.	Students not recruited for special services.
First-semester College Success course	3-credit course designed to help probationary students develop skills needed for academic success; taught by some experienced, some new counselors; approximately half of program group took course.	3-credit course designed to help probationary students develop skills needed for academic success; taught by experienced staff; almost three-fourths of program group took course.	Students could take College Success course; very few control group members did so.
Second-semester College Success course	1-credit course designed to build upon first-semester course; few students were informed about it, and very few took the course.	2-credit course designed to build upon first-semester course; all students who took first semester course invited to participate; roughly one-third of program group took course.	Students could take College Success course; very few control group members did so.
Success Centers	First-semester College Success students expected to visit centers 9 times; instructor assigned students to a center; content of assignments based on assessment results; some instructors did not enforce Success Center expectation.	First-semester College Success students expected to visit centers 5 times; students chose which center(s) to visit; content of assignments integrated and timed with course material; all instructors enforced Success Center expectation.	Students could visit centers on their own; students in some developmental classes were required to do so; some control group members did so.
Counseling	Students in College Success courses received help from counselor in class, and some met with counselor outside of class; counselors sometimes worked proactively to identify, resolve issues; students not in course could access college's counseling on their own.	Students in College Success courses received help from counselor in class, and many met with counselor outside of class; counselors generally worked proactively to identify, resolve issues; students not in course could access college's counseling on their own.	Students could access counseling on their own; caseload for counselors was roughly 1,500:1; counseling role was reactive.
Textbook voucher	Voucher provided to program group students to cover College Success course books.	Voucher provided to program group students to cover College Success course books.	No voucher offered.

SOURCE: MDRC field research data.

learners.”³ The course’s three credits counted toward full-time enrollment at the college, but they could not be applied toward a degree or transferred to another postsecondary institution.

The program model specified that, as part of the College Success course, students would be asked to visit the college’s Success Centers nine times during the semester. Based on the results of skills assessment tests, students would be asked to complete a series of assignments at the Success Centers to improve their math, reading, or writing skills. The assignments counted toward a student’s grade for the College Success course. The program model also specified that the instructor of the College Success course provide extra counseling to participating students, both inside and outside of class.

The key findings about the original Opening Doors program as it was implemented at Chaffey College follow.

- **Chaffey’s Opening Doors program did not fully operate as designed and participation rates were lower than the college and MDRC had hoped.**

Only about half of the Opening Doors program group took the College Success course; thus, the program did not reach many of the students it was designed to serve. Low participation rates likely reflect the interaction of the program’s voluntary nature and the fact that the College Success course did not provide transferable credits and therefore may not have been as attractive to students as some other courses.

Some of the course instructors did not communicate and enforce the course expectation of visiting the Success Centers nine times. Many Chaffey students visit the centers on their own or as part of a developmental course, and, in the end, the program did not increase attendance at the centers as much as expected. In addition, some students in the Opening Doors program received extra counseling from their instructor, but many did not.

- **Opening Doors did not meaningfully improve students’ academic outcomes.**

MDRC compared academic outcomes for the Opening Doors program and control groups to estimate the impact of the program. Tests of statistical significance were conducted to determine whether any differences that emerged were likely to be a result of chance rather than the program. (Differences, or effects, that are not statistically significant may be a result of chance.) The analyses show that Opening Doors did not have a statistically significant effect on the total number of credits that students earned or on their GPA. Furthermore, Opening Doors did not have a statistically significant effect on moving students off probation.

³For more information, see www.oncourseworkshop.com.

Enhanced Opening Doors: How Was It Implemented and Did It Make a Difference for Students?

As shown in Table ES.1, the first semester of Enhanced Opening Doors offered the same components as the original Opening Doors program, but had some key differences. Chaffey administrators were disappointed in the low rate of participation in the original program, and decided to require participation in the Enhanced Opening Doors program. Thus, Enhanced Opening Doors program group members were told that they were *required* to take the College Success course and that their registration would be blocked if they did not. In the end, administrators decided not to implement the block. Interviews with Enhanced Opening Doors program group students, however, indicated that most believed that they were, in fact, required to take the course, based on the messages they had heard during and after study intake.

The College Success course for Enhanced Opening Doors was taught by staff with experience in the original Opening Doors program. The Success Center component of the program was reduced to five expected visits from nine, and the assignments were integrated with themes from the College Success course, rather than being based upon students' assessment results. Enhanced Opening Doors offered a second College Success course in the second semester of the program to build upon what students learned in the first semester.

The key findings about the Enhanced Opening Doors program implemented at Chaffey College follow.

- **Chaffey's Enhanced Opening Doors program operated largely as designed and participation rates were relatively high.**

Approximately three-fourths of the Enhanced Opening Doors program group took the first-semester College Success course. Approximately one-third of the program group took the second-semester College Success course. As was the case in the original Opening Doors program, program group members who did not take the College Success course in the Enhanced Opening Doors program did not receive any program services.

All the College Success course instructors in Enhanced Opening Doors enforced the expectation that students visit the Success Centers five times during the semester. During the first semester of the program, the proportion of Enhanced Opening Doors program group members who visited a center at least once was more than double the proportion of Enhanced Opening Doors control group members. Finally, the Enhanced Opening Doors program consistently provided extra counseling to students who took the College Success courses each semester.

- **Enhanced Opening Doors increased the number of credits that students earned.**

Figure ES.1 shows the number of credits that students earned in their first two semesters in the study (the “program semesters”). The white bar in the figure shows the average number of credits earned by the Enhanced Opening Doors program group, and the solid bar shows the average outcome for the Enhanced Opening Doors control group. The difference between the two groups’ average outcomes is the estimated impact of the program. Asterisks above the bar indicate that the impact is statistically significant, meaning that it is unlikely to be a result of chance.

As shown, the Enhanced Opening Doors program group earned an average of 8.3 credits during their first two semesters in the study, compared with an average of 5.6 credits for their control group counterparts. Almost all the estimated increase of 2.7 credits is accounted for by credits that do not count toward a degree (primarily from the College Success course).

- **Enhanced Opening Doors increased the proportion of students who earned a cumulative GPA of 2.0 or higher.**

Figure ES.2 (see page ES-10) illustrates the estimated program impact on GPA over the two semesters after sample members entered the study. The first two bars show the program group and control group average for the “cumulative GPA,” which includes all credit-bearing courses and is the GPA used at Chaffey to determine students’ probationary status. (Recall that students who have attempted 12 or more credits are placed on academic probation if their cumulative GPA drops below 2.0, and they are placed on progress probation if they do not successfully complete at least half of all credits attempted.) As the figure shows, 36.2 percent of the Enhanced Opening Doors program group earned a cumulative GPA of 2.0 (“C”) or higher, compared with only 23.6 percent of their control group counterparts.

The higher cumulative GPA for the program group is partly a result of the grades that they received in the College Success course. The second set of bars in Figure ES.2 shows outcomes for the “degree-applicable GPA,” which excludes grades from the College Success course and other courses that do not count toward a degree (such as other college preparatory courses). As the figure shows, Enhanced Opening Doors also increased the proportion of sample members who earned a cumulative degree-applicable GPA of 2.0 or higher. This finding suggests that Enhanced Opening Doors positively affected performance in courses outside the program.

- **The Enhanced Opening Doors program almost doubled the proportion of students who moved off probation and into good academic standing.**

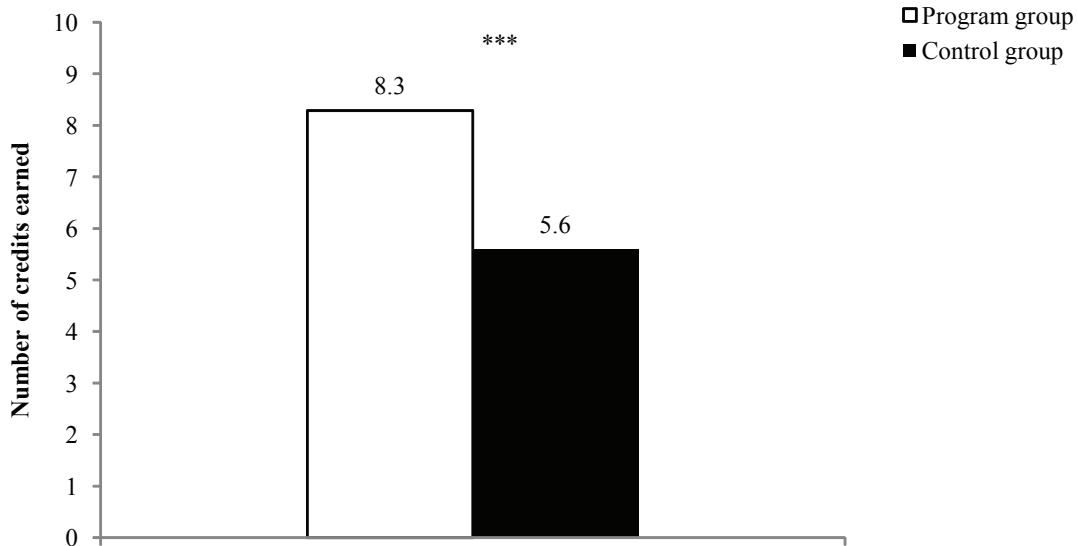
Given the impact on GPA described above, it is not surprising that Enhanced Opening Doors moved many students off probation. As shown in Figure ES.3 (see page ES-11), 30.4

The Opening Doors Demonstration

Figure ES.1

Cumulative Credits Earned, First and Second Program Semesters: Enhanced Opening Doors Program

Chaffey College Report



SOURCE: MDRC calculations from Chaffey College transcript data.

NOTE: A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

percent of the Enhanced Opening Doors program group achieved good academic standing during the two program semesters, compared with only 15.9 percent of the control group.

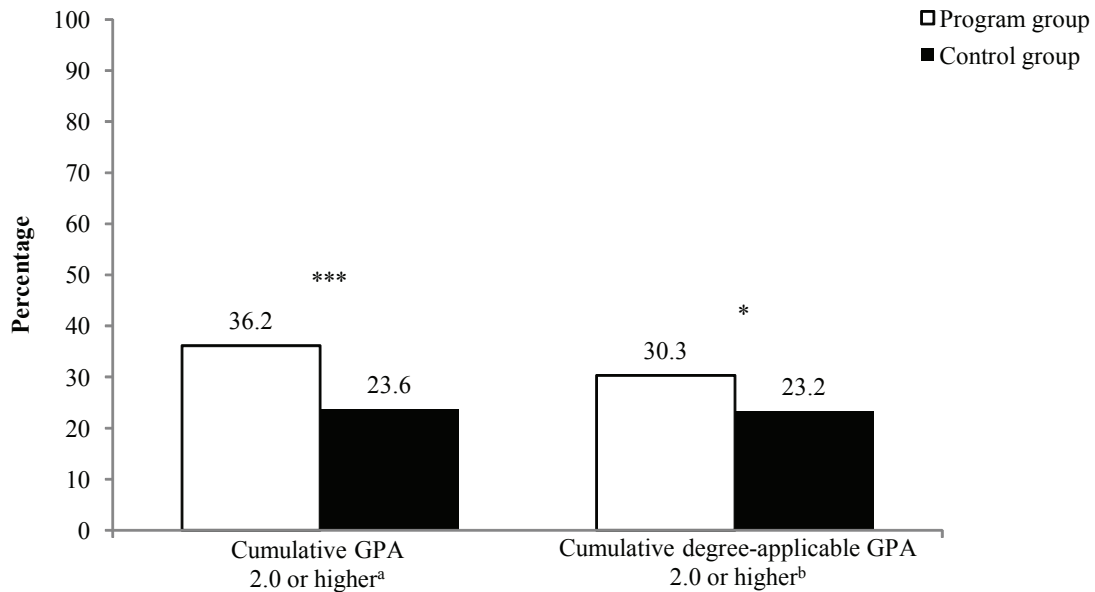
- **Enhanced Opening Doors' more positive effects on academic outcomes might have been driven by the higher rate of participation in the College Success course.**

Enhanced Opening Doors generally had larger effects on sample members' academic outcomes than did the original Opening Doors program. The study was not designed to determine systematically *why* the two programs might have had different results, but MDRC conducted some analyses to shed light on that question. The analyses (which include controlling for

The Opening Doors Demonstration

Figure ES.2

Cumulative Grade Point Average, First and Second Program Semesters: Enhanced Opening Doors Program Chaffey College Report



SOURCE: MDRC calculations from Chaffey College transcript data.

NOTES: A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

GPA = grade point average.

^a“Cumulative GPA” is based on all credit-bearing courses taken during the first and second semesters.

^b“Cumulative degree-applicable GPA” excludes credit from the College Success course and other non-degree-applicable courses.

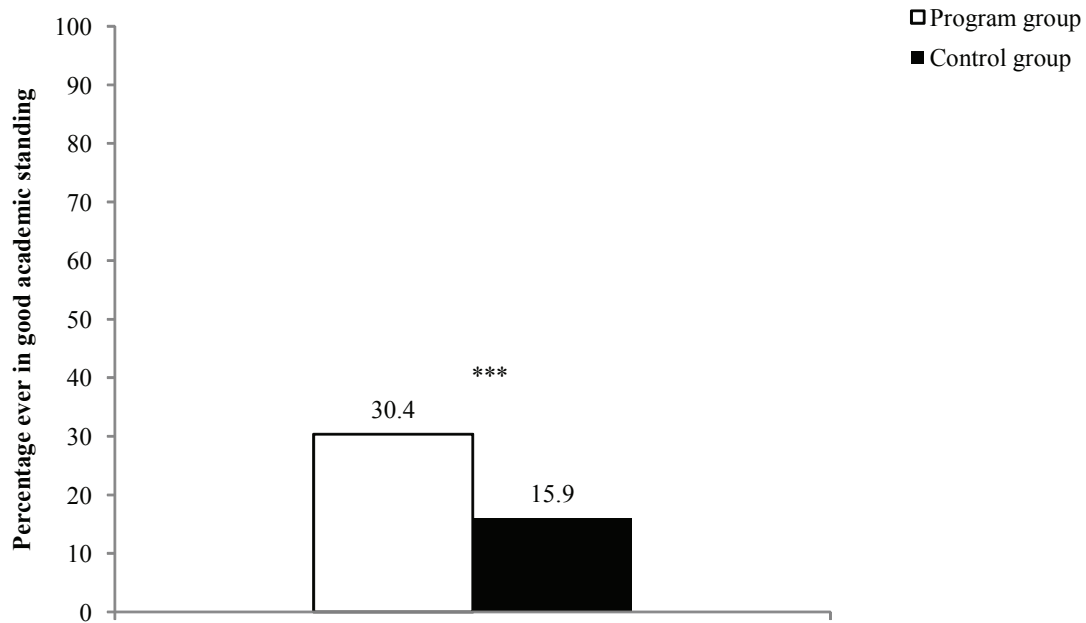
registration in the College Success course and for sample members’ baseline characteristics) suggest that the more positive effects of Enhanced Opening Doors might have been driven by the higher rate of participation in the College Success course. These positive effects do not appear to be caused by differences in the characteristics of the students served by the two programs. Differences in effectiveness might also have been driven by other differences in the implementation of the two programs, although there is no statistical evidence regarding this possibility.

The Opening Doors Demonstration

Figure ES.3

Students Ever in Good Academic Standing, First and Second Program Semesters: Enhanced Opening Doors Program

Chaffey College Report



SOURCE: MDRC calculations using Chaffey College probation data.

NOTE: A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

What Are the Implications of the Results?

Little rigorous research has been done to understand how to best help probationary students succeed in college, but this study offers some promising evidence:

- **It can be worthwhile to target services to students on probation.**

Past research has shown some positive effects for probationary students who receive special services, but the study at Chaffey offers rigorous, causal evidence that services can make a difference. The program's design and operation, however, are important. Although Chaffey's original Opening Doors program did not improve students' academic outcomes, the college's

Enhanced Opening Doors program helped move students off probation. While further rigorous research should be conducted, this report provides hope for other colleges struggling to help students with substantial academic difficulties.

- **A program like Enhanced Opening Doors may be more effective if it is required.**

Results from this study suggest that requiring participation in a program like Chaffey's may generate larger effects than allowing students to volunteer. By sending the message that participation in a program or a course is required, a college can engage students who would not take part on their own. This approach may offer more room to effect change with probationary students, who have already faced substantial academic difficulties.

- **Other program implementation factors may matter, as well.**

Some differences between the implementation of the two programs may have contributed to Enhanced Opening Doors' relative success. In Enhanced Opening Doors, all the College Success course instructors had experience in teaching the course and consistently enforced the expectation that students should visit the Success Centers. Assignments at the Success Centers were integrated with the College Success course material. Students consistently received extra counseling. Finally, a second semester College Success course was offered.

The study cannot determine the importance of each of the program's different components. Another MDRC evaluation, however, will provide evidence on the effects of a course very similar to Chaffey's College Success course. As part of the Achieving the Dream initiative, Guilford Technical Community College in North Carolina is providing a class for students in developmental classes using the same *On Course* curriculum used at Chaffey. Results from the study will be available by 2010.

* * *

Finally, Chaffey's approach to program development during the Opening Doors demonstration provides a model for continuous improvement of college policies and practices. Throughout the study, Chaffey was committed to evaluation and innovation, with the goal of improving services for probationary students. The college developed the original Opening Doors program, using data about the Success Centers. It then evaluated and improved the model, to create the Enhanced Opening Doors program. After the demonstration programs operated, the college institutionalized a revised version of the Enhanced Opening Doors program, called "Opening Doors to Excellence." Chaffey also developed a similar program, "Smart Start," for new students who are identified through the college's assessment process as being at risk of experiencing difficulties.

Chapter 1

Introduction

Community colleges are often hailed as open-access institutions. Arguably, no state has done more to ensure access to these institutions than California. The 110 community colleges located throughout the state have minimal entry requirements and the lowest tuition of any state in the nation:¹ To gain admission, a student simply has to be 18 years of age or a high school graduate. Tuition is currently \$26 a credit.² Thus, virtually any state resident who wants to attend community college can do so. Open access does not, however, yield universal academic success. Recent analyses suggest that only one-fourth of students seeking a degree or certificate in California either transfer to a university or earn an associate's degree within six years.³ One reason for this low rate of completion is that many students arrive at community college underprepared for college-level work. In fact, tens of thousands of students in California are on probation, owing to poor grades or inadequate academic progress, and face a high risk of not finishing school. Many colleges provide services to help probationary students succeed, but few studies have provided rigorous evidence on the effects of such services.

This report examines two versions of an innovative program operated at Chaffey College in Southern California to improve outcomes among students who were on probation owing to poor grades or inadequate academic progress. Referred to in this report as “Opening Doors” (the original version of the program) and “Enhanced Opening Doors,” the programs offered students a “College Success” course taught by a college counselor that provided instruction on how to set personal goals, manage time, study effectively, and other topics designed to help students do well in school. Students in the original Opening Doors program were encouraged to take the course, but it was voluntary. Students in Enhanced Opening Doors were told that they were required to take the course. As part of the course, students were asked to visit the college’s “Success Centers” — which were established at Chaffey in response to the administration’s recognition that many of its students were scoring at pre-collegiate levels on skills assessment test — where students could receive individualized or group instruction. The original Opening Doors program was a one-semester program and operated during fall 2005. Enhanced Opening Doors was a two-semester program and

¹California Postsecondary Education Commission (2009).

²California Community Colleges Online Application Center (2001-2009).

³Shulock and Moore (2007).

operated during fall 2006 and spring 2007. Additional differences between the two versions of the program are described later in this chapter.⁴

Chaffey's original Opening Doors and Enhanced Opening Doors programs were part of a multisite Opening Doors demonstration of various programs designed to improve outcomes of community college students. This chapter briefly describes the Opening Doors demonstration and evaluation, and then focuses specifically on the study at Chaffey College. The chapter then provides a broader context in which to consider the study at Chaffey, and it concludes with a description of the contents of the rest of the report.

Overview of the Opening Doors Demonstration and Evaluation

With support from a consortium of funders, MDRC launched the Opening Doors demonstration in 2003. Six community colleges in four states each operated an innovative program that was designed to increase students' achievement and persistence in school. The programs included two or three of the following strategies: curricular and instructional innovations, enhanced student services, and supplementary financial aid. Chaffey College was the last site to begin operating its Opening Doors program.⁵

The evaluation of the Opening Doors programs is being conducted by MDRC, a group of scholars who are part of The Network on Transitions to Adulthood (funded by The John D. and Catherine T. MacArthur Foundation), and an expert on the relationship between education and health at Princeton University.⁶ To measure the effects of the programs, the evaluation is using a random assignment research design, a first in large-scale community college research. At each college, students who met the site's eligibility criteria and agreed to take part in the study were assigned, at random, either to a program group that received the special services as part of the demonstration program or to a control group that received the college's standard

⁴After the demonstration, Chaffey institutionalized a revised version of the program for probationary students, called "Opening Doors to Excellence," and built upon it to create a second program for new students at risk of having academic difficulties, called "Smart Start." Chapter 6 provides more information on these later programs.

⁵See page 5 in Scrivener et al. (2008) for a description of the other programs in the study. The following reports present results from the other sites in the Opening Doors demonstration: Richburg-Hayes et al. (2009); Scrivener et al. (2008); Scrivener and Au (2007); and Scrivener and Pih (2007).

⁶Members of The Network on Transitions to Adulthood are Gordon L. Berlin (MDRC), Mark Courtney (University of Washington), Sheldon Danziger (University of Michigan), Connie A. Flanagan (Pennsylvania State University), Frank F. Furstenberg (University of Pennsylvania), Vonnie C. McLoyd (University of North Carolina, Chapel Hill), Wayne Osgood (Pennsylvania State University), Jean E. Rhodes (University of Massachusetts, Boston), Cecilia E. Rouse (Princeton University), Rubén G. Rumbaut (University of California, Irvine), Richard Settersten (Oregon State University), and Mary C. Waters (Harvard University). Christina Paxton of Princeton University is leading the evaluation component focused on health outcomes.

services. The study is tracking both groups at each site over time to find out whether the demonstration programs result in better educational and other outcomes for students. Random assignment ensures that the characteristics, including motivation levels and demographic characteristics, of students in the program group and control group were similar when the study began; hence, any subsequent substantial differences in outcomes can be attributed with a high level of confidence to the demonstration programs.

The Opening Doors evaluation has three main components: an implementation analysis, an impact analysis, and a cost analysis. The implementation analysis will determine whether the demonstration program services were sufficiently different from the services available to the study's control group to constitute a "fair test" of the intervention. It will also determine the intensity and quality of the services provided. The impact analysis will estimate the effects of the demonstration programs on a wide range of outcomes. Most centrally, the study is focused on educational outcomes, including credits earned, semester-to-semester persistence, grade point average (GPA), and, eventually, graduation and transfer to four-year institutions. The study is also examining whether the demonstration programs or any resulting educational impacts have any effect on students' well-being, defined using various psychological, social, and health indicators. Finally, the study will also include an analysis of some of the programs' costs (if funding is available).⁷

The Chaffey College Environment and Its Original Opening Doors and Enhanced Opening Doors Programs

Chaffey College is located in Rancho Cucamonga, California, in San Bernardino County, approximately 40 miles east of Los Angeles. Though it may sound remote, Rancho Cucamonga is part of the vast "Inland Empire" — one of the most rapidly growing areas of the nation.⁸ In 2005, when the study began, the city had a population of about 170,000,⁹ of which roughly one-third is Hispanic or Latino.¹⁰ The San Gabriel Mountains provide a striking backdrop to the north of the college. To the east, west, and south are many miles of suburbs, commercial areas, and light industry, all connected by Southern California's ubiquitous freeways.

The college was founded in 1883 as a private agricultural college and was one of the first postsecondary institutions to be established in California. Since 1916, Chaffey has been a

⁷See Chapter 1 in Scrivener et al. (2008) for more detail on the Opening Doors demonstration and evaluation.

⁸U.S. Census Bureau (2007).

⁹Husing (2008).

¹⁰U.S. Census Bureau (2007).

publicly funded two-year community college.¹¹ The campus covers 200 acres and is going through a major building boom to expand and upgrade its facilities.

During the 2005-2006 school year, the most commonly awarded associate's degrees at the college were in (1) Liberal Arts and Sciences, General Studies, and Humanities; (2) Health Professions and Related Clinical Sciences; and (3) business-related majors. Chaffey's 2000 graduation rate, determined by calculating the percentage of entering freshmen who earned an associate's degree within three years, is 23 percent — the highest rate among the colleges participating in the Opening Doors demonstration.¹²

During the fall 2005 semester, when the study started at Chaffey, the college served about 17,200 students. Approximately 70 percent attended on a part-time basis, and the majority of students were women (61 percent) and under 25 years old (65 percent). The college is classified as a Hispanic Serving Institution, with 43 percent Hispanic/Latino enrollment. Even with its low cost per credit, 43 percent of Chaffey students received some form of financial aid. (The financial aid statistic is for first-time, full-time, degree- or certificate-seeking students.)¹³

The California Context

As noted, California's community colleges accept any state resident who is 18 or older or has a high school diploma. The state's open-access policies were established in its Master Plan for Higher Education in 1960 and have been reiterated in subsequent legislation. The plan differentiated the functions of the state's three public postsecondary education segments: the University of California, California State University, and Community College systems. The plan established the community colleges' primary mission: to provide academic and vocational instruction through the first two years of undergraduate education. Community colleges were also authorized to provide remedial instruction, "English as a Second Language" courses, adult noncredit instruction, community service courses, and workforce training services.¹⁴

California residents in the top one-eighth of the statewide high school graduating class are guaranteed admission at one of the University of California campuses, and residents in the top one-third of the graduating class are guaranteed admission at one of the California State University campuses. The remaining students are directed to the state's community colleges. In addition, for various reasons, some students in the top one-third *choose* to attend a community

¹¹The information on the history of Chaffey College is from the college's Web site: www.chaffey.edu/cchist.shtml. See Chaffey College (2008).

¹²See Table 2.1 in Brock and LeBlanc (2005).

¹³The information about Chaffey's student body in this paragraph is from the Integrated Postsecondary Education Data System (2007-2008), at <http://nces.ed.gov/collegenavigator>.

¹⁴University of California, Office of the President (2007).

college. Recent data show that approximately three-fourths of the undergraduate students attending public postsecondary institutions in California attend the state's community colleges.¹⁵ Chaffey College, along with other community colleges, has been challenged to meet the needs of its student body, many of whom are not adequately prepared for college-level work.

Program History and Model

When developing the Opening Doors demonstration, MDRC sought community colleges that had innovative ideas or programs designed to increase students' academic success and persistence, and that were interested in participating in a rigorous evaluation. Chaffey College came to MDRC's attention because of its Basic Skills Transformation Project, which the college had launched in 2000. Concerned that over 70 percent of its first-time students were testing at a pre-collegiate level in math, reading, or writing, Chaffey used State of California Partnership for Excellence funds to establish so-called Success Centers offering individualized and small group instruction to students in math, reading, and writing, along with curriculum resources and instructional support to faculty in these fields.¹⁶ The centers provide one-on-one instruction, tutoring, and study groups for specific classes or topics. They also offer workshops on various subjects. During the fall 2005 semester, for example, the Writing Success Center offered about 30 workshops with titles including, "Purpose, Audience, and Tone," "How to Proofread Your Own Paper," "Developing Paragraphs," and "The Writing Process." The centers also provide computer- and Internet-based instructional assistance, including skills diagnostic tests, practice exercises, and instructional videos.

The Success Centers are led by full-time faculty and are supported by other instructors and tutors. Students can make appointments or drop in, as the facilities are open from early morning through the evening on weekdays and during some hours on weekends. Most of the college's developmental-level instruction occurs in a traditional classroom setting, but most of the lower-level developmental courses require attendance at the Success Centers to complete specific assignments. Research by the college's Institutional Research (IR) office shows that the centers are heavily used and that students who frequently visit them tend to have better academic outcomes than students who never or rarely go.

Because the Success Centers were already well established and open to all students, MDRC and Chaffey administrators quickly agreed that they were not well suited for a research project that would randomly assign some students to a control group. However, MDRC and

¹⁵Shulock and Moore (2007).

¹⁶The Partnership for Excellence was established by the California legislature and governor in 1998. It provided additional funding to community colleges in exchange for a commitment to improve their performance in five specified areas, including basic skills development. See California Community Colleges (2008).

Chaffey representatives also discovered that there was mutual interest in developing a new intervention targeting the large and growing number of students on academic or progress probation: approximately 3,500 in spring 2004, or about one out of every five students enrolled.

At Chaffey, students are placed on *academic probation* if they have attempted 12 or more credits (since beginning at the college) and have a GPA below 2.0 (“C”). Students are placed on *progress probation* if they have attempted 12 or more credits and have not successfully completed 50 percent or more of the credits (usually because they withdrew or took an “Incomplete”).¹⁷ The college assigns probation statuses about a month after a semester ends, once course grades are final.

Students who were placed on academic or progress probation typically received a letter from Chaffey notifying them of their status. The letter recommended that they meet with a counselor to get assistance in moving off probation and restoring good academic standing. The college had no formal system, however, to follow up with students who did not contact a counselor. Probationary students could access the college’s existing supports, such as the counselors and Success Centers, but they were not required to do so. In fact, the college’s data indicated that they were unlikely to do so. As a result, many students did not receive assistance with how to successfully move off and stay off probation. Chaffey students who had been on academic or progress probation for three consecutive semesters were officially subject to dismissal from the college, and they received a letter communicating that possibility. Prior to the study, however, dismissals rarely occurred. In fall 2006, Chaffey began enforcing its dismissal policy for some students. (Sample members in the study were exempt from the policy during the follow-up period for this report.)

Some students who are on academic or progress probation at Chaffey are also on financial aid probation. The federal government mandates that aid recipients make satisfactory academic progress toward a degree or certificate and requires that colleges develop and enforce a system to monitor the aid recipients’ progress. Aid recipients at Chaffey are placed on financial aid probation if they have a GPA of less than 2.0 or have not completed a certain number of credits. (The number of credits required depends on whether the student was part-time or full-time and his or her semester in school.) The college’s Financial Aid office requires that students on financial aid probation complete a probation contract in which they agree to improve their performance. Students who do not improve their performance lose their eligibility for financial aid but are still free to take classes at the college. Because tuition at Chaffey (and other California community colleges) is very low, however, the threat of losing financial aid is far less ominous than at most other colleges.

¹⁷Specifically, students are placed on progress probation if they have attempted 12 or more credits and have received grades of “Withdrawal,” “Incomplete,” or “No Credit” for 50 percent or more of their credits.

When MDRC approached Chaffey about the Opening Doors demonstration, the college was already taking steps to develop a better process of alerting students on academic and progress probation about their status. College administrators realized, though, that many of these students would need much more help if they were to become “tomorrow’s transfer students,” in the words of one administrator.

Throughout 2004, Chaffey administrators, faculty, and staff worked diligently on developing what became their original Opening Doors program, and included MDRC staff in several planning meetings and retreats. The process was truly collaborative, involving a large group of senior administrators, Success Center coordinators, counseling and financial aid staff, and faculty from throughout the college. To aid in the planning effort, the IR department prepared reports on the characteristics and course-taking patterns of probationary students. What emerged was a picture of students who often had undefined goals, took too many classes or the wrong type of classes, did not understand college policies (particularly about dropping courses), and had poor study habits. In addition, as mentioned above, they were less likely to visit the college’s Success Centers than other students. To help illustrate how a student might end up on probation, Box 1.1 tells the story of a freshman at Chaffey.

The college developed an innovative one-semester Opening Doors program model that had three key components.

- **College Success course.** Taught by a counselor, this “guidance” course was designed to help probationary students clarify their personal goals, understand college rules and regulations, and develop better study skills. A two-credit lecture course would be linked to a one-credit workshop in which students would apply the principles covered in the lecture. Like credits for the colleges’ other guidance courses, the course’s credits would count toward full-time enrollment at the college, but would not count toward a degree and would not be transferable to a four-year college or university. (The course was the central component of the program. Students who did not take the course did not receive any Opening Doors services.)
- **Visits to the Success Centers.** As part of the course, students would be expected to complete nine visits to the college’s Success Centers. Based on assessment results, students would be asked to work on improving their math, reading, or writing skills at one of the centers.
- **Improved counseling.** The instructor of the College Success course would work with students in the course and would meet with them outside of class time.

Box 1.1

“Bouncing Around”

In the spring of 2004, Denise Hernandez (not her real name) graduated from high school with a lifelong goal of someday becoming a veterinarian. While she did well her first year in high school, she did not think her final grades upon graduating were good enough to apply to a four-year university program, so she became interested in Chaffey College. She also considered attending Chaffey because it was the closest school to her home and the tuition was lower than the tuition at four-year colleges nearby. In an interview, Hernandez discussed how she found herself on academic and financial aid probation after her first semester.

I was lost when I first got here. I was bouncing around... The transition is just a big difference. You're in shock with all these new people and older people. And the teachers? In high school they get on you, like, "Okay, you have homework due tomorrow and there is a test on this day." In college, you know, it's like, "Here's a syllabus," and that's it... I was, like, "What am I doing here? Why am I taking these classes that are not even in the field I want to get into?" Of course, there are life situations that get you off track, too... You know, straight after high school you have your high school sweetheart, and then that break-up is all dramatic and you don't know what to do... So I just stopped going to class, got withdrawals, Fs and low GPA. After that, I received letters in the mail talking about academic and financial probation. I didn't know my GPA was so low. I didn't know the W's [withdrawals] contribute to it.

Chapter 3 describes how the program model was implemented. The main goals of the program were to help students succeed in their classes, move off probation, and ultimately persist in college and earn a degree or transfer to a four-year institution. The architects of the Opening Doors program at Chaffey were interested in employing what they called a “holistic approach” to addressing the needs of probationary students. The program would institute the first formal linkage between a College Success or guidance course and the Success Centers. Chaffey viewed the collaboration between the college’s academic instruction and student services divisions during the planning phase as critical to developing the program model.

The program designers debated whether or not probationary students should be *required* to take the College Success course. Initially, the college leaned in that direction. Some administrators, however, worried that such a “hard line” could have a negative effect on enrollment — an important concern, given that Chaffey’s funding, like all community colleges, is largely based on head count. Some administrators also questioned whether the college could legally require students to take a particular course, even if it was believed to be in the students’ best interests. A 1988 lawsuit in California brought forward by the Mexican American Legal Defense Fund challenged educational policies that disproportionately directed Latinos into

developmental courses. The lawsuit led to regulations by the California Community College Board of Governors that were widely interpreted to oppose mandatory placement. Ultimately, Chaffey College administrators decided that the Opening Doors intervention for probationary students would be voluntary.

With funding from the William and Flora Hewlett and James Irvine foundations, MDRC provided a grant to Chaffey College to pilot its Opening Doors program during the spring 2005 semester. About 50 students participated. College staff took advantage of the pilot to refine their program and to work with MDRC in developing procedures for recruiting students and launching a random assignment evaluation in the fall. Students were recruited and randomly assigned for the study during the spring and summer, and the full-scale Opening Doors program at Chaffey operated during the fall 2005 semester.

After Chaffey's original Opening Doors program ended, the college had several meetings and retreats with many of the same individuals who had participated in the development of the program in 2004 and 2005. They had detailed discussions about what went well in Opening Doors and what was less successful. They solicited feedback from participating students and counselors about their experiences. They discussed findings from an assessment of the program, in which MDRC offered the college some recommendations on how to strengthen the intervention. In the end, Chaffey decided to reform its program, and the college operated an enhanced, two-semester version of Opening Doors during the following school year. The program is called "Enhanced Opening Doors" in this report.¹⁸ The college hoped that Enhanced Opening Doors would lead to better outcomes for probationary students.

The first semester of the Enhanced Opening Doors program offered the same three components as the original Opening Doors program, but had some key differences. Participation in the Enhanced Opening Doors program was framed as required for program group members, rather than voluntary. The College Success course was taught by staff with experience in Opening Doors who had been hand-picked by the Project Coordinator. The course requirements were made more manageable for students. The Success Center expectation was reduced to five visits from nine, and the assignments were integrated with themes from the College Success course, rather than depending on students' assessment results. In addition, during the spring semester, Enhanced Opening Doors offered a second College Success course to build upon what students learned in the first-semester course. Chapter 3 describes the differences between the program models in more detail and provides information about how they were implemented.

¹⁸At Chaffey, the original program was called "Opening Doors," and the reformed program (called "Enhanced Opening Doors" in this report) was called "Opening Doors to Excellence."

The Research Design at Chaffey College

As discussed above, this evaluation is using a random assignment research design to estimate the effects of the special demonstration programs. As described in more detail in Chapter 2, in 2005, MDRC and Chaffey assigned students, at random, to either a program group or to a control group to estimate the effect, or “impact,” of the college’s original Opening Doors program. The study is tracking the Opening Doors program group and control group over time to estimate whether Chaffey’s original program resulted in better outcomes for students. The study, therefore, is estimating the *value added* of Opening Doors, above and beyond what probationary students would normally receive at Chaffey.

The Enhanced Opening Doors program was not part of MDRC’s original evaluation plan. Both Chaffey and MDRC, however, were interested in understanding the program’s effects on students’ educational outcomes and whether the effects were different from those of the original Opening Doors program. As a result, the college and MDRC agreed to randomly assign a new group of students. In 2006, a second group of students were randomly assigned to estimate the effects of Enhanced Opening Doors.

It is important to note two limitations of the study. First, because Opening Doors and Enhanced Opening Doors were operated sequentially, not simultaneously, MDRC is not able to definitively attribute any differences in the programs’ impacts to the programs themselves. (To do so would have required that students be randomly assigned to one of the two programs or to the control group during the same time period, which was not possible.) Nonetheless, the study allows for a direct comparison of the effectiveness of the two programs in which most circumstances were similar except for the variations in the two programs, and offers suggestive evidence about why the effects might differ. Second, the study cannot disentangle the effects of each program component (such as the effects of the College Success course separate from the effects of asking students to visit the Success Centers). Rather, the study examines whether the *package* of reforms in Opening Doors and Enhanced Opening Doors led to different outcomes, compared with standard classes and services.

A Brief Review of Prior Research

Chaffey’s Opening Doors program and Enhanced Opening Doors program were designed to help students on probation. Many higher education institutions offer services to probationary students, such as targeted advising and counseling, study skills courses, money management and goal-setting courses, and interpersonal problem-solving training.¹⁹ Some

¹⁹See, for example, Wlazelek and Coulter (1999); Trombley (2000-2001); “‘Clean Slate’ Helps Students Bounce Back from Probation” (2005).

studies have found positive effects of the programs, but a review of the literature did not uncover any rigorous research that provided evidence of causality. For example, one open-admissions public liberal arts four-year college piloted a program for students on probation. The program required students to meet with a college counselor at least twice during the semester, meet with their instructors, and complete at least two hours of supervised studying per week. The college found that students' average GPA increased during the semesters in which the program was piloted, compared with prior semesters, and they decided to implement it for all probationary students.²⁰

As discussed above, the central component of Chaffey's intervention is the College Success course. Many colleges operate similar courses. A 2007 research brief published by the Community College Research Center described "student success" courses that provide instruction on how to take notes, take tests, manage their time, explore their learning styles, and develop plans for college and work.²¹ Some colleges offer such courses for all students, some require them for entering students, and others require them for other groups of students, such as those in developmental classes. In general, research has found an association between taking a student success course and positive outcomes, such as persistence in school and academic performance.²²

The research brief mentioned above presents results from a study of student success courses that were offered in Florida's 28 community colleges. The study found that students who enrolled in a student success course were more likely to earn a credential, persist in college, and transfer to an institution in the state's university system, compared with students who did not enroll in such a course. When conducting the analysis, researchers controlled for various factors that might influence whether someone would take a student success course or not, such as their scores on assessment tests, race, and gender, as well their participation in developmental courses. This thorough approach led the researchers to have confidence that at least some of the positive differences they observed in students' outcomes were related to taking the student success course.²³

The first-semester College Success course offered as part of Opening Doors and Enhanced Opening Doors at Chaffey was based on the principles of *On Course: Strategies for Creating Success in College and in Life*, a curriculum commonly used for student success courses and similar instruction.²⁴ The *On Course* Web site describes how several colleges have used the curriculum, and it shares the colleges' assessment of the curriculum's positive effects on student outcomes, including retention and academic performance. One four-year college used *On*

²⁰Garnett (1990).

²¹Zeidenberg, Jenkins, and Calcagno (2007).

²²For a review of the research, see O'Gara, Karp, and Hughes (2008).

²³Zeidenberg, Jenkins, and Calcagno (2007).

²⁴For more information, see www.oncourseworkshop.com.

Course as the textbook for an academic success course that was required for all students who were on academic probation. The college found that students who took that course had higher rates of persistence than students who took the prior version of the course, which did not use *On Course*.²⁵

Contents of This Report

In the pages that follow, Chapter 2 describes how students entered the research sample for the study at Chaffey College. It also presents some descriptive characteristics of the sample members and describes the data sources used in this report. Chapter 3 provides further information about Chaffey's original Opening Doors and Enhanced Opening Doors programs, and discusses their implementation. Chapter 4 presents the effects of the original Opening Doors program on various educational outcomes, and Chapter 5 does the same for the Enhanced Opening Doors program. Chapter 6 summarizes and compares the findings from Chapters 4 and 5, and offers some ideas on why the programs' effects may be different.

²⁵On Course Workshop (2000).

Chapter 2

Sample Intake, Sample Characteristics, and Data Sources

As discussed in Chapter 1, the evaluation at Chaffey College is using a random assignment design to estimate the effects of the original Opening Doors program and the Enhanced Opening Doors program, compared with the regular classes and services for probationary students. This chapter describes how students became part of the research sample and presents some characteristics of the sample members. It also discusses the data sources used in this report and the follow-up periods for the impact analyses.

Identifying, Recruiting, and Randomly Assigning Students

Each student in the population that Chaffey targeted for its original Opening Doors program and Enhanced Opening Doors program met the following criteria:

- Was on academic or progress probation (see below)
- Had earned fewer than 35 credits toward a degree or credential
- Did not have an associate’s degree (or higher) from an accredited college or university
- Had a high school diploma or General Educational Development (GED) certificate
- Was between 18 and 34 years of age

The program was open to both part-time and full-time students.¹

As discussed in Chapter 1, students at Chaffey are placed on *academic probation* if they have attempted at least 12 credits (since starting at the college) and have a cumulative grade point average (GPA) below 2.0 (“C”). Students are placed on *progress probation* if they have attempted at least 12 credits and have not completed at least half of the credits they attempted (usually because they withdrew or received an “Incomplete”). The analyses in this report combine these two probation categories.

¹Unlike the studies at most of the other colleges in the Opening Doors demonstration, the study at Chaffey did not require that sample members have income below a certain threshold. The majority of students on probation at Chaffey College, however, had relatively low family income.

MDRC worked with Chaffey to define the study's target group and to develop a method to identify an eligible pool of students. The process was complex and time-consuming, and would not have been possible without Chaffey's strong Institutional Research department. This section first describes how the original Opening Doors research sample was built, and then discusses the processes for building the Enhanced Opening Doors sample.

Building the Original Opening Doors Sample

Chaffey identified individuals who were eligible for the study of the original Opening Doors program using the college's student database. The college sent letters to eligible students notifying them of their probationary status and communicating the college's desire to help them succeed academically. The letter noted that "Failure to improve your academic status may subject you to dismissal from Chaffey College." The letter informed students that they should attend a probation orientation session, and that if they did not attend a session before their registration date, they could be blocked from signing up for fall courses. The college did not ultimately dismiss students or block registration, but the statements provided some gravity to the letter. The letter included a flyer about the program, its potential benefits, and the study; a copy of the students' Chaffey transcript; and a schedule of probation orientation sessions for which students could register online or by calling the college's Counseling Department.

College staff sent follow-up letters and made multiple phone calls to students who did not respond to the initial letter, and posted flyers about the study and program on campus. Generally, staff encouraged students who had been targeted for Opening Doors to attend an orientation session, but did not tell them attendance was required.

Chaffey staff held probation orientation sessions daily for several weeks during the sample intake period. At the sessions they explained what students needed to do to improve their academic standing and the purpose of the study. If students agreed to participate in the study, staff obtained their written consent, and collected baseline information (discussed below). Staff transmitted students' information to MDRC over a secure Web site, received students' research group designation (that is, program or control group), and informed the students of the outcome of the random assignment process. Students received a \$20 gift card from a major discount store as compensation for their time.

The students who were assigned to the program group were scheduled to meet with a counselor from the Opening Doors program at a later date. At that meeting, counselors encouraged the Opening Doors program group students to register for the College Success course, which was central to the program, but did not tell them that the course was required. The counselors also reviewed students' most recent skills assessment test results, discussed their

class schedule for the fall, and determined which Success Center they should attend as part of the Opening Doors program. (Counselors encouraged students whose assessment test results were more than a year old to retest.)

After random assignment, the students in the control group attended a brief workshop in which they were told in more detail what they needed to do to improve their academic standing and were encouraged to schedule an appointment with a college counselor. Control group members were then able to seek services on their own.

Between April and August 2005, 898 students were assigned to test the effects of the original Opening Doors program (448 were assigned to the program group and 450 were assigned to the control group).² The college recruited students in two different rounds. The first round of recruitment occurred in April and May 2005, and it targeted students who were on probation at the end of the fall 2004 semester. In order to increase the sample size, a second round occurred from June through August, targeting students who were on probation by the end of the spring 2005 semester.

Building the Enhanced Opening Doors Sample

For the most part, the processes to recruit and randomly assign the sample for the study of the Enhanced Opening Doors program were similar to those for the study of the original Opening Doors program. This section describes the differences.

The letters sent to recruit students for the study of the original Opening Doors and Enhanced Opening Doors programs were similar. During the follow-up phone calls, in which staff tried to convince students to attend a study orientation session, however, different messages were conveyed. As noted above, when staff spoke with students who were eligible for the original Opening Doors study, they *encouraged* them to attend an orientation session. In contrast, staff told students who had been targeted for Enhanced Opening Doors that they were *required* to attend an orientation session and that if they did not, they would not be able to register for classes.

During interviews with MDRC staff, Chaffey staff reported that during the orientation sessions for Enhanced Opening Doors, they made a greater effort to explicitly describe what it would mean to be assigned to the program group. To try to weed out students who were

²During the sample intake period for the study of the original Opening Doors program, some students were erroneously identified as being on academic or progress probation, owing to outdated or inaccurate codes in the college's database. Partway through sample intake, the college and MDRC discovered and corrected the issue. A total of 194 students who were not on probation were randomly assigned for the original Opening Doors study. The 194 students were not included in the analyses presented in this report and are not part of the final research sample of 898. The 194 sample members are evenly distributed between the program and control groups.

unlikely to participate in the program, they shared more details about the required College Success course and the fact that it provided non-transferable credits. Staff said that the effort resulted in a slightly higher proportion of students opting out prior to random assignment during the orientation sessions for Enhanced Opening Doors.

The students who were assigned to the program group were scheduled to meet with a counselor from the Enhanced Opening Doors program. At this point in the process, again, the message communicated to the study participants differed. As noted above, staff *encouraged* the Opening Doors program group students to register for the College Success course. In contrast, staff told Enhanced Opening Doors program group students that they were *required* to register for the course. As Chapter 3 describes in more detail, after sample intake ended, Chaffey decided not to block students' registration because of concern about lower-than-expected enrollment rates at the college. Enhanced Opening Doors program group students, however, said that they believed they were required to take the course.

Between March and August 2006, 444 students were assigned to test the Enhanced Opening Doors program (224 were assigned to the program group and 220 were assigned to the control group). As MDRC and Chaffey intended, the research sample for the study of the Enhanced Opening Doors program is about half the size of the sample for the study of the original Opening Doors program.³

As it did for the study of the original Opening Doors program, the college recruited students in two different rounds for the study of Enhanced Opening Doors. The first round targeted students who were on probation at the end of fall 2005, and the second round targeted students who were on probation at the end of spring 2006. During the first round of recruitment for Enhanced Opening Doors, Chaffey attempted to target students who were likely to still be on probation when the intervention began. The college identified students who met all the study eligibility criteria *and* who seemed unlikely to get off probation during the spring 2006 semester (that is, students who would not have been able to move off probation even if they had done well in the courses for which they registered in the spring semester).

Characteristics of the Sample

Table 2.1 presents some characteristics of the sample members at Chaffey based on the Baseline Information Form (BIF), a questionnaire they completed just before they were randomly assigned. The table shows the characteristics of the original Opening Doors sample

³As discussed in Chapter 1, Enhanced Opening Doors was not part of MDRC's original research plan, and the study was more modest.

The Opening Doors Demonstration

Table 2.1

Selected Characteristics of Sample Members at Baseline:
Opening Doors Program and Enhanced Opening Doors Program

Chaffey College Report

Characteristic (%)	Opening Doors Sample	Enhanced Opening Doors Sample
Gender		
Male	40.3	38.3
Female	59.7	61.7
Age (years)		
18-20	58.6	60.6
21-25	31.6	29.5
26-30	6.8	5.6
31-34	3.0	4.3
Marital status		
Married	7.1	5.8
Unmarried	92.9	94.2
Race/ethnicity ^a		
Hispanic/Latino	52.6	54.2
Black, non-Hispanic	14.5	12.2
White, non-Hispanic	23.1	21.8
Asian or Pacific Islander	5.7	6.0
Other ^b	4.1	5.8
Has one child or more	12.2	10.8
Household receiving any government benefits ^c	13.6	12.1
Financially dependent on parents	51.5	51.3
Ever employed	91.0	92.6
Currently employed	68.1	74.6 **
Diplomas/degrees earned ^d		
High school diploma	95.2	95.7
General Educational Development (GED) certificate	3.1	3.6
Occupational/technical certificate	5.1	6.3
Date of high school graduation/GED certificate receipt		
During the past year	20.7	32.2 ***
Between 1 and 5 years ago	63.0	50.9 ***
More than 5 years ago	16.3	17.0
Main reason for enrolling in college ^d		
To complete a certificate program	5.1	5.8
To obtain an associate's degree	22.2	24.8
To transfer to a 4-year college/university	64.9	62.9
To obtain/update job skills	3.0	2.7
Other	4.7	3.9

(continued)

Table 2.1 (continued)

Characteristic (%)	Opening Doors Sample	Enhanced Opening Doors Sample
First person in family to attend college	33.5	30.8
Working personal computer in home	88.0	90.3
Owns or has access to a working car	88.0	88.9
Language other than English spoken regularly in home	34.9	35.6
U.S. citizen	92.7	93.0
Respondent born outside U.S. ^e	12.8	11.0
Respondent or respondent's parent(s) born outside U.S. ^e	47.8	50.3
Region in which respondent was born		
North America	87.4	89.2
Asia	2.9	2.7
Latin America and the Caribbean	8.5	6.9
Other ^f	1.3	1.2
Region in which respondent's mother was born ^g		
North America	60.5	58.0
Asia	6.7	7.0
Latin America and the Caribbean	31.4	32.1
Other ^f	1.4	3.0 *
Sample size	898	444

SOURCE: MDRC calculations using Baseline Information Form (BIF) data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between the two groups of sample members. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

^aRespondents who indicated that they are Hispanic and who chose a race are included only in the Hispanic/Latino category.

^b“Other” race/ethnicity includes American Indians/Alaskan Natives and those who marked “other race/ethnicity” or more than one racial/ethnic category.

^cBenefits include Unemployment/Dislocated Worker benefits, Supplemental Security Income (SSI) or disability, cash assistance or welfare, food stamps, and Section 8 or public housing.

^dDistributions may not add to 100 percent because categories are not mutually exclusive.

^e“U.S.” includes Puerto Rico.

^fThis category includes the Baltics, the Commonwealth of Independent States, eastern and western Europe, North Africa, Sub-Saharan Africa, the Near East, and Oceania. The Commonwealth of Independent States includes Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Republic of Moldova, Russia, Tajikistan, Turkmenistan (until August 2005), Ukraine, and Uzbekistan. Countries are grouped by region according to the U.S. Bureau of the Census, International Data Base.

^gThe majority of respondents reported that both parents were born in the same region as each other.

members in the first column and the characteristics of the Enhanced Opening Doors sample members in the second column. One or more asterisks in the rightmost column of the table indicates that the difference between the proportion of Opening Doors and Enhanced Opening Doors sample members with that characteristic is statistically significant, meaning that the difference is unlikely to be a result of chance. As the table shows, some such differences exist, but only for a few outcomes.⁴

About 60 percent of the sample members at Chaffey are women. Just over half identified themselves as Hispanic/Latino, and just under one-fourth identified themselves as white (non-Hispanic). Fifteen percent of the Opening Doors sample members and 12 percent of the Enhanced Opening Doors sample members reported their race as black (non-Hispanic). The majority of the study participants — approximately 60 percent — were between 18 and 20 years of age when they were randomly assigned. Most were unmarried and did not have any children.

The majority of the sample members were working when they entered the study, and about half said they were financially dependent on their parents. Some study participants had graduated from high school during the past year, but the majority had graduated between one and five years previously. Roughly two-thirds of the sample members said that their main reason for enrolling in college was to transfer to a four-year college or university, and approximately one-third said they were the first person in their family to attend college.

Just over a third of the study participants reported they regularly speak a language other than English at home. The vast majority of the sample members were U.S. citizens when they entered the study and most sample members were born in the United States. A substantial proportion, however, said that at least one parent was born outside the United States. Almost one-third of the participants' mothers were born in Latin America or the Caribbean.⁵

⁴An additional statistical test (a likelihood ratio test) was conducted to evaluate the joint significance of the individual characteristics. It showed that there are systematic differences between the two groups of sample members.

⁵Appendix Tables A.1 and A.2 show a more complete list of characteristics that were collected on the BIF. Appendix Table A.1 shows the characteristics for the full original Opening Doors sample, the program group, and the control group. Appendix Table A.2 shows the same information for the Enhanced Opening Doors sample. An asterisk indicates that the proportion of program group members with that characteristic is significantly different from the proportion of control group members. As the tables show, there are some small differences. A joint likelihood ratio test showed that there are systematic differences between the research groups in the original Opening Doors sample. To determine whether the differences affect the study's impact results, the main impact analyses presented in Chapter 4 were conducted controlling for the baseline variables on which differences were observed. Controlling for the variables did not meaningfully change the findings. A joint likelihood ratio test showed no systematic differences between the Enhanced Opening Doors program and control groups.

As discussed above, Chaffey targeted its original Opening Doors and Enhanced Opening Doors programs to students on academic and/or progress probation. As the uppermost set of outcomes in Table 2.2 shows, all the sample members were on probation when they were randomly assigned. (The outcome “on probation” in the table includes students who were on academic probation, progress probation, or both.) The majority of the original Opening Doors sample (61 percent) had been on probation only one semester when they were randomly assigned. A somewhat smaller proportion of the Enhanced Opening Doors sample members (48 percent) were newly on probation at that point.

The Opening Doors Demonstration

Table 2.2

**Probation Status of Sample Members at Baseline:
Opening Doors Program and Enhanced Opening Doors Program
Chaffey College Report**

Outcome (%)	Opening Doors Sample	Enhanced Opening Doors Sample
<u>At time of random assignment</u>		
Good academic standing	0.0	0.0
On probation ^a	100.0	100.0
One semester on probation	61.4	48.2 ***
Two or more semesters on probation	38.6	51.8 ***
<u>At start of program semester</u>		
Good academic standing	12.1	1.1 ***
On probation ^a	87.9	98.9 ***
One semester on probation	41.0	48.4 ***
Two or more semesters on probation	46.9	50.5
Sample size	898	444

SOURCE: MDRC calculations using probation data from Chaffey College.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between the two groups of sample members. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

^aThis outcome includes academic probation (attempted at least 12 credits since starting at the college and has a cumulative grade point average below 2.0, or below a C average) and progress probation (attempted at least 12 credits and has completed less than half of the credits attempted).

By the time the program began, some sample members' probation status had already changed. As described above, random assignment for both programs occurred in two rounds. During the first round, students were identified using their probation status at the end of the prior fall semester. Some sample members' status changed later, based on their performance during the spring semester. As the outcomes at the bottom of Table 2.2 show, 12 percent of the original Opening Doors sample had already achieved good academic standing by the time the program started. This is true for only 1 percent of the Enhanced Opening Doors sample.⁶ This outcome probably reflects Chaffey's efforts to target students for Enhanced Opening Doors who were likely to still be on probation when the fall semester began.

Finally, Table 2.3 compares the research sample, whose members were all on probation when they entered the study (that is, at the time of random assignment), with the student body at Chaffey on a few demographic characteristics. The sample members reflect the gender make-up of the campus. The research participants are younger, however, than the overall student body: A higher proportion of the sample members are less than 20 years old and a lower proportion are 25 or older, compared with the Chaffey population. Both the student body and the research sample are diverse, but the sample includes a higher proportion of Hispanics. It is important to note that because the research sample consists of students on probation, it should not be considered representative of the broader Chaffey student body. Students on probation had experienced substantial academic difficulties before entering the study.

Data Sources and Follow-Up Periods

To study Chaffey's programs, the analyses presented in this report rely on several data sources, described below. Data are available for both the original Opening Doors and Enhanced Opening Doors programs, except when noted.

Baseline Data

As mentioned above, just before students were randomly assigned to the study groups, they completed a questionnaire, called the Baseline Information Form (BIF), and a baseline survey. The BIF collected demographic and other background information. The survey contained a series of questions about students' well-being and their health. Baseline data are used to describe the sample and define subgroups of sample members for analysis.

⁶Probation status at the time of random assignment and at the start of the program semester did not vary by research group for either the original Opening Doors sample or the Enhanced Opening Doors sample.

The Opening Doors Demonstration

Table 2.3

**Selected Characteristics of Student Body and Research Sample:
Opening Doors Program and Enhanced Opening Doors Program**

Chaffey College Report

Characteristic (%)	Chaffey Student Body	Opening Doors Sample	Enhanced Opening Doors Sample
Gender			
Male	38.8	40.3	38.3
Female	61.2	59.7	61.7
Age (years)			
Less than 20	30.1	38.5	45.7
21-24	34.8	48.0	41.7
25 and older	35.1	13.5	12.6
Race/Ethnicity			
Hispanic	42.5	52.6	54.2
White	29.5	23.1	21.8
Black	12.1	14.5	12.2
Asian	8.2	5.7	6.0
Native American	0.5	0.0	0.5
Other ^a	7.2	4.1	5.3
Sample size	17,188	898	444

SOURCES: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), and MDRC calculations using Baseline Information Form (BIF) data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

Data on the Chaffey College student body is drawn from the IPEDS dataset on race and age from fall 2005.

Missing values are not included in individual variable distributions.

^aRace/ethnicity categories available in the IPEDS data include Hispanic, non-Hispanic white, non-Hispanic black, Native American or Alaskan Native, Asian or Pacific Islander, and race unknown or nonresident alien. The race is unknown when the student did not select a racial or ethnic designation and Chaffey College could not place the student in one of the racial/ethnic categories. An “Other” category was created that combined the unknown race and nonresident alien categories for IPEDS data. The “Other” category in the BIF data includes students who marked “Other race” or more than one race on the BIF.

Chaffey College Transcript Data

Chaffey provided to MDRC transcript data for sample members. These data include various academic outcomes, including courses registered for, number of credits earned, and course grades. When the analyses for this report were conducted, MDRC had transcript data through the spring 2007 semester. Since the Enhanced Opening Doors program operated a year later than the original Opening Doors program, this report presents a shorter follow-up period for the Enhanced Opening Doors sample. Specifically, for the Opening Doors sample, transcript outcomes are presented for fall 2005, the first semester that the sample members were in the study, through spring 2007, yielding a follow-up period of four semesters. For the Enhanced Opening Doors sample, transcript outcomes are presented for fall 2006 through spring 2007, yielding a two-semester follow-up period. Transcript data are used in Chapters 4, 5, and 6 to help describe the impacts of the programs.

Chaffey College Success Center Participation Data

This report uses data about sample members' attendance at Chaffey's Success Centers. A computerized swipe-card system recorded the incidence and length of time of students' visits to the center, and the activities completed. The follow-up periods for the Success Center data are the same as for the transcript data, and these data are used in Chapters 4, 5, and 6.

Chaffey College Probation Data

Chaffey provided to MDRC data on sample members' probation status. The follow-up period for the Opening Doors and Enhanced Opening Doors samples is the same as the periods for the transcript data. This report also presents sample members' probation status at the time of random assignment and at the start of the program semester (in Table 2.2).

National Student Clearinghouse Data

The National Student Clearinghouse, a nonprofit organization, collects and distributes enrollment, degree, and certificate data from more than 3,000 colleges that enroll more than 90 percent of the nation's college students.⁷ The Clearinghouse data are used in Chapters 4 and 5 to provide information about students in the study who may have attended a postsecondary institution other than Chaffey. The follow-up periods for the Clearinghouse data are the same as for the other impact data sources.

⁷See www.studentclearinghouse.org.

The Opening Doors 12-Month Survey

A survey was administered to Opening Doors sample members approximately 12 months after random assignment. The Enhanced Opening Doors sample was not included in the survey effort. MDRC attempted to locate and interview all the Opening Doors sample members; in the end, 68 percent completed the survey. The survey asked about a wide range of topics, including sample members' educational experiences, social relationships and supports, and health.⁸ Selected measures from the survey are used in Chapters 3 and 4.

Field Research

Periodically throughout the operation of the original Opening Doors program and the Enhanced Opening Doors program, MDRC staff visited Chaffey to conduct field research. MDRC interviewed many college administrators, faculty, and staff, including those involved in the Opening Doors and Enhanced Opening Doors programs. The interviews provided information about the operation of the programs and about the key differences between the programs and the standard college courses and services that were available to the members of the study's control group. MDRC also interviewed a small subset of students in the program groups. MDRC studied the original Opening Doors program in more depth than the Enhanced Opening Doors program. Information from the field research is used in Chapter 3 to describe the two programs.

⁸The Opening Doors 12-Month Survey included some questions from the Community College Survey of Student Engagement (CCSSE), with permission. For more information, see CCSSE's Web site: www.ccsse.org.

Chapter 3

Implementation of the Original Opening Doors Program and the Enhanced Opening Doors Program

This chapter describes how the original Opening Doors program and the Enhanced Opening Doors program operated at Chaffey College during the study period. (It does not discuss the version of the program that the college institutionalized beginning in fall 2007.) This chapter draws from field research conducted by MDRC staff, as well as from the Opening Doors 12-Month Survey. After a brief summary, the chapter describes how the original Opening Doors program was implemented. It then describes how the Enhanced Opening Doors program was implemented, focusing on the differences between the programs. The chapter discusses the key differences between the programs and the standard courses and services offered to the study's control group. Finally, it presents some findings about sample members' experiences in college.

The key findings are:

- **Participation rates in the original Opening Doors program were lower than the college and MDRC had hoped.** About half of the program group members took the College Success course. This outcome likely reflects the interaction between the program's voluntary nature and the fact that the College Success course did not provide transferable credits and therefore may have been less attractive to students than other courses.
- **Chaffey's original Opening Doors program did not fully operate as designed.** Only some College Success course instructors communicated and enforced the expectation of attendance at the college's Success Centers. Some students received extra counseling, but others did not.
- **Participation rates were relatively high in Enhanced Opening Doors.** About three-fourths of the program group members took the first-semester College Success course. Interviews with Enhanced Opening Doors program group students indicated that most believed that they were required to take the course.
- **Chaffey's Enhanced Opening Doors program operated largely as designed.** The instructors of the first-semester College Success course consistently enforced the expectation that students visit the Success Centers. The program included a second-semester College Success course in the spring, and it provided additional counseling to students in the courses.

Implementation of the Original Opening Doors Program

As noted in Chapter 1, Chaffey's original Opening Doors program operated during the fall 2005 semester. After describing the program staffing and message, this section describes the program's three main components — a College Success course, visits to the Success Centers, and improved counseling — and discusses how they were implemented.

Administrative Structure, Staffing, and Training

The original Opening Doors program was designed through a collaborative process involving administrators, faculty, and staff from the college's instructional, student services, financial aid, and institutional research departments. Two of the key players on the committee were the Dean of Instructional Programs and Services, and the Dean of Counseling and Matriculation. The Steering Committee that created Opening Doors continued to meet regularly to discuss the status of the program and the study. The college's president was very supportive of the program, and the college provided some funds to help cover the program's costs. (Other funds were provided by the Hewlett and Irvine foundations.)

A Project Coordinator oversaw the operation of the Opening Doors program, taught some sections of the College Success course, and counseled students. Chaffey hired nine counselors to work on Opening Doors and recruited another five experienced counselors from the college. All the counselors received one or two days of training from the Project Coordinator in the Opening Doors program, and two days of training on the core curriculum used in the College Success course. Instructional Specialists from the Success Centers helped develop the program model and the Success Center assignments. The key Success Center staff received training on the Opening Doors program just before the fall 2005 semester. Finally, the program employed three counselor apprentices as well as graduate students in counseling and similar fields who assisted the Project Coordinator and followed up with students on behalf of some counselors. (The counselor apprentices also did much of the recruitment for the study and led the probation orientation sessions and study intake.)

Program Message

As discussed in Chapter 2, after sample members were assigned to the program group for Opening Doors, they were asked to meet with a counselor to discuss their assessment results and develop a class schedule. Students were encouraged to enroll in the College Success course, but, as mentioned earlier, the program was voluntary. In the end, only about half of the Opening Doors program group members took the course. (Chapter 4 provides more detail on course registration rates.)

College Success Course

Chaffey developed a one-semester College Success course for the original Opening Doors program that consisted of a two-credit lecture linked to a one-credit workshop or practicum. The course credits counted toward full-time status but were not transferable to a four-year college or university. (That is, they could not be applied toward a degree.) The workshop met immediately after each lecture. This structure is similar to some learning community programs, where groups of students take two or more classes together, often in close sequence. During fall 2005, Chaffey offered 18 sections of the course, which were taught by the 15 different counselors. Class size ranged from 7 to 27 students.

The course was based on other College Success or guidance courses at Chaffey, but was designed specifically for probationary students — that is, for students who had experienced substantial academic difficulties. It was based in large part on the principles of *On Course*, a curriculum developed to promote “innovative learner-centered strategies for empowering ... students to become active, responsible learners.”¹ *On Course: Strategies for Creating Success in College and in Life* was the core textbook for the class.² Opening Doors students received a voucher to cover the cost of the book and another required text.

The syllabus for the course was structured around the following themes: adopting life-long learning; discovering self-motivation; mastering self-management; learning time management; employing interdependence (building supportive relationships and accessing support systems); learning college policies, customs, and expectations; developing effective reading and writing skills; learning effective note-taking and memorization strategies; building effective studying and test-taking habits; gaining self-awareness; developing emotional intelligence; exploring careers and academic majors; using library resources; and managing money. The linked College Success workshop was designed to help students apply the principles and concepts explored in the lecture. In the workshop, students completed a comprehensive self-evaluation of their learning skills and preparedness for college. Students also participated in various activities, watched videos, and heard guest presentations that reinforced or elaborated upon topics covered in the lecture. During the first week in the workshop, students received an orientation to the college’s Success Centers.

During interviews with MDRC staff, some students expressed positive views about the Opening Doors College Success course, and others were less positive. Box 3.1 shares the impressions of two students from the study’s program group who took the course.

¹For more information, see www.oncourseworkshop.com.

²Downing (2004).

Box 3.1

Mixed Perceptions of the College Success Course

Juan Reyes and Robert Smith (not their real names) both participated in Opening Doors at Chaffey College during the fall 2005 semester, and improved their grades enough to get off probation. In the spring of 2006, they continued to take classes at Chaffey in pursuit of their associate's degree. In interviews, they shared feedback about the College Success course, the Success Centers, and their impressions of the program.

Reyes said that, after graduating from high school more than 10 years earlier, he had gone into the military. Following his time in the military, he spent a few years working while also signing up for and dropping classes at Chaffey. Fall 2005 was the first semester he attempted and successfully completed a full course load, and he was very upbeat about the College Success course:

I thought the assignments were a little excessive when I first got there. I looked at this, going, "Ooooh, this is not a credit class. It's a lot of work to be done." As the weeks progressed, it wasn't very hard at all. It was just managing the time of when I could do it.... This course shows you how to manage your time, and time management is key to being a student... I learned to look at my transcript and see where the F's and W's were so I could knock those out so I could better my transcript.... We were networking in the class and the environment just molded that.... This class really helped me and showed me what it's going to take to develop and become a student.

Smith enrolled in Chaffey full time right after high school, in 2003, but he was balancing a job with classes. In an interview, he was less enthusiastic about the College Success course and his counselor/instructor.

The guidance class was tedious. It just seemed like how my teacher was; she just gave us a lot more work for nothing really. We just had to do so many hours of ridiculous stuff that it just hurt what my grade would have been in my other classes. I don't know. It was just like stupid stuff. I would be catching myself doing stuff for guidance class that really had nothing to do with anything at the time and then I'd be doing that for, like, two hours, and then I would be trying to work on math and other stuff really quick just because I wouldn't have enough time.... It was hard to grasp at first because I'm pretty hard-headed, but once you start finding out things that help you — it was kind of hard for me to accept that I needed to, like, get better techniques of studying and different ways of getting through it.... It helped for sure just to, like, know better techniques and, like, knowing that you're not the only one that's struggling.... We networked about what we learned in the book. I had a couple of girls [from the College Success course] in my other classes. We would help each other out in math. If we missed a class we would call each other and brush up on what we missed. It was really good. It helps you out a lot, too... but the teacher taught things differently. I didn't like her that much.

Chaffey offered a one-credit (non-transferable) course during spring 2006 that built upon what Opening Doors students had learned in the first-semester College Success course. In practice, only some students were informed about the course and very few (only 3 percent) took it.

Success Centers

As discussed in Chapter 1, Chaffey College's Success Centers offer individualized and small-group instruction to students in math, reading, and writing. With the implementation of the original Opening Doors program, the college for the first time included attendance at the centers as a main component of a College Success or guidance course. The course instructor assigned students to one of the centers — math, reading, or writing — based on their assessment results. (Each student was assigned to only one center to build the skills with which he or she had the most trouble.) This decision was typically made during the summer, prior to the start of the class. During the summer, the counselors and Success Center faculty collaborated to develop assignments for Opening Doors and to identify workshops that might be useful for students to attend. For the most part, all the students assigned to a specific center were given the same set of assignments.

According to the program model, instructors were supposed to ask students to make nine visits to the centers to complete nine assignments. The assignments were supposed to be completed by the tenth week of the 18-week semester, and they were supposed to count toward a student's grade for the course. The purpose of the visits was both to familiarize students with the Success Centers, so that they might return in the future, as well as to help them build a specific set of skills. The content of the assignments usually did not coincide with the subject matter covered in the College Success course. During interviews with MDRC, students reported participating in a wide variety of activities in the Success Centers, including taking practice exams, receiving help with note-taking, being tutored in geography, getting assistance writing papers, and receiving instruction on grammar and vocabulary.

In practice, some instructors in the original Opening Doors program did not communicate or enforce the expectation that students visit the Success Centers, and many students did not complete nine visits. (Chapter 4 provides more information on visits to the centers.) During interviews with MDRC staff, at least one instructor reported being unaware that attendance at the Success Centers was supposed to be part of the program. Some of the newly hired counselors did not fully understand what the Success Centers were or why students would benefit from visiting them.

Some program group students in the original Opening Doors program interviewed by MDRC indicated that it was not clear that they were supposed to complete nine visits and assignments in the Success Centers (that is, one assignment per visit), or that they were sup-

posed to do so by the tenth week of class. Some students also reported that it was not clear what assignments they were supposed to complete. Overall, students had mixed reactions to the centers. Box 3.2 offers the perspectives of two Opening Doors program group students on the Success Centers.

Box 3.2

Mixed Perceptions of the Success Centers

Juan Reyes and Robert Smith (not their real names) had different views of the Success Centers at Chaffey College and the assignments. Reyes observed:

I got help with just small little questions. I can't believe the kind of help that we have. The knowledge that is in that place is simply amazing. Former Chaffey students from Cal-Poly come here [to the Success Center] to get help.... I like the centers because they promote friendships and learning from each other. We can always ask questions.

While Smith seemed to understand the value of the Success Centers, he expressed his frustrations with the timing of the required visits and assignments:

All of the centers are useful but there's a time when you need it. You can't just say, "Oh you're assigned to the center and you got to do nine hours by this date." I did it but it really didn't help me until I really needed it and I wanted to go. I'm sure it helped people that needed it but it was really just a burden on me. Just going there took way too much time that I needed on other things. It's good to know where they're at and get in the habit of going. That's probably why they do it. It's good to know you can get help.... There was really no need. If I'm getting A's and B's on my tests, was there really a need for me to go to the center? Just being forced to go sit there and do nothing was kind of, like, stupid to me. I mean, obviously, yeah, it's really good to get you in there to know where the lab is, but if you don't have anything to do and you really don't need it at the time, then I really don't see any need for it.

Counseling

As noted, the Opening Doors College Success course was taught by Chaffey counselors. Students who attended class, then, saw their counselor relatively frequently. The program designers also intended that students meet with their counselor at least twice outside of class to develop and review an education plan that identified goals and a timeline with steps to achieve the goals, and to discuss issues in school, barriers to progress, or personal issues. MDRC's field

research suggested that some students in the original Opening Doors program group met with their counselor outside of class, but many did not. Counselors were encouraged to reserve two hours outside of class to meet with students, but not all did. Some counselors did not encourage students to seek their assistance outside class to the degree that the program's designers intended. Opening Doors counselors sometimes referred students to other campus services, including Chaffey's Student Health Services to see doctors or psychologists, and the college's Disability Program and Services. During interviews with MDRC, counselors noted that some students appeared to have relatively serious issues that interfered with their academic progress.

The program's counselor apprentices were available to assist the Project Coordinator and counselors. They were available to call students who missed class or did not show up for an appointment, or to follow up on an issue with a class assignment or a recommendation from the counselor. Based on MDRC's interviews with college staff, this occurred for students in some, but not all, sections of the College Success course in the original Opening Doors program. Some counselors reported that they were uncertain what the counselor apprentices' role was in the program.

It is important to note that the improved counseling in the Opening Doors program was linked to participation in the College Success course. Program group students who did not take the course did not receive counseling from Opening Doors. Instead, they could access the college's standard counseling services (discussed briefly later in this chapter). In other words, program group students who did not take the College Success course experienced a similar set of services as control group students.

Implementation of the Enhanced Opening Doors Program

As discussed in Chapter 1, after the original Opening Doors program ended, the program's designers evaluated what went well and what was less successful. The Steering Committee solicited feedback from participating students and staff about their experiences, and discussed findings from an assessment of the program conducted by MDRC. Based on the assessment of the original Opening Doors, Chaffey decided to reform its program. The college operated the Enhanced Opening Doors program during the following school year, with the hope that it would lead to better outcomes for probationary students.

The two-semester Enhanced Opening Doors program operated during fall 2006 and spring 2007. During the fall, the program offered participating students the same three main components as the fall 2005 Opening Doors program, but there were some key differences in how the components were implemented. As discussed in more detail below, participation in the Enhanced Opening Doors program was framed as *required* for program group members. Students in the Enhanced Opening Doors program were required to complete an education plan

that identified goals and a timeline with steps to achieve those goals. (Students in the original Opening Doors program were encouraged to complete a plan.) The College Success course was taught by staff with experience in Opening Doors who had been selected by the Project Coordinator (the same Project Coordinator served for both versions of the program), and the course requirements were made more manageable for students. The Success Center expectation was reduced to five visits from nine, and the assignments were integrated with themes from the College Success course. In addition, during the spring semester, Enhanced Opening Doors offered a second College Success course to build upon what students had learned in the first-semester course. Finally, as is typical with a new program, operations generally went more smoothly during the second year, when the Enhanced Opening Doors program was run.

This section describes how the Enhanced Opening Doors program was implemented, highlighting the differences between it and the original Opening Doors program. Table 3.1 summarizes the key differences between the original Opening Doors program and the Enhanced Opening Doors program. It also summarizes the main differences between the programs and the regular college environment, with its standard courses and services, for probationary students; those differences are discussed below.

Staffing

The Project Coordinator selected four of the counselors who had taught the College Success course in fall 2005, who were thought to be particularly strong, to teach the course in Enhanced Opening Doors. In addition, the three counselor apprentices had received their graduate degrees and were hired as counselors. New counselor apprentices were hired. The Project Coordinator did not teach any course sections in Enhanced Opening Doors, and was thus able to devote more attention to running the program.

Program Message

As described in Chapter 1, Chaffey originally intended that participation in the Enhanced Opening Doors program be required for program group members. Program group students were told that they were required to register for the College Success course in the fall, or they would be blocked from registering for other classes. However, during the summer, college administrators decided not to implement the registration block. Enrollment rates at the college were lower than expected for the fall semester, and the administration did not want to lower enrollment further by blocking program group students who chose not to register for the College Success course (which meant not participating in Enhanced Opening Doors).

Ultimately, then, no one in the program group was required to enroll in the course as a condition of staying at Chaffey. At that point, however, program group students had already

The Opening Doors Demonstration
Table 3.1
Opening Doors Program, Enhanced Opening Doors Program,
and Regular College Environment for Probationary Students: Comparison of Key Features
Chaffey College Report

Feature	Opening Doors Program, Fall 2005	Enhanced Opening Doors Program, Fall 2006 - Spring 2007	Regular College Environment (Control Group)
Recruitment for services	Students met with Opening Doors counselor, who encouraged them to take College Success course.	Students met with Enhanced Opening Doors counselor, who told them College Success course required.	Students encouraged to meet with college counselor but not recruited for special services.
First-semester College Success course	2-credit lecture linked with 1-credit workshop designed to help probationary students develop skills needed for academic success; taught by experienced, some new counselors; approximately half of program group took course.	2-credit lecture linked with 1-credit workshop designed to help probationary students develop skills needed for academic success; taught by experienced staff; almost three-fourths of program group took course.	Students could take College Success course; very few control group members did so.
Second-semester College Success course	1-credit course designed to build upon first-semester course; few students were informed about it, and very few took the course.	2-credit course designed to build upon first-semester course; all students who took first semester course invited to participate; roughly one-third of program group took course.	Students could take College Success course; very few control group members did so.
Success Centers	First-semester College Success students expected to visit centers 9 times; instructor assigned students to a center; content of assignments based on assessment results; some instructors did not enforce Success Center expectation.	First-semester College Success students expected to visit centers 5 times; students chose which center(s) to visit; content of assignments integrated and timed with course material; second-semester College Success course had no Success Center expectation.	Students could visit centers on their own; students in some developmental classes were required to do so; some control group members did so.
Counseling	Students in College Success courses received help from counselor in class, and some met with counselor outside of class; counselors sometimes worked proactively to identify, resolve issues; students not in course could access college's counseling on their own.	Students in College Success courses received help from counselor in class, and many met with counselor outside of class; counselors generally worked proactively to identify, resolve issues; students not in course could access college's counseling on their own.	Students could access counseling on their own; caseload for counselors was roughly 1,500:1; counseling role was reactive.
Textbook voucher	Voucher provided to program group students to cover College Success course books.	Voucher provided to program group students to cover College Success course books.	No voucher offered.

SOURCE: MDRC field research data.

received the *message* that participation in the program was required. The college's administration decided that they would not explicitly inform students that they would not, in fact, be blocked from registering for courses if they did not register for the College Success course. In interviews with MDRC staff, Enhanced Opening Doors program group students said they believed they were required to register for the College Success course. One student said, "It [the course] sounded required. I didn't think I would be able to register if I didn't sign up."

In the end, about three-fourths of the program group members took the first-semester College Success course as part of Enhanced Opening Doors (compared with about half of the original Opening Doors program group). It is unknown whether implementing the registration block would have resulted in even higher participation rates. Roughly one-third of the Enhanced Opening Doors program group took the second-semester College Success course. (Chapter 5 provides more detail on Enhanced Opening Doors sample members' registration rates.)

First-Semester Services

This section describes the courses and services that Enhanced Opening Doors program group members received during the first semester of the program, compared with what was offered to the original Opening Doors program group.

College Success Course

The College Success course in Enhanced Opening Doors was similar to the course provided as part of the original Opening Doors program, but it had some key differences. As noted above, all the instructors had worked in Opening Doors the prior year. Seven instructors taught a total of 11 sections of the course. The instructors met monthly throughout the semester to discuss their experiences in the course, challenges, successes, and ideas for classroom activities. (Monthly meetings were considered during original Opening Doors, but did not occur.) When asked to identify a positive aspect of the Enhanced Opening Doors program, one instructor said, "What is working well is that the instructors are meeting a lot more to get ideas. Meeting is great. You don't want to feel like you are doing this all by yourself. That is definitely helping."

Partly because many of the instructors had taught the course before, they were given more flexibility in designing the curriculum. In interviews with MDRC, they reported that they were encouraged to adapt the curriculum and change assignments and activities, as long as those elements were related to the same topics as originally planned. One instructor said, "At the beginning, last year [in original Opening Doors], it felt a little more strict. I am playing around with certain activities. I felt like I got the message that it was okay to experiment more."

In designing Enhanced Opening Doors, the college tried to make the College Success course more manageable for students. Participants in the original Opening Doors program had

reported in course evaluations that too many assignments were required and they took too much time for a course with non-transferable credit. As a result, the course offered as part of the Enhanced Opening Doors program required less reading and fewer assignments. In addition, the Success Center participation expectation was reduced (see below for more detail).

Chaffey administrators and staff involved in the program believed that the College Success course would be more attractive to students if it provided credits that could be transferred to another institution. The program requested that the college recategorize the course offered as part of Enhanced Opening Doors so that it provided transferable credits, but the college's Curriculum Committee denied the request. The committee believed that the course was appropriately categorized with other non-degree-applicable, non-transferable college preparatory and remedial courses.

Success Centers

As noted above, as part of the College Success course in the Enhanced Opening Doors program, students were told to visit the Success Centers five times during the semester. The five assignments, which counted toward a student's grade in the course, were due every two weeks, rather than every week, as they were in Opening Doors. Both instructors and students reported to MDRC that this load was more manageable.

In Enhanced Opening Doors, the Success Center assignments were tied to the content of the College Success course. Rather than having assignments based on their assessment results, students in the Enhanced Opening Doors program were required to complete assignments on the following five topics, which were covered in class: skills assessment, learning styles, time management, use of resources, and test preparation. An administrator at Chaffey said, "I think [students] see a connectedness and relevance they didn't see last time." Most of the students with whom MDRC staff spoke agreed.

Also, instructors in Enhanced Opening Doors did not assign students to a specific Success Center, as they did in original Opening Doors. Students in Enhanced Opening Doors were free to go to any center and could go to different centers to complete different assignments. If students were not happy with their experience at a certain center, for example, they could choose a different one. During interviews, the counselors reported to MDRC that this flexibility was valuable and led to more positive experiences for students. Many students reported visiting more than one center, but some were not aware of the option.

In the Enhanced Opening Doors program, instructors were more consistently clear that students were expected to visit the Success Centers, and they more closely monitored completion of the visits. Instructors gave students a form, called a Success Center Verification sheet, that listed the five Success Center assignments and their due dates. When students completed an

assignment, they received a stamp from a faculty member or staff person at the Success Center. Instructors collected the sheets periodically and followed up (either themselves or with the help of the counselor apprentices) with students who were not completing the assignments. The form was used in the original Opening Doors program, as well, but instructors typically did not collect them until the end of the semester (or, in a few cases, not at all).

Counseling

Evidence from MDRC's field research suggests that students in the Enhanced Opening Doors program were more likely to see their instructor outside of class to receive assistance than were students in the original Opening Doors program. In Enhanced Opening Doors, Chaffey paid the College Success instructors extra to reserve two hours a week to meet with students. During interviews with MDRC staff, instructors reported that they valued the counseling hours. One instructor said, "The counseling hours are excellent. I've really gotten to know my students personally and I can follow up."

In Enhanced Opening Doors, the College Success course instructors worked more closely with the counselor apprentices to follow up with students on attendance and performance issues. A system was developed in which each week all the instructors reported absences and missed assignments to the counselor apprentices. The counselor apprentices then called the students to discuss their participation in the class and kept a running "Absentee List" with notes from phone conversations, which they shared with the instructors.

As was true in original Opening Doors, program group students who did not take the College Success course that was part of Enhanced Opening Doors did not receive counseling from the program. Instead, they had access to the college's standard counseling services.

Second-Semester Services

The Enhanced Opening Doors program included a second-semester College Success course that was designed to reinforce and build upon what was learned in the first course and help students develop the skills they would need in order to succeed after they completed the program. The course provided two non-transferable credits and the curriculum was structured around the book, *The Seven Habits of Highly Effective Teens*, by Sean Covey.³ Students read chapters on the seven habits — including "Be Proactive," "Begin with the End in Mind," and "Put First Things First" — then discussed them in class, and completed assignments related to them. Chaffey offered six sections of the course, which were taught by five first-semester College Success course instructors. Before the spring semester began, the instructors received training in the new course. They continued to meet monthly, as they had during the first semester of the program.

³Covey (1998).

Visiting the Success Centers was not an explicit expectation of the second-semester College Success course. Chaffey administrators hoped that students who participated in the first semester of the program would continue visiting the centers on their own. The students who took the second-semester course continued to receive counseling from their instructor.

The instructors of the first-semester College Success course encouraged their students to take the second-semester course, but the college did not expect all students to do so. About 40 percent of the students who took the first-semester course took the second-semester course (or 29 percent of the Enhanced Opening Doors program group).

Chaffey also intended to offer a series of workshops on the main topics covered in the second-semester College Success course. College staff sent flyers about the workshops to the Enhanced Opening Doors students who had taken the first-semester College Success course but had not registered for the second-semester course. Only two students attended the first workshop. The counselor apprentices called the targeted students to encourage them to attend the workshop series. Many of the students said they thought attending was unnecessary because the topics were similar to what they had covered in the first-semester class. In fact, they said that was why they had opted not to take the second-semester College Success class. After no one attended the third workshop, Chaffey canceled the series.

Differences Between the Program Environment and the Control Group Environment

As was shown in Table 3.1 — which presents and compares the key features of the original Opening Doors program, the Enhanced Opening Doors program, and the regular college environment for probationary students at Chaffey College (that is, the control group environment) — in contrast to the program group members, control group members were encouraged to see a counselor, but they were not recruited for any special services.

Control group students were free to take the College Success courses, but almost none did. They were also free to visit the Success Centers, and some were likely asked to do so as part of a developmental-level class. As discussed in more detail in Chapters 4 and 5, many control group members did visit the centers, but at lower rates than the program group members.

Control group students had access to Chaffey's standard advising and counseling services. Chaffey employed approximately one counselor for every 1,500 students; as a result, intensive, personalized attention wasn't the norm. At times, students had to wait as long as three weeks to see a counselor. As discussed above, program group students in the College Success courses received extra counseling from their instructors, and sometimes follow-up from counselor apprentices.

Students' Experiences in the Original Opening Doors Program and the Control Environment

As noted in Chapter 2, a 12-month survey was administered to the sample members who were randomly assigned for the study of the original Opening Doors program.⁴ This section discusses some of the findings about sample members' receipt of student services and engagement in school. (The survey was not administered to the Enhanced Opening Doors sample members.)

Table 3.2 shows the proportion of the original Opening Doors program group and control group that reported receiving various student services at least three times during the year after they entered the study and the difference between the two groups' outcomes, or the estimated "impact" of the program. (Box 3.3 explains how to read the impact tables in this report.) If

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Table 3.2

Receipt of Student Services: Opening Doors Program Chaffey College Report

Outcome (%)	Sample Size	Program Group	Control Group	Difference (Impact)	Standard Error
Attended 3 or more times during first year in study					
Academic advising	607	48.7	29.2	19.5 ***	3.9
Financial aid advising	603	25.8	26.2	-0.4	3.6
Tutoring on campus	605	52.4	46.5	5.9	4.1
Career counseling	604	30.0	21.7	8.3 **	3.6
Job placement assistance	603	11.4	10.8	0.6	2.6
Advising about transferring earned credits	603	32.0	20.8	11.2 ***	3.6

SOURCE: MDRC calculations from the Opening Doors 12-Month Survey.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

Estimates are adjusted by round of random assignment.

The Opening Doors 12-Month Survey was administered to the Opening Doors sample members, but not to the Enhanced Opening Doors sample members.

⁴See Appendix B for an analysis of the response rates for the 12-month survey.

Box 3.3

How to Read the Impact Tables in This Report

Most tables in this report use a similar format, illustrated below. An exception to this model is that only survey tables show a column for sample size (since the number of respondents to different survey questions often varies). The abbreviated table below displays survey data and shows some educational outcomes for the program group and the control group. The first row of data, for example, shows that about 49 percent of the program group members and about 29 percent of the control group members attended academic advising three or more times during their first year in the study.

Because individuals were assigned randomly either to the program group or to the control group, the effects of the program can be estimated by the difference in outcomes between the two groups. The “Difference” column in the table shows the differences between the two research groups’ outcomes — that is, the program’s estimated impacts on the outcomes. For example, the estimated impact on attending academic advising three or more times during the first year of the study can be calculated by subtracting 29 percent from 49 percent, yielding an increase, or impact, of about 20 percentage points.

Differences marked with asterisks are “statistically significant,” meaning that there is only a small probability that the difference occurred by chance, rather than as a result of the program. The number of asterisks indicates the likelihood of this chance (that is, the likelihood that there is actually no difference between the program and control group outcomes). One asterisk corresponds to the 10 percent level, or a 10 percent chance that there is no difference between the program and control group outcomes; two asterisks, a 5 percent chance; and three asterisks, a 1 percent chance. For example, as the first row of data shows below, the Opening Doors program increased the likelihood that a student attended academic advising three or more times during the first year in the study by nearly 20 percentage points, a difference that is statistically significant at the 1 percent level — indicating that there is a 1 percent probability (or less) that the difference occurred by chance rather than as a result of the program (or, put another way, it is highly likely that the difference between the two groups’ outcomes reflects a program impact).

The statistical significance is calculated using the standard error of the impact estimate, shown in the rightmost column. The standard error is a measure of uncertainty or variability around the impact estimate. Some useful rules of thumb are that there is about a 90 percent chance that the true impact is within plus or minus 1.65 standard errors (that is, the standard error multiplied by 1.65) of the estimated impact, roughly a 95 percent chance that the true impact is within plus or minus 1.96 standard errors of the estimated impact, and about a 99 percent chance that the true impact is within plus or minus 2.58 standard errors. For example, in the first row of data below, there is roughly a 99 percent chance that the impact on students who attended academic advising three or more times during the first year of the study lies between 9.4 and 29.6 percentage points, calculated as $19.5 \pm (2.58 \times 3.9)$.

Outcome (%)	Sample Size	Program Group	Control Group	Difference (Impact)	Standard Error
Attended 3 or more times during first year in the study					
Academic advising	607	48.7	29.2	19.5 ***	3.9
Financial aid advising	603	25.8	26.2	-0.4	3.6

the original Opening Doors program provided additional student services, as intended, differences between the two research groups in at least some of these categories would be expected. As Table 3.2 indicates, the program group was indeed more likely to have received academic advising at least three times during the follow-up period (49 percent of the program group, compared with 29 percent of the control group). In addition, a higher proportion of the program group received career counseling and advising about transferring credits at least three times during the follow-up period.

Table 3.3 presents some additional information about sample members' experiences in school. As shown in the first four rows of the table, the original Opening Doors program did not affect the amount of time that sample members spent on campus or studying — that is, the differences are not statistically significant. (See Box 3.3 for an explanation of statistical significance.) The italicized rows in the table present some outcomes for the subset of program group and control group members who had attended Chaffey at some point since entering the study. Since the program may have influenced who attended school, and thus who answered the questions, equivalence between the program and control group respondents cannot be assumed. Therefore, any differences on these outcomes are not referred to as “impacts” and they cannot be reliably attributed to the Opening Doors program.

As the table shows, a higher proportion of the program group members who had attended Chaffey rated their college experience as good or excellent, compared with control group attendees (78 percent, compared with 69 percent). The final four outcomes on the table, which are scales that were created using related sets of questions from the survey, also suggest that the program group students who attended Chaffey had somewhat more positive experiences than control group students who attended the college. For example, among attendees, program group members were somewhat less likely to report a low level of participation and engagement in school, and were somewhat more likely to report a high level of participation and engagement, compared with control group members. (Appendix C describes the four scales and lists the questions used to create them. To facilitate interpretation of the scales, Table 3.3 presents the percentage of program and control group respondents whose scaled score is either “low,” meaning it is one standard deviation below the average, or “high,” meaning it is one standard deviation above the average response. Standard deviation is the measurement of the distribution of data around a mean value.)

The survey data suggest that the original Opening Doors program positively affected the college experience of at least some sample members. During interviews with MDRC staff, Opening Doors program group students expressed mixed overall perceptions of the program. Box 3.4 (see page 43) offers two different perspectives.

The Opening Doors Demonstration

Table 3.3

Classroom and College Experiences of Sample Members:
Opening Doors Program
Chaffey College Report

Outcome	Sample Size	Program Group	Control Group	Difference (Impact)	Standard Error
Hours per week spent on campus in first semester	605	8.3	8.8	-0.5	0.4
Spent 12 or fewer hours per week on campus in first semester (%)	605	62.3	58.5	3.8	4.0
Hours per week studying in first semester	606	5.8	6.5	-0.7	0.4
Studied 19 or more hours per week in first semester (%)	606	5.7	7.2	-1.6	2.0
<i>Among those who attended Chaffey during first year of study (%)</i>					
<i>Rated college experience good or excellent</i>	503	77.7	68.5		
<i>Integration and sense of belonging at school^a</i>					
<i>Low</i>	489	14.6	21.3		
<i>High</i>	489	16.2	14.1		
<i>Participation and engagement^b</i>					
<i>Low</i>	499	16.0	20.7		
<i>High</i>	499	22.3	16.7		
<i>Using knowledge (critical-thinking curriculum)^c</i>					
<i>Low</i>	494	16.4	22.3		
<i>High</i>	494	22.6	13.3		
<i>Acquired academic and work skills^d</i>					
<i>Low</i>	500	13.7	20.5		
<i>High</i>	500	19.5	12.4		

(continued)

Table 3.3 (continued)

SOURCE: MDRC calculations from the Opening Doors 12-Month Survey.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

Estimates are adjusted by round of random assignment.

Italics indicate nonexperimental data. Significance tests are not calculated for nonexperimental data; thus, the cells for “Difference” and “Standard Error” are empty.

The Opening Doors 12-Month Survey was administered to the Opening Doors sample members, but not to the Enhanced Opening Doors sample members.

Standard deviation is the measurement of the distribution of data about an average value. It describes the amount of variation in the data on either side of an average value.

^a10-item scale about sense of integration with and belonging to the school community; response categories range from 1 = “strongly disagree” to 4 = “strongly agree.” “Low” is the percentage of sample members scoring one standard deviation below the mean; “high” is the percentage of sample members scoring one standard deviation above the mean.

^b15-item scale about participation in schoolwork, projects, and ideas; response categories range from 1 = “very often” to 4 = “never.” “Low” is the percentage of sample members scoring one standard deviation below the mean; “high” is the percentage of sample members scoring one standard deviation above the mean.

^c6-item scale about using acquired knowledge inside and outside the classroom; response categories range from 1 = “very much” to 4 = “very little.” “Low” is the percentage of sample members scoring one standard deviation below the mean; “high” is the percentage of sample members scoring one standard deviation above the mean.

^d16-item scale about acquiring academic and work skills, and a sense of self and community; response categories range from 1 = “very much” to 4 = “very little.” “Low” is the percentage of sample members scoring one standard deviation below the mean; “high” is the percentage of sample members scoring one standard deviation above the mean.

Box 3.4

Mixed Perceptions of Opening Doors

Juan Reyes (not his real name) said he found Opening Doors helpful and would recommend the program to others.

It's been a pleasure. It really helped me out in a lot of aspects in my life. Even in day-to-day things that I see, I say, "Aha, I learned that one already." With knowing the direction I need to go, it actually penned it out more for me than any other class that I've taken.

In contrast, William Lee (not his real name) — another student interviewed by MDRC — was not as buoyant about his experience in the program. Similar to Reyes and another student, Robert Smith (not his real name), Lee participated in Opening Doors during the fall 2005 semester. Like Smith, he had enrolled in Chaffey full-time right after high school, and he was balancing a job with classes. In the interview, he explained that he was placed on academic probation because he got a promotion at work and decided to stop going to class so he could work more hours. While Lee, like Reyes and Smith, moved off probation after participating in Opening Doors, he did not attribute this improvement to the College Success course or to the Success Centers. When asked if he thought the program had helped him improve his grades, Lee said, "No. Just going [to class] was the biggest thing.... I did better because I went." He added that he did not feel his study habits had changed much after taking the course. When asked if he would recommend the program to other students, Lee said,

I think it depends. I'd say if it was a person like me that didn't really need the study skills and all that, I would say no.... It was alright. Most of them [fellow classmates], you could tell they didn't really care to be there and that was their whole attitude about school, so they didn't try at all, so if you got paired with them in the group stuff, it was kind of difficult.... I don't think we had the greatest teacher for it. I think that was the biggest problem, our instructor.... The instructors have got to be more upbeat because some of the classes can be pretty dull, and if the instructor is not exciting, then it can be pretty painful.

Chapter 4

Effects of the Original Opening Doors Program

As discussed in Chapter 1, Chaffey's Opening Doors and Enhanced Opening Doors programs were designed to help students on academic and progress probation improve their performance in school and move off probation. Primarily using data from Chaffey College, this chapter describes the effects of Chaffey's original, one-semester Opening Doors program on various educational outcomes during sample members' first semester in the study (the "program semester") and during the following three semesters (called "postprogram semesters").¹ The chapter also briefly discusses the program's effects on some social, psychological, and health outcomes, based on sample members' responses to the study's 12-month survey.

The key findings are:

- Participation rates in the original Opening Doors program were lower than expected. Only about half of the program group members registered for the College Success course. Compared with control group rates, the program increased the likelihood of visiting the college's Success Centers by only 15 percentage points.
- During the program semester, Opening Doors program group members *attempted* an average of half a course more than the control group, but the increase was driven solely by the nontransferable College Success course. In fact, the program group *earned 0.7 less* of a regular credit that semester.
- The program group and control group had similar educational outcomes in the postprogram semesters. Analysis of cumulative outcomes for the follow-up period did not reveal any meaningful differences between the Opening Doors program and control groups.

Effects on Educational Outcomes During the Program Semester

Table 4.1 provides some detail about the rates of participation in the program, based on transcript data and information from the college's Success Centers. The second and third rows of the table show that 52 percent of the program group registered for the College Success

¹The semesters are fall 2005, spring 2006, fall 2006, and spring 2007. Some cumulative outcomes, such as those presented Table 4.3, also include summer 2006.

The Opening Doors Demonstration

Table 4.1

**Program Participation:
Opening Doors Program
Chaffey College Report**

Outcome	Program Group	Control Group	Difference (Impact)	Standard Error
Registered for any courses (%)	78.1	77.8	0.4	2.8
College Success Course I (%)				
Registered for College Success lecture	51.8	2.4	49.4 ***	2.5
Registered for College Success workshop	51.8	2.2	49.6 ***	2.5
Success Centers				
Ever visited (%)	57.4	42.9	14.5 ***	3.3
Total number of visits	7.3	4.3	3.1 ***	0.8
0 (%)	42.6	57.1	-14.5 ***	3.3
1-8 (%)	31.0	26.9	4.1	3.0
9 or more (%)	26.3	16.0	10.4 ***	2.7
Total hours spent	8.3	5.4	2.9 ***	1.1
<i>Ever visited, by activity^a (%)</i>				
<i>Lab resources</i>	<i>86.1</i>	<i>65.7</i>		
<i>Study group</i>	<i>2.3</i>	<i>4.2</i>		
<i>Workshop/seminar</i>	<i>21.8</i>	<i>2.0</i>		
<i>Student/peer tutoring</i>	<i>36.2</i>	<i>33.7</i>		
<i>Class activities/directed learning activities</i>	<i>64.5</i>	<i>71.1</i>		
Sample size (total = 898)	448	450		

SOURCES: MDRC calculations from Chaffey College transcript and Success Center participation data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

Estimates are adjusted by round of random assignment.

Italics indicate nonexperimental data. Significance tests are not calculated for nonexperimental data; thus, the cells for “Difference” and “Standard Error” are empty.

^aThis outcome was calculated only among sample members who ever visited a Success Center.

Distributions may not add to 100 percent because categories are not mutually exclusive.

lecture and the linked workshop. In other words, only about half of the targeted students participated in the course that was central to the Opening Doors program.

Readers may recall from Chapter 2 that a portion (12 percent) of the Opening Doors research sample had already achieved good academic standing by the start of the program

semester. It might be expected that those students would be far less likely to take the Opening Doors College Success course, which was intended primarily to help students who were on probation. To explore that issue, MDRC examined registration rates separately for those in the Opening Doors sample who had achieved good academic standing by the start of the program semester and those who were still on probation at that point. Interestingly, 41 percent of the program group members with good academic standing took the College Success course. Fifty-four percent of the program group members who were still on probation took the course. (These numbers are not shown in the table.) The difference between the rates is not large, and the rate for the full Opening Doors program group — 52 percent — is very close to the rate for the subset of students on probation.²

Table 4.1 also shows information on students' attendance at the Success Centers. As discussed in Chapter 3, the program designers intended that a key part of the College Success course would be completing nine visits to the Success Centers. That expectation, however, was not consistently communicated or monitored. As the table shows, 57 percent of the Opening Doors program group visited a Success Center at least once, compared with 43 percent of the control group, yielding an estimated impact of only 15 percentage points. Only 26 percent of the program group members visited the centers nine or more times. Opening Doors program group members spent an average of 3 hours more in the centers than their control group counterparts.

Both research groups used the Success Centers for a variety of activities. The last set of measures in Table 4.1 shows the proportion of sample members who participated in the listed activities, among those who visited a center at least once. The outcomes are presented in italics to indicate that they are nonexperimental — program group students who visited the centers were not necessarily similar at baseline to the control group students who visited the centers. Since the differences, then, represent a combination of the effects of the program and the differences in the groups of sample members, the differences are not shown in the table and statistical significance tests were not conducted. As the table shows, both program and control group members most commonly used lab resources, such as computerized instruction, and participated in class activities and/or directed learning activities, such as assignments for a class or activities structured by Success Center staff to build a specific skill.

In sum, then, Chaffey's original Opening Doors program engaged about half of the targeted students in the College Success course and increased attendance at the Success Centers somewhat. But how did the program affect students' academic performance during the program semester? As Table 4.2 shows, the program and control groups registered at the same rate: 78 percent of each group registered for at least one course during their first semester in the study.

²None of the key results in this chapter is markedly different when the sample members who had achieved good academic standing by the start of the program semester are removed from the analysis.

The Opening Doors Demonstration

Table 4.2

**Transcript Outcomes, Program Semester:
Opening Doors Program**

Chaffey College Report

Outcome	Program Group	Control Group	Difference (Impact)	Standard Error
Registered for any courses (%)	78.1	77.8	0.4	2.8
Number of courses attempted	3.1	2.6	0.5 ***	0.1
Number of credits attempted	7.9	7.7	0.3	0.4
Regular credits	5.9	7.1	-1.2 ***	0.3
Non-degree credits	2.0	0.5	1.5 ***	0.1
Developmental credits	0.4	0.4	0.0	0.1
Other credits ^a	1.6	0.1	1.5 ***	0.1
Passed all courses (%)	27.0	24.7	2.3	2.9
Number of courses passed	1.9	1.5	0.4 ***	0.1
Withdrew from any courses (%)	31.7	29.5	2.2	3.1
Number of course withdrawals	0.5	0.5	0.1	0.1
Number of credits earned	4.5	4.1	0.4	0.3
Regular credits	3.2	3.9	-0.7 **	0.3
Non-degree credits	1.3	0.3	1.1 ***	0.1
Developmental credits	0.3	0.2	0.1	0.1
Other credits ^a	1.0	0.0	1.0 ***	0.1
Term GPA ^b (%)				
No GPA ^c	27.4	27.6	-0.1	3.0
0-1.9	38.9	42.4	-3.5	3.3
2.0 or higher	33.7	30.0	3.6	3.1
Degree-applicable term GPA ^d (%)				
No GPA ^c	32.8	28.2	4.6	3.1
0-1.9	38.0	42.4	-4.4	3.2
2.0 or higher	29.2	29.4	-0.2	3.0
Sample size (total = 898)	448	450		

(continued)

Table 4.2 (continued)

SOURCE: MDRC calculations from Chaffey College transcript data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

Estimates are adjusted by round of random assignment.

GPA = grade point average.

^a“Other credits” includes credits for the College Success courses and for other non-degree-applicable college preparatory courses.

^bGrades earned in all courses except for developmental courses are used in the calculation of term GPA.

^cThe “No GPA” category includes students who did not enroll and students who took only developmental courses, which are not included in GPA calculations.

^dGrades earned only in degree-applicable courses, which excludes the College Success course and other non degree-applicable courses, are used in this calculation of GPA.

^eThe “No GPA” category includes students who did not enroll and students who took only non-degree-applicable courses, which are not included in degree-applicable GPA calculations.

The Opening Doors program group members attempted an average of half a course more than the control group members. (The College Success lecture and workshop were counted as two separate courses.) Examining the average number of credits attempted shows, however, that the increase was driven solely by the program group’s increased participation in the College Success course. The program group attempted an average of 1.5 more “other” credits than the control group. Other credits include credits for the College Success course and other college preparatory courses that are not transferable and cannot be applied toward a degree. On average, in fact, the program group *attempted* 1.2 fewer regular credits than the control group. The findings suggest that rather than taking the College Success course on top of their usual course load, the Opening Doors program group students reduced their usual load. Similarly, as shown in the table, the program group *earned* 1.0 additional other credit, but 0.7 fewer regular credits.

As the last sets of measures in Table 4.2 show, the original Opening Doors program did not produce statistically significant effects on students’ grade point average (GPA) during the program semester. “Term GPA” includes grades for all credit-bearing courses and is the GPA used at Chaffey to determine students’ probationary status. “Degree-applicable term GPA” excludes grades from the College Success course and other courses that cannot be applied toward a degree (such as other college preparatory classes).

Effects on Educational Outcomes After the Program Semester

When preparing this report, MDRC had Chaffey transcript data through the spring 2007 semester. The resulting analysis for the original Opening Doors program, then, covered the time period through the third semester after the program operated (from fall 2005, the semester in which the program operated, through spring 2007). Table 4.3 shows some cumulative measures through this follow-up period. The program group earned an average of about 1 more non-degree-applicable credit (from the College Success course) than their control group counterparts. They did not earn more credits overall, however, because they earned fewer regular credits. (The difference in regular credits earned is not statistically significant.) The program-produced no other statistically significant differences between the groups' cumulative outcomes. Additional analyses presented in Appendix Tables D.1 and D.2 show no meaningful differences between the research groups' educational outcomes over the follow-up period.³

A key goal of Chaffey's Opening Doors program was to move students off probation, into good academic standing. Table 4.4 (see page 53) shows sample members' status at the end of the program semester and at the end of each of the three postprogram semesters, based on probation data provided to MDRC by the college. (The outcome "On probation" in the table includes students who were on academic probation, progress probation, or both.) At Chaffey, students' probation status is updated based on their performance each semester. Once course grades were final for fall 2005, for example, students who had met the requirements for good academic standing were placed in that status. Students who are not enrolled during a semester are not assigned a status.

For the most part, the original Opening Doors program did not produce any differences in probation status. As the second set of measures in Table 4.4 indicates, 29 percent of the program group was in good academic standing at the end of the first postprogram semester, compared with 24 percent of the control group, yielding an estimated impact of 5 percentage points. The impact, however, was temporary and did not translate into any differences in the outcomes that summarize sample members' probation status across the follow-up period.

³Appendix Table D.1 presents academic outcomes for each of the three postprogram semesters for the Opening Doors sample. Appendix Table D.2 shows information on enrollment at two- and four-year colleges across the nation during the four-semester follow-up period, based on data from the National Student Clearinghouse and transcripts from Chaffey College.

The Opening Doors Demonstration

Table 4.3

Cumulative Outcomes, Program Semester Through Third Postprogram Semester: Opening Doors Program Chaffey College Report

Outcome	Program Group	Control Group	Difference (Impact)	Standard Error
Registered for any courses (%)	85.7	86.0	-0.3	2.3
Number of semesters registered	2.5	2.4	0.1	0.1
Number of credits earned	12.5	12.2	0.3	0.9
Regular credits	10.7	11.5	-0.9	0.9
Non-degree credits	1.8	0.6	1.2 ***	0.1
Developmental credits	0.6	0.6	0.1	0.1
Other credits ^a	1.2	0.1	1.1 ***	0.1
Cumulative GPA ^b (%)				
No GPA ^c	17.9	18.2	-0.4	2.6
0-1.9	47.4	44.6	2.7	3.3
2.0 or higher	34.8	37.2	-2.4	3.2
Cumulative degree-applicable GPA ^d (%)				
No GPA ^c	21.0	18.4	2.5	2.7
0-1.9	47.1	44.8	2.3	3.3
2.0 or higher	31.9	36.7	-4.8	3.1
Sample size (total = 898)	448	450		

SOURCE: MDRC calculations from Chaffey College transcript data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

Estimates are adjusted by round of random assignment.

Cumulative outcomes use data from the fall 2005, spring 2006, summer 2006, fall 2006, and spring 2007 semesters.

GPA = grade point average.

^a“Other credits” includes credits for the College Success courses and for other non-degree-applicable college preparatory courses.

^bThis cumulative GPA does not include grades from courses taken before random assignment. It is based on credit-bearing courses taken from the semester in which the program operated (fall 2005) through the end of the third postprogram semester (spring 2007). This includes credits for the College Success courses and for other non-degree-applicable college preparatory courses. Courses in which students did not receive a passing grade and subsequently repeated are not included in cumulative GPA, per Chaffey College policy.

(continued)

Table 4.3 (continued)

^cThe “No GPA” category includes students who did not enroll and students who took only developmental courses, which are not included in GPA calculations.

^dThis cumulative GPA does not include grades from courses taken before random assignment. It only includes grades earned in courses taken from the semester in which the program operated (fall 2005) through the end of the third postprogram semester (spring 2007), and excludes credit from the College Success course and other non-degree-applicable courses.

^eThe “No GPA” category includes students who did not enroll and students who took only non-degree-applicable courses, which are not included in degree-applicable GPA .

Effects for Selected Subgroups

MDRC examined the impacts of the original Opening Doors program on educational outcomes for two different subgroups of students, defined using characteristics measured at baseline. One subgroup was defined by sample members’ gender, and the other was defined by sample members’ probation status at the time of random assignment.

Overall, the analyses found no meaningful differences in impacts based on students’ gender. The analyses suggest, however, that the original Opening Doors program had somewhat more positive effects for the subgroup of sample members who had been on probation two or more semesters when they entered the study, compared with students who had been on probation only one semester at that point. Among the longer-term probationary students, the program produced a small increase in the number of credits earned and moved some of them off probation, into good academic standing. (The subgroup results are presented in Appendix Tables D.3 through D.10.)

Effects on Selected Social, Psychological, and Health Outcomes

The primary goal of Chaffey’s Opening Doors program was to improve educational outcomes. As discussed in Chapter 1, the architects of the multisite Opening Doors demonstration posited that if the programs had positive effects on sample members’ educational outcomes, they could, in turn, have positive effects on well-being. Prior research establishes a strong positive association between education levels and health. Education is also believed to foster a greater sense of self, connectivity to others, and civic engagement.⁴

⁴For more detail on this research, see Chapter 5 in Scrivener et al. (2008).

The Opening Doors Demonstration

Table 4.4

Probation Status, Program Semester Through Third Postprogram Semester: Opening Doors Program Chaffey College Report

Outcome (%)	Program Group	Control Group	Difference (Impact)	Standard Error
<u>At end of program semester</u>				
Good academic standing	29.0	25.2	3.8	2.9
On probation ^a	49.2	52.6	-3.4	3.3
No status ^b	21.9	22.2	-0.4	2.8
<u>At end of first postprogram semester</u>				
Good academic standing	28.8	23.6	5.2 *	2.9
On probation ^a	33.9	38.9	-4.9	3.2
No status ^b	37.3	37.5	-0.3	3.2
<u>At end of second postprogram semester</u>				
Good academic standing	26.8	22.9	3.8	2.9
On probation ^a	20.1	22.9	-2.8	2.7
No status ^b	53.2	54.2	-1.0	3.3
<u>At end of third postprogram semester</u>				
Good academic standing	21.0	21.8	-0.8	2.7
On probation ^a	16.7	16.7	0.1	2.5
No status ^b	62.3	61.5	0.8	3.2
<u>Summary outcomes</u>				
Ever in good academic standing	38.8	37.8	1.0	3.2
Never in good academic standing	46.9	48.2	-1.2	3.3
No status ^b	14.3	14.0	0.3	2.3
Sample size (total = 898)	448	450		

SOURCE: MDRC calculations using Chaffey College probation data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

Estimates are adjusted by round of random assignment.

^aThis outcome includes academic probation (attempted at least 12 credits since starting at the college and has a cumulative grade point average below 2.0, or below a C average) and progress probation (attempted at least 12 credits and has completed less than half of the credits attempted).

^bThe “No status” category includes sample members who were not enrolled during the semester and therefore did not have an assigned probation status.

To explore whether the programs in the Opening Doors demonstration affected students' well-being, the study's 12-month survey contained a series of questions about various social, psychological, and health outcomes. While most changes in these areas — particularly in health — would not be expected in a short time frame, the study's designers were interested in seeing if any short-term educational gains or experiences led to improvements in well-being. As discussed below, Chaffey's original Opening Doors program engaged a portion of the program group in the College Success course and increased attendance at the college's Success Centers somewhat. The program did not, however, have statistically significant positive effects on any other educational outcomes. Expectations of impacts on indicators of well-being, then, should not be high.

Fulfilling expectations, for the most part, Chaffey's original Opening Doors program did not meaningfully affect the social, psychological, or health outcomes that were examined. The program, however, did affect a few outcomes. The program group was somewhat more likely than the control group to report that their friends valued education. This may be consistent with the finding reported in Chapter 3 that students in the program group reported a greater sense of integration and sense of belonging at school. The program group at Chaffey was also less likely than the control group to report that a close friend had spent time in reform school or prison in the past year. Perhaps some students in the program group shifted to peer groups that engaged in fewer delinquent activities. Finally, program group members were less likely to report being a smoker at the time of the survey than were control group members. This finding could be consistent with shifts toward healthier and more academically inclined peer groups, but the difference is only marginally statistically significant and could be the product of chance.⁵ (Appendix Tables D.11 through D.13 present the details of the analysis on well-being, and Appendix E describes the scales used in the analysis.)

⁵Furthermore, it should be noted that reported smoking did not decline from baseline to follow-up among students in the program group, but rather the rate of reported smoking increased less among the program group than among students in the control group. Finally, when baseline smoking is controlled for in the analysis, the difference between the research groups is no longer statistically significant.

Chapter 5

Effects of the Enhanced Opening Doors Program

Like the original Opening Doors program, Chaffey's Enhanced Opening Doors program was designed to help students on academic and progress probation improve their performance in college and move off probation. Relying primarily on data provided to MDRC by Chaffey College, this chapter describes the effects of Enhanced Opening Doors on various educational outcomes over a two-semester follow-up period — that is, the two semesters in which the program operated, fall 2006 and spring 2007. The follow-up semesters are referred to as the “first program semester” (fall 2006) and the “second program semester” (spring 2007). When this report was prepared, data were not available for any semesters after the Enhanced Opening Doors program ended.¹

The key findings presented in this chapter are:

- During the first program semester, almost three-fourths of the Enhanced Opening Doors program group took the College Success course. More than twice as many program group members than control group members visited a Success Center that semester. Just under a third of the program group members took the second-semester College Success course.
- The Enhanced Opening Doors program produced positive impacts on the number of credits earned during the two program semesters. By the end of the follow-up period, program group members had earned an average of almost three more credits than the control group.
- The program also increased the proportion of sample members who passed all their courses each semester and earned a grade point average (GPA) of 2.0 or higher.
- Importantly, the Enhanced Opening Doors program also increased the proportion of sample members who moved off probation: Almost twice as many program group members as control group members had achieved good academic standing at some point during the follow-up period.

¹As noted in Chapter 2, the study's 12-month survey was not administered to the Enhanced Opening Doors sample members.

Effects on Educational Outcomes During the Two Program Semesters

As discussed in Chapter 3, Enhanced Opening Doors was a two-semester program that offered a College Success course during each semester in which it operated. Table 5.1 shows that 72 percent of the Enhanced Opening Doors program group took the College Success course — that is, the lecture and the linked workshop — during the first semester. The first-semester course included an expectation that students would visit the college’s Success Centers. As shown in the table, 69 percent of the program group visited a center at least once, while 32 percent of the control group did the same, yielding an estimated impact of 37 percentage points. Students in the first-semester course, as operated as part of Enhanced Opening Doors, were expected to visit the Success Centers five times.² The program group averaged 5.5 visits during the first program semester, and 38 percent visited five or more times. Enhanced Opening Doors program group members spent an average of 5.7 hours at the centers, compared with an average of 1.7 hours for the control group members. Enhanced Opening Doors more than tripled the amount of time students spent at the centers.

Both research groups used the Success Centers for a variety of activities. The first italicized set of measures in the table shows the proportion of sample members who participated in the listed activities during the first semester, among those who visited a center at least once. The outcomes are presented in italics to indicate that they are nonexperimental — program group students who visited the centers were not necessarily similar at baseline (that is, at the time the study began) to the control group students who visited the centers, so the differences represent a combination of the effects of the program and the differences in the groups of sample members. As the table shows, almost all the program group members who visited a center (89 percent) used lab resources, such as computerized instruction. The next most common activities for the program group members were attending a workshop or seminar and participating in class activities and/or directed learning activities, such as assignments for a class or activities structured by Success Center staff to build a specific skill.

Although participation rates were higher during the first semester, the Enhanced Opening Doors program increased participation in the College Success course and Success Centers during the second semester, as well. As shown in Table 5.1, 29 percent of the program group took the second-semester College Success course. Although the course did not include an

²As discussed in Chapters 3 and 4, students in the original Opening Doors version of the course were supposed to visit the Success Centers nine times during the semester in which the program operated. Reflecting the different expectations for the two versions of the program, Tables 4.1 and 5.1 use different categories for the total number of visits to the centers. Table 4.1 shows the proportion of Opening Doors sample members who visited the centers up to nine times or more, whereas Table 5.1 shows the proportion of Enhanced Opening Doors sample members who visited the centers up to five times or more.

The Opening Doors Demonstration

Table 5.1

Program Participation, First and Second Program Semesters:
Enhanced Opening Doors Program

Chaffey College Report

Outcome	Program Group	Control Group	Difference (Impact)	Standard Error
<u>First program semester</u>				
Registered for any courses (%)	85.3	80.9	4.4	3.6
College Success Course I (%)				
Registered for College Success lecture	72.3	0.5	71.9 ***	3.1
Registered for College Success workshop	72.3	0.5	71.9 ***	3.1
Success Centers				
Ever visited (%)	68.8	31.8	37.0 ***	4.4
Total number of visits	5.5	1.8	3.7 ***	0.7
0 (%)	31.2	68.2	-37.0 ***	4.4
1-4 (%)	31.3	18.6	12.6 ***	4.1
5 or more (%)	37.5	13.2	24.3 ***	4.0
Total hours spent	5.7	1.7	4.0 ***	0.9
<i>Ever visited, by activity^a (%)</i>				
<i>Lab resources</i>	88.9	58.6		
<i>Study group</i>	16.2	4.4		
<i>Workshop/seminar</i>	46.8	22.7		
<i>Student/peer tutoring</i>	28.0	34.2		
<i>Class activities/directed learning activities</i>	41.6	47.1		
<u>Second program semester</u>				
Registered for any courses (%)	67.0	59.5	7.4	4.6
Registered for College Success Course II (%)	29.0	0.0	29.0 ***	3.1
Success Centers				
Ever visited (%)	28.6	20.5	8.1 **	4.1
Total number of visits	2.5	1.3	1.2 ***	0.5
0 (%)	71.4	79.5	-8.1 **	4.1
1-4 (%)	9.4	10.5	-1.1	2.8
5 or more (%)	19.2	10.0	9.2 ***	3.3
Total hours spent	3.4	1.2	2.2 ***	0.7
<i>Ever visited, by activity^a (%)</i>				
<i>Lab resources</i>	62.3	69.1		
<i>Study group</i>	4.7	4.5		
<i>Workshop/seminar</i>	26.5	15.7		
<i>Student/peer tutoring</i>	56.2	42.2		
<i>Class activities/directed learning activities</i>	47.0	28.7		
Sample size (total = 444)	224	220		

(continued)

Table 5.1 (continued)

SOURCES: MDRC calculations from Chaffey College transcript and Success Center participation data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

Estimates are adjusted by round of random assignment.

Italics indicate nonexperimental data. Significance tests are not calculated for nonexperimental data; thus, the cells for “Difference” and “Standard Error” are empty.

^aThis outcome was calculated only among sample members who ever visited a Success Center.

Distributions may not add to 100 percent because categories are not mutually exclusive.

explicit expectation that students visit the Success Centers, the program group members were more likely, on average, to visit the centers: 29 percent of the program group visited a center at least once, compared with 21 percent of the control group. As shown in the table in the distribution of total number of visits, the increase was generated by program group students who visited the centers five or more times.

Table 5.2 presents information on Enhanced Opening Doors sample members’ academic performance during the two program semesters. During the first semester, the program and control groups registered at about the same rate. Program group members, however, attempted almost one more course, on average, than control group members. (The College Success lecture and workshop were counted as two separate courses.) During the semester, the program group attempted an average of 1.8 fewer regular credits than the control group. But, by the end of the semester, they had earned about the same number of regular credits. (The 0.4 credit decrease is not statistically significant.) The program group earned an average of 0.3 more developmental credits than the control group, and 1.5 more other non-degree-applicable credits (from the College Success course).

The Enhanced Opening Doors program group members were also more likely to pass their courses: 26 percent passed all their courses during the first program semester, compared with 19 percent of the control group. Also, 40 percent of the program group earned a term GPA of 2.0 or higher that semester, compared with 22 percent of the control group, a difference of 18 percentage points. It is important to note that “term GPA” includes grades earned in all courses except for developmental-level courses (such as developmental English and math). This is the GPA that Chaffey uses to determine students’ probationary status. Part of the GPA boost from the Enhanced Opening Doors program was generated by program group students’ grades in the College Success course. The rows at the bottom of Table 5.2 present the impact of Enhanced Opening Doors on “degree-applicable GPA.” This calculation of GPA excludes grades from the

The Opening Doors Demonstration

Table 5.2

Transcript Outcomes, First and Second Program Semesters:
Enhanced Opening Doors Program

Chaffey College Report

Outcome	Program Group	Control Group	Difference (Impact)	Standard Error
<u>First program semester</u>				
Registered for any courses (%)	85.3	80.9	4.4	3.6
Number of courses attempted	3.2	2.4	0.8 ***	0.2
Number of credits attempted	7.7	7.2	0.5	0.4
Regular credits	4.8	6.6	-1.8 ***	0.4
Non-degree credits	2.9	0.6	2.3 ***	0.2
Developmental credits	0.7	0.6	0.2	0.2
Other credits ^a	2.2	0.0	2.2 ***	0.1
Passed all courses (%)	26.3	19.1	7.2 *	4.0
Number of courses passed	2.0	1.1	0.9 ***	0.2
Withdrawn from any courses (%)	32.6	32.3	0.3	4.5
Number of course withdrawals	0.5	0.5	0.0	0.1
Number of credits earned	4.5	3.1	1.4 ***	0.4
Regular credits	2.5	2.9	-0.4	0.3
Non-degree credits	2.0	0.2	1.8 ***	0.2
Developmental credits	0.5	0.2	0.3 **	0.1
Other credits ^a	1.6	0.0	1.5 ***	0.1
Term GPA ^b (%)				
No GPA ^c	21.4	28.7	-7.3 *	4.1
0-1.9	38.4	49.5	-11.1 **	4.7
2.0 or higher	40.2	21.8	18.4 ***	4.3
Degree-applicable term GPA ^d (%)				
No GPA ^c	37.5	29.6	7.9 *	4.5
0-1.9	38.4	49.1	-10.6 **	4.7
2.0 or higher	24.1	21.4	2.7	4.0
<u>Second program semester</u>				
Registered for any courses (%)	67.0	59.5	7.4	4.6
Number of courses attempted	2.2	1.9	0.3 *	0.2
Number of credits attempted	6.5	5.6	0.9 *	0.5
Regular credits	5.3	5.3	-0.1	0.5
Non-degree credits	1.3	0.3	1.0 ***	0.2
Developmental credits	0.7	0.3	0.4 ***	0.1
Other credits ^a	0.6	0.0	0.6 ***	0.1

(continued)

Table 5.2 (continued)

Outcome	Program Group	Control Group	Difference (Impact)	Standard Error
Passed all courses (%)	22.8	14.1	8.7 **	3.7
Number of courses passed	1.3	0.9	0.5 ***	0.1
Withdrawn from any courses (%)	21.0	27.7	-6.7 *	4.1
Number of course withdrawals	0.4	0.4	-0.1	0.1
Number of credits earned	3.8	2.5	1.3 ***	0.4
Regular credits	2.9	2.4	0.5	0.4
Non-degree credits	0.8	0.1	0.8 ***	0.1
Developmental credits	0.3	0.1	0.3 ***	0.1
Other credits ^a	0.5	0.0	0.5 ***	0.1
Term GPA ^b (%)				
No GPA ^c	37.5	45.9	-8.4 *	4.7
0-1.9	33.5	35.0	-1.5	4.5
2.0 or higher	29.0	19.1	9.9 **	4.0
Degree-applicable term GPA ^d (%)				
No GPA ^c	43.3	45.9	-2.6	4.7
0-1.9	33.0	35.0	-2.0	4.5
2.0 or higher	23.7	19.1	4.6	3.9
Sample size (total = 444)	224	220		

SOURCE: MDRC calculations from Chaffey College transcript data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

Estimates are adjusted by round of random assignment.

GPA = grade point average.

^a“Other credits” includes credits for the College Success courses and other non-degree-applicable college preparatory courses.

^bGrades earned in all courses except for developmental courses are used in the calculation of term GPA.

^cThe “No GPA” category includes students who did not enroll and students who took only developmental courses, which are not included in GPA calculations.

^dGrades earned only in degree-applicable courses, which excludes the College Success course and other non-degree-applicable courses, are used in this calculation of GPA.

^eThe “No GPA” category includes students who did not enroll and students who took only non-degree-applicable courses, which are not included in degree-applicable GPA calculations.

College Success course and other courses that cannot be applied toward a degree (such as other college preparatory classes). As the table shows, in fact, the program did not increase the proportion of sample members who earned a 2.0 or higher degree-applicable GPA during the first program semester. (The 3 percentage point increase is not statistically significant.)

During the second program semester, the Enhanced Opening Doors program group continued to earn more developmental credits and other non-degree credits, without a corresponding reduction in regular credits. On average, the program group members earned a total of 1.3 credits more than the control group members. As in the first program semester, the program group members were more likely to pass all their courses and earn a term GPA of 2.0 or higher during the second program semester.

Table 5.3 shows some cumulative measures from the two program semesters for Enhanced Opening Doors. Compared with the control group members, the program group members registered for 0.1 more of a semester. They also earned an average of 2.7 more credits over the two semesters, 0.5 of which was from developmental-level classes.

Reflecting the positive impacts on term GPA during the two program semesters, Enhanced Opening Doors increased students' cumulative GPA over the study's follow-up period. Thirty-six percent of the program group had a cumulative GPA of 2.0 or higher, compared with 24 percent of the control group, an estimated impact of 13 percentage points. It is important to note that this cumulative GPA only reflects students' grades during the two-semester follow-up period — that is, fall 2006 and spring 2007, the period during which the program operated — and does not take into account grades earned prior to random assignment. Like the term GPA measures presented in Table 5.2, it includes grades for all courses except for developmental-level courses.

Notably, the Enhanced Opening Doors program had an effect on the cumulative degree-applicable GPA. As mentioned above, this GPA calculation excludes the College Success course and other courses that cannot be applied toward a degree. As Table 5.3 shows, 30 percent of the program group earned a cumulative degree-applicable GPA of 2.0 or higher, compared with 23 percent of the control group. Thus, the Enhanced Opening Doors program produced an estimated impact of 7 percentage points on this outcome. This finding suggests that Enhanced Opening Doors positively affected performance in courses outside the program.³

³Appendix Table F.1 shows information on enrollment at two- and four-year colleges across the nation, based on data from the National Student Clearinghouse and transcript data from Chaffey College. The program group and control group had similar rates of enrollment at two-year schools. During the second program semester, 2 percent of the control group members were enrolled in a four-year college, compared with none of the program group. The difference between the groups is statistically significant, but given the small number of students involved, it is not educationally meaningful.

The Opening Doors Demonstration

Table 5.3

**Cumulative Outcomes, First and Second Program Semesters:
Enhanced Opening Doors Program**

Chaffey College Report

Outcome	Program Group	Control Group	Difference (Impact)	Standard Error
Registered for any courses (%)	88.4	87.7	0.7	3.1
Number of semesters registered	1.5	1.4	0.1 *	0.1
Number of credits earned	8.3	5.6	2.7 ***	0.7
Regular credits	5.4	5.3	0.1	0.6
Non-degree credits	2.9	0.3	2.6 ***	0.2
Developmental credits	0.8	0.3	0.5 ***	0.2
Other credits ^a	2.1	0.0	2.1 ***	0.1
Cumulative GPA ^b (%)				
No GPA ^c	16.5	20.0	-3.5	3.7
0-1.9	47.3	56.3	-9.0 *	4.7
2.0 or higher	36.2	23.6	12.5 ***	4.3
Cumulative degree-applicable GPA ^d (%)				
No GPA ^c	25.4	20.5	5.0	4.0
0-1.9	44.2	56.3	-12.1 **	4.7
2.0 or higher	30.3	23.2	7.2 *	4.2
Sample size (total = 444)	224	220		

SOURCE: MDRC calculations from Chaffey College transcript data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

Estimates are adjusted by round of random assignment.

Cumulative outcomes use data from the fall 2006 and spring 2007 semesters.

GPA = grade point average.

^a“Other credits” includes credits for the College Success courses and for other non-degree-applicable college preparatory courses.

^bThis cumulative GPA does not include grades from courses taken before random assignment. It is based on credit-bearing courses taken from the first and second program semesters. Courses in which students did not receive a passing grade and subsequently repeated are not included in cumulative GPA, per Chaffey College policy.

^cThe “No GPA” category includes students who did not enroll and students who took only developmental courses, which are not included in GPA calculations.

^dThis cumulative GPA does not include grades from courses taken before random assignment. It only includes grades earned in courses taken from the program semesters, and excludes credit from the College Success course and other non-degree-applicable courses.

^eThe “No GPA” category includes students who did not enroll and students who took only non-degree-applicable courses, which are not included in degree-applicable GPA calculations.

Given Enhanced Opening Doors' positive impacts on academic performance, it is not surprising that it also positively affected probation status. Table 5.4 shows sample members' probation status at the end of the first and second program semesters. (The outcome "On probation" in the table includes students who were on academic probation, progress probation, or both.) As described in Chapter 4, students' probation status is updated based on their performance each semester. Students who are not enrolled during a semester are not assigned a status.

By the end of the first semester, 22 percent of the Enhanced Opening Doors program group was in good academic standing, compared with 12 percent of their control group counterparts. By the end of the second semester, 24 percent of the program group was in good academic standing, compared with 14 percent of the control group. As shown at the bottom of the table, program group members were almost twice as likely as control group members to have been in good academic standing at some point during the study's follow-up period: 30 percent of the Enhanced Opening Doors program group members were ever in good academic standing (that is, in good standing at any point in time over the two semesters), compared with 16 percent of the control group.

Effects for Selected Subgroups

MDRC examined the impact of Enhanced Opening Doors on educational outcomes for two different subgroups of students, defined using characteristics measured at baseline: 1) men and women, and 2) sample members who had been on probation for one semester when they entered the study and sample members who had been on probation for two or more semesters at that point. The analyses found no meaningful differences in impacts based on students' gender. Some interesting differences were found, however, based on students' probation status at the time of random assignment.

A series of tables in Appendix F present the key educational impacts for these two subsets of sample members. A dagger in the right-hand column of the tables indicates that the difference between the impact for the group that was newly on probation and the impact for the group that had been on probation longer is statistically significant (and therefore not likely to be a chance occurrence). The tables show that Chaffey's Enhanced Opening Doors program increased the number of visits to the college's Success Centers more for the new probationary students (shown in Appendix Table F.6). It increased the number of credits earned over the two-semester follow-up period for the new probationary students, but not for those who had been on

The Opening Doors Demonstration

Table 5.4

**Probation Status, First and Second Program Semesters:
Enhanced Opening Doors Program**

Chaffey College Report

Outcome (%)	Program Group	Control Group	Difference (Impact)	Standard Error
<u>At end of first program semester</u>				
Good academic standing	21.9	12.3	9.6 ***	3.6
On probation ^a	63.4	68.6	-5.2	4.5
No status ^b	14.7	19.1	-4.4	3.6
<u>At end of second program semester</u>				
Good academic standing	24.1	13.6	10.5 ***	3.7
On probation ^a	42.9	45.9	-3.0	4.7
No status ^b	33.0	40.5	-7.4	4.6
<u>Summary outcomes</u>				
Ever in good academic standing	30.4	15.9	14.5 ***	4.0
Never in good academic standing	58.0	71.8	-13.8 ***	4.5
No status ^b	11.6	12.3	-0.7	3.1
Sample size (total = 444)	224	220		

SOURCE: MDRC calculations using Chaffey College probation data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

Estimates are adjusted by round of random assignment.

^aThis outcome includes academic probation (attempted at least 12 credits since starting at the college and has a cumulative grade point average below 2.0, or below a C average) and progress probation (attempted at least 12 credits and has completed less than half of the credits attempted).

^bThe “No status” category includes sample members who were not enrolled during the semester and therefore did not have an assigned probation status.

probation longer (shown in Appendix Table F.8).⁴ The Enhanced Opening Doors program decreased the proportion of sample members on probation at the end of the first program semester among the new probationary students but not among the longer-term probationary students (shown in Appendix Table F.9). Of course, in many cases, the longer-term probationary students would not have been able to make enough progress to get off probation in just a semester or two. The sample sizes are quite small for these subgroups, so the results should be considered only suggestive.

⁴Appendix Table F.7 shows the program's impacts on credits earned and other academic outcomes for each semester in the follow-up period.

Chapter 6

Summary and Conclusions

Chapters 4 and 5 discuss the effects of the original Opening Doors program and the Enhanced Opening Doors program, respectively. This chapter briefly summarizes and compares the effects of the programs and offers some conclusions. The final section of the chapter describes how Chaffey has institutionalized services for probationary students.

As Chapter 1 described, because Opening Doors and Enhanced Opening Doors were operated sequentially, not simultaneously, MDRC is not able to definitively attribute any differences in the programs' impacts to the programs themselves. (To do so would have required that students be randomly assigned to one of the two programs or to the control group at the same time, which was not possible.) Nonetheless, the study allows for a direct comparison of the effectiveness of each program, in which most circumstances were similar except for the variations in the two programs, and offers suggestive evidence about why the effects might differ.

Effects on Educational Outcomes

This section briefly compares the key effects of the original Opening Doors program with those of the Enhanced Opening Doors program. When the report was prepared, transcript data were available through the spring 2007 semester. Because the two-semester Enhanced Opening Doors program operated during fall 2006 and spring 2007, no postprogram data were available. To facilitate comparisons, this chapter examines only the first two semesters of the follow-up period for the original Opening Doors sample. The figures discussed in this chapter, then, present information for the semester in which the original Opening Doors program ran (the "program semester," or fall 2005) and the semester that followed it (the "postprogram semester," or spring 2006), as well as for the two "program semesters" during which Enhanced Opening Doors ran.

The figures in this chapter present the programs' impacts on some selected measures. Appendix Tables G.1 through G.4 present the program and control group levels on all the key educational outcomes presented in Chapters 4 and 5, and compare the programs' impacts. A dagger in the right-hand column of the tables indicates that the difference between the impact of original Opening Doors and the impact of Enhanced Opening Doors is statistically significant (and therefore is not likely to be to the result of chance). All the differences between the programs' impacts discussed in this section are statistically significant.

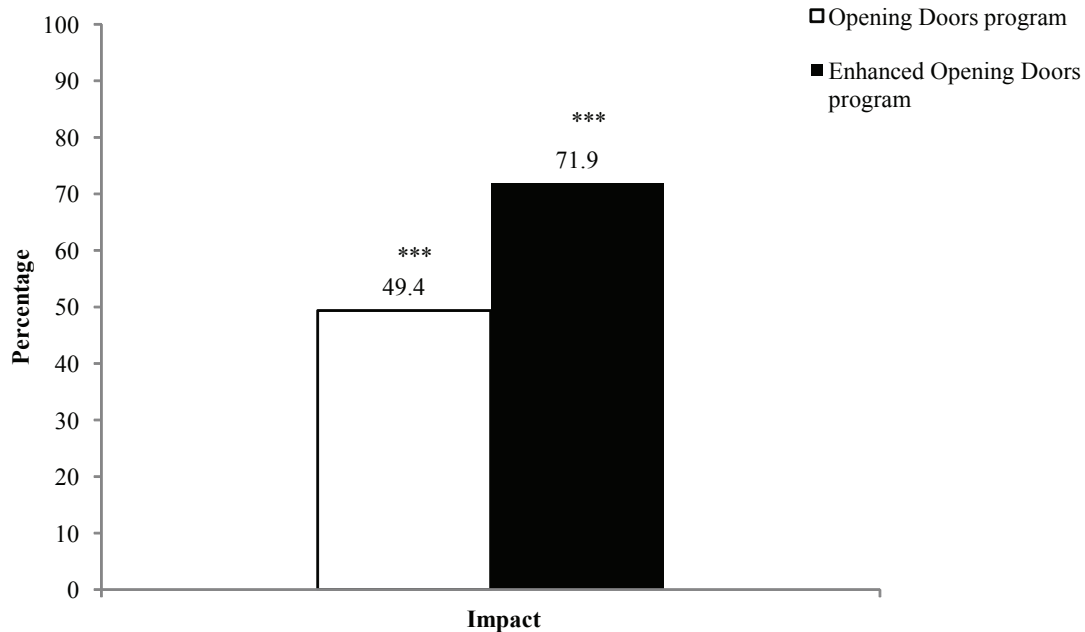
Enhanced Opening Doors was more successful in engaging students in the program than was Opening Doors. First, as Figure 6.1 shows, the Enhanced Opening Doors program

The Opening Doors Demonstration

Figure 6.1

Impact on College Success Course Registration, First Program Semester: Opening Doors Program and Enhanced Opening Doors Program

Chaffey College Report



SOURCE: MDRC calculations from Chaffey College transcript data.

NOTES: A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

The difference between the programs' impacts shown in this figure is statistically significant.

produced an impact of 72 percentage points on registration for the first-semester College Success course. This impact represents the difference between the proportion of Enhanced Opening Doors program group members who registered for the course (72 percent) and the proportion of Enhanced Opening Doors control group members who registered for the course (0 percent). The Opening Doors program, in contrast, produced an impact of 49 percentage points on registration for the College Success course.

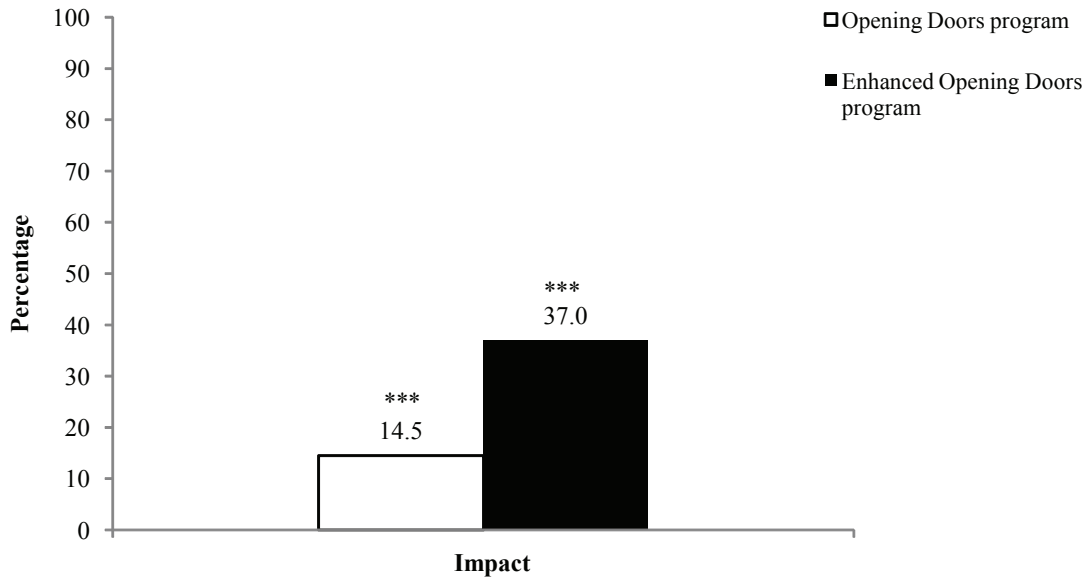
Second, Enhanced Opening Doors was also more successful in increasing attendance at the college's Success Centers than the original Opening Doors program. As shown in Figure 6.2, Enhanced Opening Doors increased the proportion of students who visited a Success

The Opening Doors Demonstration

Figure 6.2

Impact on Ever Visiting a Success Center, First Program Semester: Opening Doors Program and Enhanced Opening Doors Program

Chaffey College Report



SOURCE: MDRC calculations from Chaffey College Success Center participation data.

NOTES: A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

The difference between the programs' impacts shown in this figure is statistically significant.

Center by 37 percentage points, whereas the original Opening Doors program increased the proportion who visited a center by 15 percentage points. (Appendix Table G.1 provides more detail on program participation.)

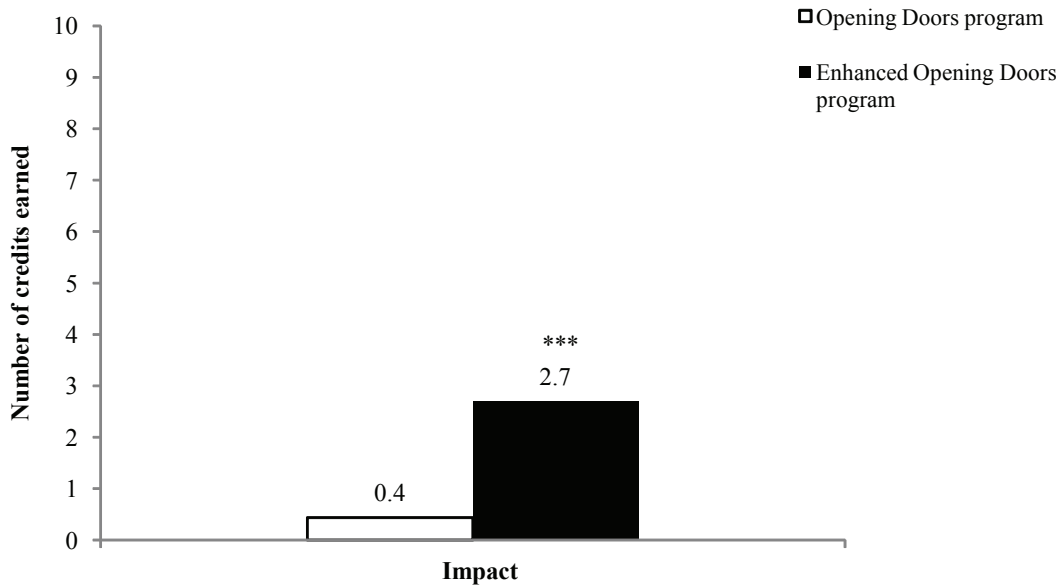
The programs at Chaffey were designed to help students improve their academic performance and move off probation. Enhanced Opening Doors was notably more successful in meeting those goals than was the original Opening Doors program. Figure 6.3 shows the programs' impact on the average number of credits that students earned over the two-semester period. The original Opening Doors program did not generate a statistically significant increase in the number of credits earned, but the Enhanced Opening Doors program did (although, as

The Opening Doors Demonstration

Figure 6.3

Impact on Cumulative Credits Earned, First and Second Semesters: Opening Doors Program and Enhanced Opening Doors Program

Chaffey College Report



SOURCE: MDRC calculations from Chaffey College transcript data.

NOTES: A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as *** = 1 percent; ** = 5 percent; * = 10 percent.

The difference between the programs' impacts shown in this figure is statistically significant.

noted, Opening Doors ran for only one semester, while Enhanced Opening Doors ran for two semesters).

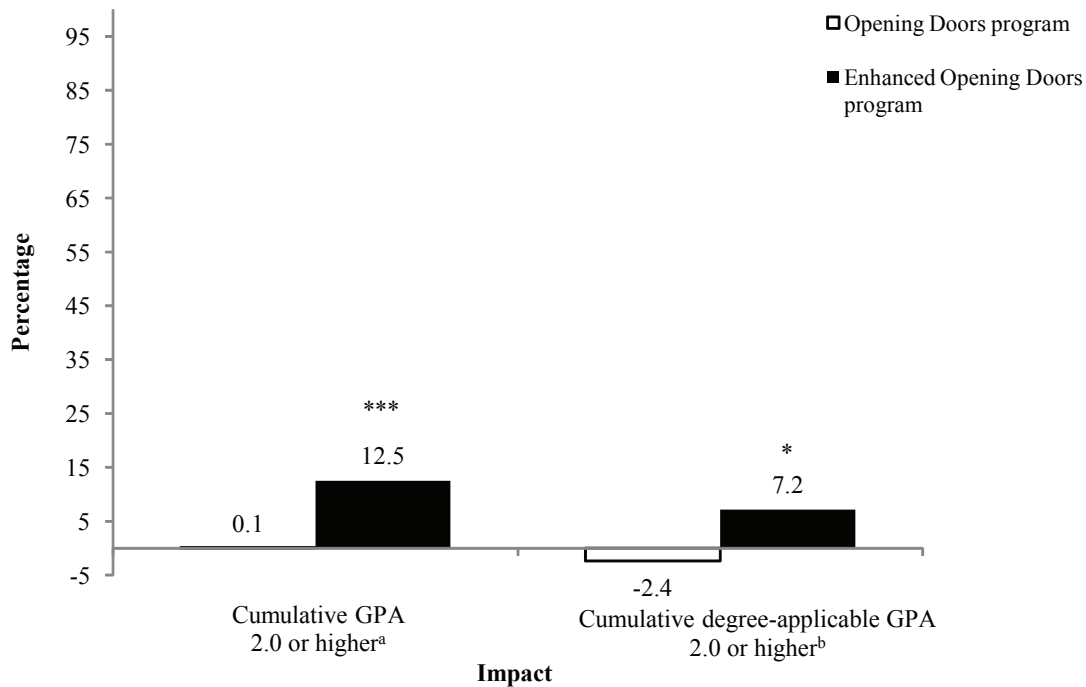
Similarly, as Figure 6.4 shows, the original Opening Doors program did not produce a statistically significant effect on sample members' cumulative GPA. Enhanced Opening Doors, however, increased the proportion of students who had a cumulative GPA of 2.0 or higher by 13 percentage points. As discussed in Chapter 5, this "cumulative GPA" includes all courses except for developmental courses, and is the GPA used at Chaffey to determine students' probationary status. The second set of bars in Figure 6.4 presents the programs' impacts on the "cumulative degree-applicable GPA," which excludes grades from the College Success course and other courses that cannot be applied toward a degree. As the figure shows, Enhanced Opening Doors

The Opening Doors Demonstration

Figure 6.4

Impact on Grade Point Average of 2.0 or Higher, First and Second Semesters: Opening Doors Program and Enhanced Opening Doors Program

Chaffey College Report



SOURCE: MDRC calculations from Chaffey College transcript data.

NOTES: A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

The difference between the programs' impacts shown in this figure is statistically significant.

GPA = grade point average.

^aThis cumulative GPA does not include grades from courses taken before random assignment. It is based on credit-bearing courses taken from the first and second semesters. Courses in which students did not receive a passing grade and subsequently repeated are not included in the cumulative GPA, per Chaffey College policy.

^bThis cumulative GPA does not include grades from courses taken before random assignment. It only includes grades earned in courses taken from the first and second semesters and excludes credit from the College Success course and other non-degree-applicable courses.

increased the proportion of sample members who earned a cumulative degree-applicable GPA of 2.0 or higher by 7 percentage points. This outcome suggests that Enhanced Opening Doors positively affected performance in courses outside the program. (Appendix Tables G.2 and G.3 show detailed transcript outcomes for the two-semester follow-up period.)

Finally, Enhanced Opening Doors was more successful in helping students move off probation, the primary goal of both programs. As shown in Figure 6.5, the Enhanced Opening Doors program increased the proportion of sample members who were ever in good academic standing during the two-semester follow-up period by 15 percentage points. The original Opening Doors program did not have a statistically significant effect on this outcome. (Appendix Table G.4 presents more detail on the two programs' effects on probation status.)

Chapters 4 and 5 present results for two different subgroups of sample members. Overall, the analyses found no meaningful differences in impacts based on students' gender. The analyses found some differences, however, based on sample members' probation status at the time of random assignment. The original Opening Doors program had somewhat more positive effects for the subgroup of sample members who had been on probation two or more semesters when they entered the study, compared with students who had been on probation only one semester at that point. Interestingly, the opposite was found to be true for the Enhanced Opening Doors program: Effects were more positive for the students who had been on probation only one semester. This study, therefore, does not provide clear evidence about whether it might be more effective to target a program like Chaffey's to students who are newly on probation or to those who have been on probation longer.

In sum, the positive effects of Enhanced Opening Doors discussed in this report are striking. It is notable that the program generated positive academic outcomes for students on probation — a group that had faced substantial prior academic difficulties and was at great risk for not successfully continuing in college. An important question, however, is whether positive effects continue beyond the two program semesters. MDRC hopes to acquire supplementary funding, as well as additional transcript and probation data from Chaffey, to answer that question.

What Might Explain the Programs' Different Effects?

Enhanced Opening Doors generally had larger effects on sample members' academic outcomes than did the original Opening Doors program. The study was not designed to determine systematically *why* the two programs might have had different results, but MDRC conducted some analyses to shed light on that question.

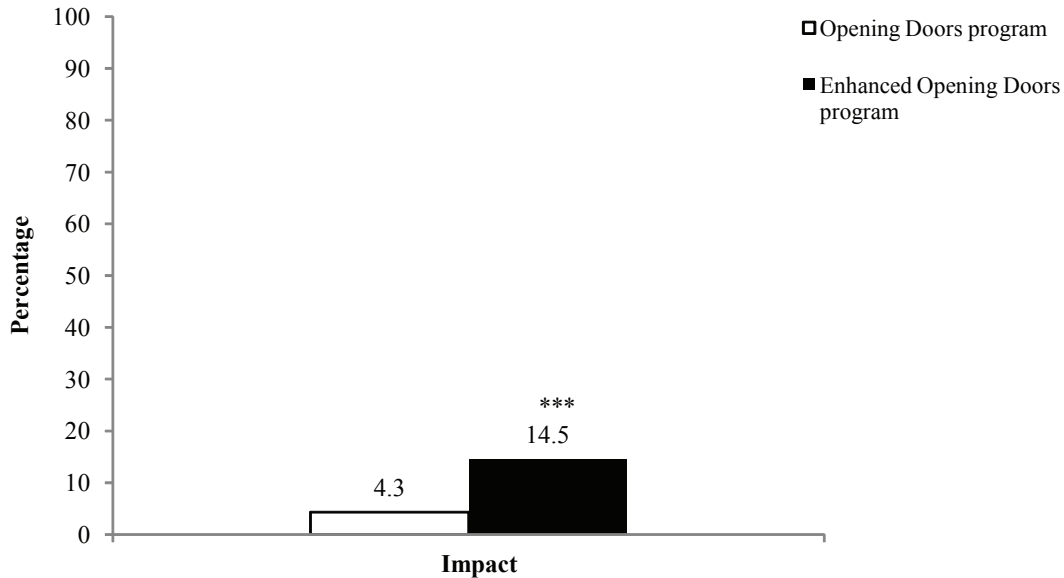
Various analyses were conducted that controlled for sample members' baseline characteristics. They suggested that the differences between the two programs' impacts were not, in fact, a consequence of differences in the characteristics of the students served by the two programs.

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Figure 6.5

Impact on Students Ever in Good Academic Standing, First and Second Semesters: Opening Doors Program and Enhanced Opening Doors Program

Chaffey College Report



SOURCE: MDRC calculations using Chaffey College probation data.

NOTES: A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

The difference between the programs' impacts shown in this figure is statistically significant.

Analyses that controlled for registration in the first-semester College Success course suggest that the more positive effects of Enhanced Opening Doors might have been driven by the higher rate of participation in the College Success course. As discussed in Chapter 3, Enhanced Opening Doors program group members were told that they were required to take the first-semester College Success course or they would not be able to register for any courses. The college ultimately decided not to enforce the registration block, but program group members had already received the message that the course was required. By sending the message that participation in a program or a course is required, a college can engage students who would not take part on their own.

The relative success of Enhanced Opening Doors might also be driven by other differences in program implementation, although there is no statistical evidence regarding this supposition. First, the College Success course in Enhanced Opening Doors was taught by experienced staff who collaborated throughout the semester. Over half of the instructors in the Enhanced Opening Doors program taught the course in the original Opening Doors program. The other instructors were counselor apprentices who had worked in the original program. Instructors met monthly to share ideas.

Second, the Success Center visits, which were intended to be a key component of the College Success course in both programs, were more effectively integrated with the course in Enhanced Opening Doors. All the Enhanced Opening Doors course instructors communicated and enforced the expectation to visit the centers, and the assignments were integrated with themes from the College Success course. This approach may have helped students master the course material. In addition, the number of visits that students were asked to complete was reduced to five from nine, which, according to both students and instructors, was more manageable than the expectation in the original Opening Doors program.

Third, the Enhanced Opening Doors program provided services to students during a second semester. Almost a third of the Enhanced Opening Doors program group took the second-semester College Success course. The program continued to have an impact on students' outcomes, on average, during this time. Not surprisingly, some other sites in the Opening Doors demonstration have found that effects are largest when students receive the special, improved services, and they diminish or disappear after the services end.

Finally, additional counseling was provided more consistently in Enhanced Opening Doors. MDRC's field research suggests that program group students in Enhanced Opening Doors were more likely to meet with their instructor outside class than were program group students in the original Opening Doors program.

Chaffey's Institutionalization of Enhanced Opening Doors

Throughout the study, Chaffey College remained notably committed to innovation and to improving services for probationary students. After the demonstration programs operated, the college committed to institutionalizing a revised version of the Enhanced Opening Doors program, as part of a more comprehensive initiative to fully implement and enforce Chaffey's probation and dismissal policies. The revised program, called "Opening Doors to Excellence," which began operating in fall 2007, targets students who have been on probation for two consecutive semesters. Students are blocked from registering for the subsequent semester until

they attend an information session for Opening Doors to Excellence and do at least one of the following: enroll in the College Success course, develop an alternate plan with a counselor to improve their academic performance, or refuse both options and accept full responsibility to move off probation at the risk of dismissal. Students in the College Success course are expected to complete five assignments in the Success Centers to augment what they learn in the course, and they receive extra counseling.

Chaffey also built upon its experiences in the Opening Doors demonstration to develop a program for new students who are identified through the college's assessment process as being at risk of experiencing difficulties. Called "Smart Start," the program serves students who volunteer to take part and provides services similar to the Opening Doors to Excellence program.

Appendix A

Supplementary Tables for Chapter 2

The Opening Doors Demonstration

Appendix Table A.1

**Selected Characteristics of Sample Members at Baseline:
Opening Doors Program
Chaffey College Report**

Characteristic	Full Sample	Program Group	Control Group
Gender (%)			
Male	40.3	38.6	42.0
Female	59.7	61.4	58.0
Age in years (%)			
18-20	58.6	56.3	60.9
21-25	31.6	32.8	30.4
26-30	6.8	6.9	6.7
31-34	3.0	4.0	2.0 *
Average age in years	21.1	21.3	20.9 *
Marital status (%)			
Married	7.1	8.9	5.2 **
Unmarried	92.9	91.1	94.8 **
Race/ethnicity (%)			
Hispanic/Latino ^a	52.6	52.0	53.2
Black, non-Hispanic	14.5	14.6	14.5
White, non-Hispanic	23.1	23.3	22.9
Asian or Pacific Islander	5.7	6.5	5.0
Other ^b	4.1	3.6	4.5
One child or more in household (%)	12.2	13.2	11.1
<i>Among sample members with children, average age of youngest child in years</i>	<i>3.3</i>	<i>3.4</i>	<i>3.1</i>
Average number of residents in household (excluding roommates or boarders)	4.2	4.2	4.1
Household receiving any of the following benefits ^c (%):			
Unemployment/Dislocated Worker benefits	3.2	4.4	1.9 **
Supplemental Security Income (SSI) or disability	7.6	6.5	8.6
Cash assistance or welfare (TANF)	3.2	3.3	3.1
Food stamps	3.9	3.5	4.3
None of the above	86.7	86.7	86.6
Household in public or Section 8 housing (%)	1.9	2.0	1.8
Household receiving any government benefits (%)	13.6	13.6	13.6

(continued)

Appendix Table A.1 (continued)

Characteristic	Full Sample	Program Group	Control Group
Financially dependent on parents (%)	51.5	48.8	54.3 *
Ever employed (%)	91.0	92.1	89.8
Currently employed (%)	68.1	70.7	65.4 *
Highest grade completed (%)			
8th or lower	0.0	0.0	0.0
9th	0.5	0.5	0.5
10th	0.7	0.9	0.5
11th	1.4	1.1	1.6
12th	97.5	97.5	97.5
Diplomas/degrees earned ^d (%)			
High school diploma	95.2	95.7	94.6
General Educational Development (GED) certificate	3.1	2.5	3.8
Occupational/technical certificate	5.1	5.6	4.5
Date of high school graduation/GED certificate receipt (%)			
During the past year	20.7	19.8	21.6
Between 1 and 5 years ago	63.0	61.9	64.2
More than 5 years ago	16.3	18.4	14.2 *
Main reason for enrolling in college ^d (%)			
To complete a certificate program	5.1	5.4	4.8
To obtain an associate's degree	22.2	20.7	23.8
To transfer to a 4-year college/university	64.9	67.3	62.4
To obtain/update job skills	3.0	2.9	3.2
Other	4.7	3.6	5.9
Completed any college courses/credits (%)	90.5	90.1	90.9
<i>Among those who completed any college courses/credits, average number of courses completed</i>	<i>6.6</i>	<i>7.0</i>	<i>6.3</i>
First person in family to attend college (%)	33.5	35.6	31.4
Working personal computer in home (%)	88.0	88.7	87.3
Owns or has access to a working car (%)	88.0	90.7	85.3 **
Language other than English spoken regularly in home (%)	34.9	35.0	34.8
U.S. citizen (%)	92.7	92.4	93.0
Respondent born outside U.S. ^e (%)	12.8	14.4	11.2
Respondent or respondent's parent(s) born outside U.S. ^e (%)	47.8	47.6	48.1

(continued)

Appendix Table A.1 (continued)

Characteristic	Full Sample	Program Group	Control Group
Respondent's birthplace (%)			
North America	87.4	86.1	88.8
Asia	2.9	3.9	1.8 *
Latin America and the Caribbean	8.5	8.7	8.2
Other ^f	1.3	1.4	1.1
Respondent's mother's birthplace ^g (%)			
North America	60.5	60.4	60.7
Asia	6.7	7.3	6.2
Latin America and the Caribbean	31.4	30.5	32.2
Other ^f	1.4	1.8	0.9
Sample size	898	448	450

SOURCE: MDRC calculations using Baseline Information Form (BIF) data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

Italics indicate nonexperimental data. Significance tests are not calculated for nonexperimental data.

TANF = Temporary Assistance for Needy Families.

^aRespondents who indicated that they are Hispanic and who chose a race are included only in the Hispanic/Latino category.

^b“Other” race includes American Indians/Alaskan Natives and those who marked “other race” or more than one racial category.

^cBenefits include Unemployment/Dislocated Worker benefits, Supplemental Security Income (SSI) or disability, cash assistance or welfare, food stamps, and Section 8 or public housing.

^dDistributions may not add to 100 percent because categories are not mutually exclusive.

^e“U.S.” includes Puerto Rico.

^fThis category includes the Baltics, the Commonwealth of Independent States, eastern and western Europe, North Africa, Sub-Saharan Africa, the Near East, and Oceania. The Commonwealth of Independent States includes Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Republic of Moldova, Russia, Tajikistan, Turkmenistan (until August 2005), Ukraine, and Uzbekistan. Countries are grouped by region according to the U.S. Bureau of the Census, International Data Base.

^gThe majority of respondents reported that both parents were born in the same region as each other.

The Opening Doors Demonstration
Appendix Table A.2
Selected Characteristics of Sample Members at Baseline:
Enhanced Opening Doors Program
Chaffey College Report

Characteristic	Full Sample	Program Group	Control Group
Gender (%)			
Male	38.3	38.8	37.7
Female	61.7	61.2	62.3
Age in years (%)			
18-20	60.6	60.7	60.5
21-25	29.5	29.5	29.5
26-30	5.6	5.4	5.9
31-34	4.3	4.5	4.1
Average age in years	21.1	21.0	21.1
Marital status (%)			
Married	5.8	5.8	5.7
Unmarried	94.2	94.2	94.3
Race/ethnicity (%)			
Hispanic/Latino ^a	54.2	54.3	54.1
Black, non-Hispanic	12.2	13.5	11.0
White, non-Hispanic	21.8	19.2	24.4
Asian or Pacific Islander	6.0	7.2	4.8
Other ^b	5.8	5.8	5.7
One child or more in household (%)	10.8	8.7	12.9
<i>Among sample members with children, average age of youngest child in years</i>	2.9	2.4	3.2
Average household size (excluding roommates or boarders)	4.2	4.3	4.1
Household receiving any of the following benefits ^c (%):			
Unemployment/Dislocated Worker benefits	3.8	2.5	5.0
Supplemental Security Income (SSI) or disability	5.3	5.1	5.5
Cash assistance or welfare (TANF)	3.0	1.5	4.5 *
Food stamps	4.3	3.6	5.0
None of the above	87.7	90.9	84.6 *
Household in public or Section 8 housing (%)	1.6	1.1	2.1
Household receiving any government benefits (%)	12.1	8.7	15.4 **

(continued)

Appendix Table A.2 (continued)

Characteristic	Full Sample	Program Group	Control Group
Financially dependent on parents (%)	51.3	52.7	50.0
Ever employed (%)	92.6	94.2	90.9
Currently employed (%)	74.6	74.5	74.6
Highest grade completed (%)			
8th or lower	0.2	0.5	0.0
9th	0.0	0.0	0.0
10th	1.2	0.5	2.0
11th	2.0	2.0	2.0
12th	96.6	97.0	96.1
Diplomas/degrees earned ^d (%)			
High school diploma	95.7	95.7	95.7
General Educational Development (GED) certificate	3.6	2.9	4.3
Occupational/technical certificate	6.3	6.8	5.8
Date of high school graduation/GED certificate receipt (%)			
During the past year	32.2	31.3	33.0
Between 1 and 5 years ago	50.9	51.7	50.0
More than 5 years ago	17.0	16.9	17.0
Main reason for enrolling in college ^d (%)			
To complete a certificate program	5.8	5.8	5.8
To obtain an associate's degree	24.8	23.8	25.7
To transfer to a 4-year college/university	62.9	64.6	61.2
To obtain/update job skills	2.7	2.9	2.4
Other	3.9	2.9	4.9
Completed any college courses/credits (%)	85.7	83.9	87.5
<i>Among those who completed any college courses/credits, average number of courses completed</i>	<i>6.1</i>	<i>5.4</i>	<i>6.8</i>
First person in family to attend college (%)	30.8	31.1	30.4
Working personal computer in home (%)	90.3	91.7	89.0
Owns or has access to a working car (%)	88.9	89.3	88.5
Language other than English spoken regularly in home (%)	35.6	37.7	33.5
U.S. citizen (%)	93.0	95.2	90.9 *
Respondent born outside U.S. ^e (%)	11.0	11.2	10.9
Respondent or respondent's parent(s) born outside U.S. ^e (%)	50.3	53.0	47.5

(continued)

Appendix Table A.2 (continued)

Characteristic	Full Sample	Program Group	Control Group
Respondent's birthplace (%)			
North America	89.2	88.8	89.6
Asia	2.7	2.4	3.0
Latin America and the Caribbean	6.9	8.3	5.5
Other ^f	1.2	0.5	2.0
Respondent's mother's birthplace ^g (%)			
North America	58.0	54.5	61.4
Asia	7.0	7.5	6.4
Latin America and the Caribbean	32.1	35.5	28.7
Other ^f	3.0	2.5	3.5
Sample size	444	224	220

SOURCE: MDRC calculations using Baseline Information Form (BIF) data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

Italics indicate nonexperimental data. Significance tests are not calculated for nonexperimental data.

TANF = Temporary Assistance for Needy Families.

^aRespondents who indicated that they are Hispanic and who chose a race are included only in the Hispanic/Latino category.

^b“Other” race includes American Indians/Alaskan Natives and those who marked “other race” or more than one racial category.

^cBenefits include Unemployment/Dislocated Worker benefits, Supplemental Security Income (SSI) or disability, cash assistance or welfare, food stamps, and Section 8 or public housing.

^dDistributions may not add to 100 percent because categories are not mutually exclusive.

^e“U.S.” includes Puerto Rico.

^fThis category includes the Baltics, the Commonwealth of Independent States, eastern and western Europe, North Africa, Sub-Saharan Africa, the Near East, and Oceania. The Commonwealth of Independent States includes Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Republic of Moldova, Russia, Tajikistan, Turkmenistan (until August 2005), Ukraine, and Uzbekistan. Countries are grouped by region according to the U.S. Bureau of the Census, International Data Base.

^gThe majority of respondents reported that both parents were born in the same region as each other.

Appendix B
Survey Response Analysis

This appendix discusses the final research sample for the study's 12-month survey at Chaffey College, provides the survey response rate, and evaluates the potential for selection bias in survey response.

Survey Sample and Survey Response Rate

The Opening Doors 12-Month Survey asked questions about a wide range of topics, including sample members' educational experiences, social relationships and supports, future outlook and identity, and health. The survey was fielded (that is, targeted) for Chaffey to only those students in the original Opening Doors sample, which includes 898 students randomly assigned for the fall 2005 semester. The Enhanced Opening Doors research sample was studied in a more limited way and was not included in the survey. Sample members who were ineligible, incarcerated, or incapacitated at the time the survey was fielded were excluded from the final survey sample. Sample members were considered ineligible if they lived 50 miles beyond where the field interviewers were located and did not have a phone. Sample members were classified as incapacitated if they were in the military and deployed outside the United States, had moved outside the United States, or were seriously injured in an accident and unable to be interviewed during the interview period. Because of these restrictions, 8 of the 898 sample members (less than 1 percent) in the Opening Doors sample were excluded, bringing the final total of those who were targeted to take the 12-month survey to 890 sample members.

Of the 890 surveys that were fielded, 617 sample members (69.3 percent) responded. However, six sample members (less than 1 percent of the respondents) were dropped from the research sample because their interviews were conducted past the interview cut-off date. Many of the questions asked specifically about the respondent's life during the previous 12 months, and respondents interviewed more than 18 months after random assignment referred to periods that did not correspond to the time period of interest. Those exclusions left a final research sample of 611 sample members. This yields a final response rate of 68.0 percent at Chaffey.

Assessment of Selective Survey Response

Background Characteristics

As shown in Appendix Table B.1, survey respondents and nonrespondents did not, in general, differ significantly on baseline characteristics. However, as is to be expected, there are some exceptions. For example, the table indicates that 66.0 percent of respondents were currently employed at the time of random assignment, compared with 73.2 percent of nonrespondents. The asterisks in the right-hand column indicate that this difference is statistically significant, suggesting that respondents and nonrespondents do differ with respect to

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Appendix Table B.1

**Selected Characteristics of 12-Month Survey Respondents and Nonrespondents:
Opening Doors Program**

Chaffey College Report

Characteristic (%)	Full Sample	Respondents	Non- respondents
Gender			
Male	40.2	40.3	40.2
Female	59.8	59.7	59.8
Age in years			
18-20	58.4	59.8	55.5
21-25	31.7	30.1	35.2
26-30	6.9	6.9	6.8
31-34	3.0	3.3	2.5
Marital status			
Married	7.0	7.2	6.6
Unmarried	93.0	92.8	93.4
Race/ethnicity ^a			
Hispanic/Latino	52.7	54.5	48.7
Black, non-Hispanic	14.5	15.2	13.2
White, non-Hispanic	23.0	21.6	26.0
Asian or Pacific Islander	5.7	5.1	7.0
Other ^b	4.1	3.6	5.2
Household receiving any government benefits ^c	13.6	14.8	11.0
Financially dependent on parents	51.7	52.8	49.1
Ever employed	91.1	91.1	91.1
Currently employed	68.2	66.0	73.2 **
Diplomas/degrees earned ^d			
High school diploma	95.2	94.6	96.7
General Educational Development (GED) certificate	3.1	3.8	1.5 *
Occupational/technical certificate	5.1	5.4	4.4
Date of high school graduation/GED certificate receipt			
During the past year	20.6	20.5	21.1
Between 1 and 5 years ago	63.1	63.8	61.7
More than 5 years ago	16.2	15.8	17.3
Main reason for enrolling in college ^d			
To complete a certificate program	5.1	4.3	7.0 *
To obtain an associate's degree	22.4	22.1	23.1
To transfer to a 4-year college/university	64.7	66.5	60.7
To obtain/update job skills	3.1	2.5	4.4
Other	4.7	4.6	4.8

(continued)

Appendix Table B.1 (continued)

Characteristic (%)	Full Sample	Respondents	Non-respondents
Language other than English spoken regularly in home	35.1	34.5	36.4
U.S. citizen	92.7	93.6	90.8
Respondent born outside U.S. ^e	12.8	11.5	15.6
Respondent or respondent's parent(s) born outside U.S. ^e	47.8	48.5	46.2
Respondent's birthplace			
North America	87.4	88.5	85.1
Asia	2.9	2.4	4.1
Latin America and the Caribbean	8.4	7.9	9.7
Other ^f	1.3	1.3	1.1
Respondent's mother's birthplace ^g			
North America	60.5	59.8	61.9
Asia	6.7	5.6	9.0 *
Latin America and the Caribbean	31.4	32.8	28.4
Other ^f	1.4	1.5	1.1
Sample size	890	611	279

SOURCE: MDRC calculations using Baseline Information Form (BIF) data.

NOTES: A two-tailed t-test was applied to differences between the groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

The Opening Doors 12-Month Survey was administered to the Opening Doors sample members, but not to the Enhanced Opening Doors sample members.

Eight of the 898 sample members (less than 1 percent) in the Opening Doors sample were excluded from the final survey sample because they were ineligible, incarcerated, or incapacitated at the time of the survey fielding, bringing the survey sample size to 890.

To analyze whether baseline characteristics and research group status predicted survey response, a joint likelihood ratio test was performed, which yielded a p-value of 0.16. This test result suggests that no overall joint differences in observable characteristics were detected between survey respondents and nonrespondents.

Estimates are adjusted by round of random assignment and research group.

Missing values are not included in individual variable distributions.

Distributions may not add to 100 percent because of rounding.

^aRespondents who indicated that they are Hispanic are included only in the Hispanic/Latino category.

^b“Other” race includes American Indians/Alaskan Natives and those who marked “other race” or more than one racial category.

^cBenefits include Unemployment/Dislocated Worker benefits, Supplemental Security Income (SSI) or disability, cash assistance or welfare, food stamps, and Section 8 or public housing.

^dDistributions may not add to 100 percent because categories are not mutually exclusive.

^e“U.S.” includes Puerto Rico.

^fThis category includes the Baltics, the Commonwealth of Independent States, eastern and western Europe, North Africa, Sub-Saharan Africa, the Near East, and Oceania. The Commonwealth of Independent States includes Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Republic of Moldova, Russia, Tajikistan, Turkmenistan (until August 2005), Ukraine, and Uzbekistan. Countries are grouped by region according to the U.S. Bureau of the Census, International Data Base.

^gThe majority of respondents (over 80 percent) reported that both parents were born in the same region.

their employment rates at random assignment. The table also indicates that survey respondents were more likely than nonrespondents to have received a General Education Development certificate at baseline. Respondents were less likely than nonrespondents to report that their main reason for enrolling in college was to complete a certificate program and to have mothers who were born in Asia. To analyze whether the baseline characteristics jointly predicted whether someone would respond to the survey, a joint likelihood ratio test was performed (controlling for research group status), which yielded a p-value of 0.16.¹ This finding suggests that no overall differences in observable characteristics were detected between survey respondents and nonrespondents at the 10 percent level — that is, there is less than a 10 percent chance that any real differences exist. These analyses provide evidence that the survey respondents and nonrespondents do not differ systematically, suggesting that generalizing impacts from the survey respondents to the study participants as a whole may be reasonable.

Appendix Table B.2 compares the baseline characteristics of the program group survey respondents with the control group survey respondents to assess whether respondents with certain baseline characteristics were more concentrated in one research group than another. The table shows that there are a few statistically significant differences between the research groups in these observable characteristics. In addition, a joint likelihood ratio test was performed, yielding a p-value of 0.48, which indicates that no overall differences in observable characteristics were detected between program and control group survey respondents at the 10 percent level.

Academic Records

Appendix Table B.3 compares the program impacts on registration for the four semester follow-up period between survey respondents and nonrespondents. The columns “Respondent Impacts” and “Nonrespondent Impacts” report the differences between the program and control groups in each case, none of which are statistically significant. (For example, as shown in the first row of the table, the difference between the percentage of program and control group members among survey respondents who registered for any courses during the first semester was 2.8 percentage points.) The “Difference (Impact)” column is the difference between the impacts for respondents and nonrespondents. The lack of asterisks indicates that there were no statistically significant differences between the impacts on registration for respondents and nonrespondents for any of the semesters. To analyze whether survey response predicted registration over the four study semesters, a multivariate F-test was performed (controlling for research group status), which yielded a p-value of 0.65. This finding suggests that there are no statistically significant differences in registration at a 10 percent level between the respondents and non-

¹The p-value is the probability that a result is at least as extreme as the one that was observed if the null hypothesis is true (that the outcomes being compared are not different).

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Appendix Table B.2

**Selected Characteristics of 12-Month Survey Respondents, by Research Group:
Opening Doors Program**

Chaffey College Report

Characteristic (%)	Full Sample	Program Group	Control Group
Gender			
Male	40.3	39.6	40.9
Female	59.7	60.4	59.1
Age in years			
18-20	59.7	58.3	61.2
21-25	30.1	29.9	30.3
26-30	6.9	8.2	5.6
31-34	3.3	3.6	2.9
Marital status			
Married	7.2	8.4	6.0
Unmarried	92.8	91.6	94.0
Race/ethnicity ^a			
Hispanic/Latino	54.5	54.0	55.1
Black, non-Hispanic	15.2	15.9	14.4
White, non-Hispanic	21.6	22.2	20.9
Asian or Pacific Islander	5.1	5.3	4.9
Other ^b	3.6	2.6	4.6
Household receiving any government benefits ^c	14.8	13.8	15.8
Financially dependent on parents	52.8	49.0	56.6 *
Ever employed	91.1	92.0	90.1
Currently employed	66.0	68.7	63.2
Diplomas/degrees earned ^d			
High school diploma	94.6	95.4	93.8
General Educational Development (GED) certificate	3.8	3.3	4.3
Occupational/technical certificate	5.4	5.9	4.9
Date of high school graduation/GED certificate receipt			
During the past year	20.4	18.0	22.9
Between 1 and 5 years ago	63.8	64.2	63.5
More than 5 years ago	15.7	17.8	13.6
Main reason for enrolling in college ^d			
To complete a certificate program	4.3	5.0	3.6
To obtain an associate's degree	22.1	18.3	26.0 **
To transfer to a 4-year college/university	66.4	71.1	61.9 **
To obtain/update job skills	2.5	2.0	3.0
Other	4.6	3.7	5.6

(continued)

Appendix Table B.2 (continued)

Characteristic (%)	Full Sample	Program Group	Control Group
Language other than English spoken regularly in home	34.5	34.2	34.9
U.S. citizen	93.6	92.7	94.4
Respondent born outside U.S. ^e	11.5	12.8	10.3
Respondent or respondent's parent(s) born outside U.S. ^e	48.5	46.2	50.9
Respondent's birthplace			
North America	88.5	87.2	89.7
Asia	2.3	2.4	2.3
Latin America and the Caribbean	7.8	8.8	7.0
Other ^f	1.3	1.7	1.0
Respondent's mother's birthplace ^g			
North America	59.8	59.8	59.9
Asia	5.6	5.7	5.6
Latin America and the Caribbean	32.8	32.2	33.4
Other ^f	1.5	2.0	1.1
Sample size	611	303	308

SOURCE: MDRC calculations using Baseline Information Form (BIF) data.

NOTES: A two-tailed t-test was applied to differences between the groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

The Opening Doors 12-Month Survey was administered to the Opening Doors sample members, but not to the Enhanced Opening Doors sample members.

To analyze whether baseline characteristics predicted research group, a joint likelihood ratio test was performed, which yielded a p-value of 0.48. This test result suggests that no overall joint differences in observable characteristics were detected between survey respondents and nonrespondents.

Estimates are adjusted by round of random assignment.

Missing values are not included in individual variable distributions.

Distributions may not add to 100 percent because of rounding.

^aRespondents who indicated that they are Hispanic and also chose a race are included only in the Hispanic/Latino category.

^b“Other” race includes American Indians/Alaskan Natives and those who marked more than one racial category.

^cBenefits include Unemployment/Dislocated Worker benefits, Supplemental Security Income (SSI) or disability, cash assistance or welfare, food stamps, and Section 8 or public housing.

^dDistributions may not add to 100 percent because categories are not mutually exclusive.

^e“U.S.” includes Puerto Rico.

^fThis category includes the Baltics, the Commonwealth of Independent States, eastern and western Europe, North Africa, Sub-Saharan Africa, the Near East, and Oceania. The Commonwealth of Independent States includes Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Republic of Moldova, Russia, Tajikistan, Turkmenistan (until August 2005), Ukraine, and Uzbekistan. Countries are grouped by region according to the U.S. Bureau of the Census, International Data Base.

^gThe majority of respondents (over 80 percent) reported that both parents were born in the same region.

The Opening Doors Demonstration

Appendix Table B.3

Impacts on Registration, by Survey Respondents and Nonrespondents: Opening Doors Program

Chaffey College Report

Outcome (%)	Full Sample Average	Respondents' Impacts	Nonrespondents' Impacts	Difference (Impact)
Registered for any courses				
During first semester	78.3	2.8	-4.4	7.2
During second semester	62.9	3.4	-6.2	9.6
During third semester	46.6	3.4	-3.5	6.8
During fourth semester	38.3	0.3	-4.0	4.3
Sample size	890	611	279	

SOURCE: MDRC calculations from Chaffey College transcript data.

NOTES: A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

The Opening Doors 12-Month Survey was administered to the Opening Doors sample members, but not to the Enhanced Opening Doors sample members.

Eight of the 898 sample members (less than 1 percent) in the Opening Doors sample were excluded from the final survey sample because they were ineligible, incarcerated, or incapacitated at the time of the survey fielding, bringing the survey sample size to 890.

A separate multivariate test was conducted to determine whether the interaction of the research group status and whether a student responded to the survey predicted registration (controlling for round of random assignment and its interaction with whether a student responded to the survey). This multivariate test yielded a p-value of 0.65 for the interaction of research group status and whether a student responded to the survey. This test result suggests that no differences were detected in the program's impact on registration for survey respondents compared with the program's impact on registration for nonrespondents.

Estimates are adjusted by round of random assignment.

respondents of the survey. In other words, the chance that differences do exist is 10 percent or less, suggesting that there is no selection bias affecting the registration findings.

Conclusion

Survey responses were collected from 68 percent of the full research sample at Chaffey College, a response rate that is suitable for a student population that traditionally is mobile and difficult to track. While the tables in this appendix indicate some sources of potential bias, additional analyses conclude that no statistically significant systematic differences exist between either respondents and nonrespondents or the program group and the control group (among survey respondents). Thus, the educational, social, and health outcomes drawn from the 12-month survey should be considered reliable for the Opening Doors sample at Chaffey College.

Appendix C

Description of Scales Presented in Chapter 3

The following multi-item scale measures are presented in Chapter 3 and were created using data from the Opening Doors 12-Month Survey. Multi-item scales are useful for measuring complex constructs, such as those outlined below, because such constructs cannot be assessed easily with a single-item measure. All except one of these scale measures were created using questions that are included in the 2004 version of the Community College Survey of Student Engagement (CCSSE), a widely used assessment of student engagement.¹ The one exception is the “integration and sense of belonging at school” scale, which was created from survey questions developed for the Opening Doors demonstration. For each of these scales, a summary scale score is calculated and then divided by the number of items that make up the scale, to create an average scale score. Finally, Cronbach’s alpha, an indicator of how well the items included in the scale measure a common underlying construct,² is presented for each scale.

Classroom and College Experiences

Integration and Sense of Belonging at School (10-item scale; Cronbach’s alpha = 0.80)

1. This is an unfriendly place. [responses were reversed in order to calculate the scale score]
2. I do not feel that I fit in or belong at this campus. [responses were reversed]
3. The instructors and staff understand who I am, where I am coming from.
4. It is difficult to make good friends with other students. [responses were reversed]
5. The other students do not understand who I am, where I am coming from. [responses were reversed]
6. This campus has the feeling of a community, where many people share the same goals and interests.
7. Many people on this campus know me by name.
8. I do not feel I am a part of campus life. [responses were reversed]
9. I know my way around this place.
10. I am proud to be a student here.

Response categories: Strongly disagree (1)
 Disagree (2)
 Agree (3)
 Strongly agree (4)

Responses were summed and averaged. Scores range from 1 to 4.

¹For more information, see the CCSSE Web site, www.ccsse.org.

²Cronbach (1951).

Participation and Engagement (15-item scale; Cronbach's alpha = 0.83)

1. Asked questions in class or contributed to class discussions.
2. Made a class presentation.
3. Prepared two or more drafts of a paper or assignment before turning it in.
4. Worked on a paper or project that required integrating ideas or information from different classes.
5. Worked with other students on a project during class.
6. Worked with classmates outside of class to prepare class assignments.
7. Participated in a community-based project as part of a regular course.
8. Used a listserv, chat group, Internet, etc. to discuss or complete an assignment.
9. Used e-mail to communicate with an instructor.
10. Discussed grades or assignments with an instructor.
11. Talked about career plans with an instructor or adviser.
12. Discussed ideas from your readings or classes with instructors outside of class.
13. Worked harder than you thought you could to meet an instructor's standards or expectations.
14. Worked with instructors on activities other than coursework.
15. Discussed ideas from your readings or classes with others outside of class (students, family members, co-workers, etc.).

Response categories: Very much (1)
 Quite a bit (2)
 Some (3)
 Very little (4)

Responses were summed and averaged. Scores range from 1 to 4.

Using Knowledge (Critical Thinking Curriculum) (6-item scale; Cronbach's alpha = 0.79)

1. Analyzing the basic elements of an idea, experience, or theory.
2. Synthesizing and organizing ideas, information, or experiences in new ways.
3. Making judgments about the value or soundness of information, arguments, or methods.
4. Applying theories or concepts to practical problems or in new situations.
5. Using information you have read or heard to perform a new skill.
6. Integrating ideas, information, or skills from different classes.

Response categories: Never (1)
Sometimes (2)
Often (3)
Very often (4)

Responses were summed and averaged. Scores range from 1 to 4.

Acquired Academic and Work Skills (16-item scale; Cronbach's alpha = 0.92)

1. Acquiring a broad general education.
2. Acquiring job- or work-related knowledge and skills.
3. Writing clearly and effectively.
4. Speaking clearly and effectively.
5. Thinking critically and analytically.
6. Solving numerical problems.
7. Using computing and information technology.
8. Working effectively with others.
9. Learning effectively on your own.
10. Understanding yourself.
11. Understanding people of other racial and ethnic backgrounds.
12. Developing a personal code of values and ethics.
13. Contributing to the welfare of your community.
14. Developing clearer career goals.
15. Gaining information about career opportunities.
16. Developing a sense of confidence in your academic abilities.

Response categories: Never (1)
Sometimes (2)
Often (3)
Very often (4)

Responses were summed and averaged. Scores range from 1 to 4.

Appendix D

Supplementary Tables for Chapter 4

The Opening Doors Demonstration

Appendix Table D.1

Transcript Outcomes, First Through Third Postprogram Semesters:
Opening Doors Program

Chaffey College Report

Outcome	Program Group	Control Group	Difference (Impact)	Standard Error
<u>First postprogram semester</u>				
Registered for any courses (%)	62.7	62.5	0.3	3.2
Number of courses attempted	1.9	1.9	-0.1	0.1
Number of credits attempted	5.6	5.9	-0.3	0.4
Regular credits	5.3	5.6	-0.3	0.4
Non-degree credits ^a	0.3	0.3	0.0	0.1
Passed all courses (%)	19.0	19.8	-0.8	2.6
Number of courses passed	1.1	1.1	0.0	0.1
Withdraw from any courses (%)	27.7	27.3	0.3	3.0
Number of course withdrawals	0.4	0.5	-0.1	0.1
Number of credits earned	3.1	3.1	0.0	0.3
Regular credits	2.9	2.9	0.0	0.3
Non-degree credits ^a	0.2	0.1	0.0	0.1
Term GPA ^b (%)				
No GPA ^c	43.5	45.3	-1.8	3.3
0-1.9	31.7	28.7	3.0	3.1
2.0 or higher	24.8	26.0	-1.3	2.9
Degree-applicable term GPA ^d (%)				
No GPA ^c	44.2	46.4	-2.2	3.3
0-1.9	31.3	27.1	4.2	3.0
2.0 or higher	24.5	26.5	-1.9	2.9
<u>Second postprogram semester</u>				
Registered for any courses (%)	46.8	45.8	1.0	3.3
Number of courses attempted	1.3	1.4	0.0	0.1
Number of credits attempted	4.1	4.1	0.0	0.3
Regular credits	3.8	4.0	-0.1	0.3
Non-degree credits ^a	0.3	0.1	0.1 *	0.1
Passed all courses (%)	16.3	17.8	-1.5	2.5
Number of courses passed	0.8	0.8	-0.1	0.1
Withdraw from any courses (%)	18.7	17.1	1.6	2.6

(continued)

Appendix Table D.1 (continued)

Outcome	Program Group	Control Group	Difference (Impact)	Standard Error
Number of course withdrawals	0.3	0.3	0.0	0.0
Number of credits earned	2.3	2.5	-0.2	0.3
Regular credits	2.1	2.4	-0.3	0.3
Non-degree credits ^a	0.2	0.1	0.1 *	0.0
Term GPA ^b (%)				
No GPA ^c	57.8	58.6	-0.8	3.3
0-1.9	24.3	19.8	4.5	2.8
2.0 or higher	17.8	21.6	-3.7	2.7
Degree-applicable term GPA ^d (%)				
No GPA ^c	60.5	58.9	1.7	3.3
0-1.9	23.9	19.8	4.1	2.8
2.0 or higher	15.6	21.3	-5.7 **	2.6
<u>Third postprogram semester</u>				
Registered for any courses (%)	37.7	38.5	-0.8	3.2
Number of courses attempted	1.1	1.1	0.0	0.1
Number of credits attempted	3.3	3.2	0.1	0.3
Regular credits	3.2	3.1	0.1	0.3
Non-degree credits ^a	0.2	0.2	0.0	0.1
Passed all courses (%)	12.9	13.8	-0.8	2.3
Number of courses passed	0.6	0.6	0.0	0.1
Withdrew from any courses (%)	15.2	16.0	-0.8	2.4
Number of course withdrawals	0.2	0.2	0.0	0.0
Number of credits earned	1.9	1.9	0.0	0.2
Regular credits	1.8	1.8	0.0	0.2
Non-degree credits ^a	0.1	0.1	0.0	0.0
Term GPA ^b (%)				
No GPA ^c	66.8	67.8	-1.0	3.1
0-1.9	18.1	16.9	1.2	2.5
2.0 or higher	15.2	15.3	-0.2	2.4
Degree-applicable term GPA ^d (%)				
No GPA ^c	67.0	68.4	-1.4	3.1
0-1.9	18.1	16.5	1.6	2.5
2.0 or higher	14.9	15.1	-0.2	2.4
Sample size (total = 898)	448	450		

(continued)

Appendix Table D.1 (continued)

SOURCE: MDRC calculations from Chaffey College transcript data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as:*** = 1 percent; ** = 5 percent; * = 10 percent.

Estimates are adjusted by round of random assignment.

GPA = grade point average.

^aNon-degree credits include developmental credits and credits for the College Success courses and other college preparatory courses.

^bGrades earned in all courses except for developmental courses are used in the calculation of term GPA.

^cThe “No GPA” category includes students who did not enroll and students who took only developmental courses, which are not included in GPA calculations.

^dGrades earned only in degree-applicable courses, which excludes the College Success course and other non degree-applicable courses, are used in this calculation of GPA.

^eThe “No GPA” category includes students who did not enroll and students who took only non-degree-applicable courses, which are not included in degree-applicable GPA calculations.

The Opening Doors Demonstration

Appendix Table D.2

Enrollment at Chaffey College and Other Institutions, Program Semester
Through Third Postprogram Semester:
Opening Doors Program
Chaffey College Report

Outcome	Program Group	Control Group	Difference (Impact)	Standard Error
<u>Program semester</u> (%)				
Enrolled in any college	81.7	81.3	0.4	2.6
Enrolled in any 2-year college	81.5	81.1	0.4	2.6
Enrolled in any 4-year college	0.7	0.2	0.4	0.4
<u>First postprogram semester</u> (%)				
Enrolled in any college	67.0	67.6	-0.6	3.1
Enrolled in any 2-year college	66.3	66.9	-0.6	3.2
Enrolled in any 4-year college	1.3	0.7	0.7	0.7
<u>Second postprogram semester</u> (%)				
Enrolled in any college	56.2	55.6	0.6	3.3
Enrolled in any 2-year college	54.9	53.4	1.5	3.3
Enrolled in any 4-year college	2.0	2.2	-0.2	1.0
<u>Third postprogram semester</u> (%)				
Enrolled in any college	47.3	52.0	-4.7	3.3
Enrolled in any 2-year college	45.5	48.9	-3.4	3.3
Enrolled in any 4-year college	2.0	3.8	-1.8	1.1
<u>Summary outcomes</u> ^a				
Enrolled in any college (%)	89.7	90.0	-0.3	2.0
Enrolled in any 2-year college (%)	89.5	89.5	0.0	2.0
Enrolled in any 4-year college (%)	3.6	3.8	-0.2	1.3
Number of semesters enrolled in any college	2.8	2.8	0.0	0.1
Sample size (total = 898)	448	450		

(continued)

Appendix Table D.2 (continued)

SOURCES: MDRC calculations using the StudentTracker service from the National Student Clearinghouse data and Chaffey College transcript data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between the research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

Estimates are adjusted by round of random assignment.

The National Student Clearinghouse collects enrollment data on about 90 percent of students at higher education institutions. Student have the right to opt out of having their information sent. Over 40 percent of the sample opted out. In these cases, data were supplemented with information from Chaffey College transcript data.

Missing values are not included in individual variable distributions.

^aSummary outcomes use data from the fall 2005, spring 2006, summer 2006, fall 2006, and spring 2007 semesters.

The Opening Doors Demonstration

Appendix Table D.3

Program Participation, by Gender:
Opening Doors Program
Chaffey College Report

Outcome	Male Subgroup			Female Subgroup			Difference Between Subgroups
	Program Group	Control Group	Standard Error	Program Group	Control Group	Standard Error	
Registered for any courses (%)	82.7	76.2	6.5	75.4	78.8	3.6	†
College Success Course I (%)							
Registered for College Success lecture	56.1	0.5	55.5 ***	49.1	3.8	45.4 ***	††
Registered for College Success workshop	56.1	0.5	55.5 ***	49.1	3.4	45.7 ***	††
Success Centers							
Ever visited (%)	58.4	37.5	20.9 ***	56.8	46.7	10.2 **	
Total number of visits	6.9	3.9	3.0 **	7.6	4.5	3.2 ***	
0 (%)	41.6	62.5	-20.9 ***	43.2	53.3	-10.2 **	
1-8 (%)	34.1	24.9	9.2 *	29.1	28.4	0.7	
9 or more (%)	24.3	12.6	11.7 ***	27.7	18.3	9.4 ***	
Total hours spent	7.4	4.8	2.6	8.9	5.8	3.1 **	
Sample size (total = 898)	173	189		275	261		

SOURCES: MDRC calculations from Chaffey College transcript and Success Center participation data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

A two-tailed t-test was applied to differences of impacts between subgroups. Statistical significance levels are indicated as: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Estimates are adjusted by round of random assignment.

The Opening Doors Demonstration
Appendix Table D.4
Transcript Outcomes, by Gender, Program Semester:
Opening Doors Program

Chaffey College Report

Outcome	Male Subgroup				Female Subgroup				Difference Between Subgroups
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group	Difference (Impact)	Standard Error	
Registered for any courses (%)	82.7	76.2	6.5	4.3	75.4	78.8	-3.5	3.6	†
Number of courses attempted	3.4	2.5	0.9 ***	0.2	2.9	2.6	0.3 *	0.2	††
Number of credits attempted	8.8	7.5	1.3 **	0.6	7.4	7.8	-0.3	0.4	††
Regular credits	6.7	7.1	-0.4	0.5	5.4	7.1	-1.7 ***	0.4	††
Non-degree credits ^a	2.0	0.4	1.6 ***	0.2	2.0	0.6	1.3 ***	0.2	††
Passed all courses (%)	24.9	27.5	-2.6	4.6	28.3	22.7	5.6	3.8	
Number of courses passed	2.0	1.6	0.4 **	0.2	1.8	1.4	0.4 ***	0.2	
Withdrawn from any courses (%)	36.4	25.5	10.9 **	4.8	28.7	32.6	-3.8	4.0	††
Number of course withdrawals	0.6	0.4	0.3 ***	0.1	0.5	0.5	-0.1	0.1	†††
Number of credits earned	4.8	4.4	0.4	0.5	4.4	3.9	0.5	0.4	
Regular credits	3.6	4.2	-0.6	0.5	2.9	3.6	-0.7 **	0.3	
Non-degree credits ^a	1.2	0.2	0.9 ***	0.2	1.4	0.3	1.1 ***	0.1	
Term GPA ^b (%)									
No GPA ^c	23.1	27.6	-4.5	4.6	30.1	27.7	2.4	3.9	
0-1.9	41.6	38.1	3.4	5.2	37.3	45.4	-8.1 *	4.2	†
2.0 or higher	35.4	34.3	1.0	5.0	32.6	27.0	5.6	3.9	

(continued)

Appendix Table D.4 (continued)

Outcome	Male Subgroup			Female Subgroup			Difference Between Subgroups	
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group		Difference (Impact)
Degree-applicable term GPA ^d (%)								
No GPA ^e	27.1	28.6	-1.5	4.7	36.3	28.1	8.2 **	4.0
0-1.9	40.4	38.1	2.3	5.2	36.6	45.4	-8.8 **	4.2
2.0 or higher	32.5	33.3	-0.8	4.9	27.2	26.5	0.6	3.8
Sample size (total = 898)	173	189			275	261		

SOURCE: MDRC calculations from Chaffey College transcript data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

A two-tailed t-test was applied to differences of impacts between subgroups. Statistical significance levels are indicated as: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Estimates are adjusted by round of random assignment.

GPA = grade point average.

^aNon-degree credits include developmental credits and credits for the College Success courses and other college preparatory courses.

^bGrades earned in all courses except for developmental courses are used in the calculation of term GPA.

^cThe “No GPA” category includes students who did not enroll and students who took only developmental courses, which are not included in GPA calculations.

^dGrades earned only in degree-applicable courses, which excludes the College Success course and other non-degree-applicable courses, are used in this calculation of GPA.

^eThe “No GPA” category includes students who did not enroll and students who took only non-degree-applicable courses, which are not included in degree-applicable GPA calculations.

The Opening Doors Demonstration

Appendix Table D.5

Cumulative Outcomes, by Gender, Program Semester Through Third Postprogram Semester:
Opening Doors Program

Chaffey College Report

Outcome	Male Subgroup			Female Subgroup			Difference Between Subgroups	
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group		Difference (Impact)
Registered for any courses (%)	89.0	85.2	3.9	3.5	83.7	86.5	-2.8	3.1
Number of semesters registered	2.6	2.4	0.2	0.2	2.4	2.4	0.0	0.1
Number of credits earned	14.0	13.3	0.7	1.5	11.5	11.3	0.2	1.1
Regular credits	12.5	12.8	-0.3	1.5	9.5	10.6	-1.1	1.0
Non-degree credits ^a	1.5	0.5	1.0 ***	0.2	2.0	0.7	1.3 ***	0.2
Cumulative GPA ^b (%)								
No GPA ^c	14.4	20.1	-5.7	4.0	20.0	16.9	3.1	3.4
0-1.9	48.5	39.8	8.7 *	5.2	46.7	48.1	-1.4	4.3
2.0 or higher	37.1	40.1	-3.0	5.1	33.3	35.0	-1.7	4.1
Cumulative degree-applicable GPA ^d (%)								
No GPA ^e	18.5	20.7	-2.2	4.2	22.5	16.9	5.6	3.4
0-1.9	47.3	39.8	7.6	5.2	47.1	48.5	-1.4	4.3
2.0 or higher	34.2	39.6	-5.3	5.1	30.4	34.6	-4.2	4.0
Sample size (total = 898)	173	189			275	261		

(continued)

Appendix Table D.5 (continued)

SOURCE: MDRC calculations from Chaffey College transcript data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

A two-tailed t-test was applied to differences of impacts between subgroups. Statistical significance levels are indicated as: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Estimates are adjusted by round of random assignment.

GPA = grade point average.

Cumulative outcomes use data from the fall 2005, spring 2006, summer 2006, fall 2006, and spring 2007 semesters.

^aNon-degree credits include developmental credits and credits for the College Success courses and other college preparatory courses.

^bThis cumulative GPA does not include grades from courses taken before random assignment. It is based on credit-bearing courses taken from the program semester through the end of the third postprogram semester. Courses in which students did not receive a passing grade and subsequently repeated are not included in cumulative GPA, per Chaffey College policy.

^cThe “No GPA” category includes students who did not enroll and students who took only developmental courses, which are not included in GPA calculations.

^dThis cumulative GPA does not include grades from courses taken before random assignment. It only includes grades earned in courses taken from the program semester through the end of the third postprogram semester, and excludes credit from the College Success course and other non-degree-applicable courses.

^eThe “No GPA” category includes students who did not enroll and students who took only non-degree-applicable courses, which are not included in degree-applicable GPA calculations.

The Opening Doors Demonstration
 Appendix Table D.6
 Probation Status, by Gender, Program Semester Through Third Postprogram Semester:
 Opening Doors Program
 Chaffey College Report

Outcome (%)	Male Subgroup				Female Subgroup				Difference Between Subgroups
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group	Difference (Impact)	Standard Error	
<u>At end of program semester</u>									
Good academic standing	27.9	24.7	3.1	4.6	29.7	25.4	4.3	3.8	
On probation ^a	54.8	51.4	3.4	5.2	45.7	53.4	-7.7 *	4.2	†
No status ^b	17.3	23.8	-6.5	4.3	24.6	21.2	3.5	3.6	†
<u>At end of first postprogram semester</u>									
Good academic standing	29.6	25.8	3.8	4.7	28.3	21.9	6.3 *	3.7	
On probation ^a	38.7	38.1	0.6	5.1	31.0	39.4	-8.4 **	4.1	
No status ^b	31.7	36.0	-4.3	5.0	40.7	38.7	2.1	4.2	
<u>At end of second postprogram semester</u>									
Good academic standing	28.4	25.3	3.0	4.7	25.7	21.2	4.6	3.7	
On probation ^a	19.1	22.2	-3.0	4.3	20.7	23.4	-2.7	3.6	
No status ^b	52.5	52.5	0.0	5.2	53.6	55.4	-1.9	4.3	
<u>At end of third postprogram semester</u>									
Good academic standing	24.3	23.8	0.6	4.5	18.9	20.4	-1.5	3.4	
On probation ^a	17.4	15.3	2.0	3.9	16.3	17.7	-1.3	3.2	
No status ^b	58.3	60.9	-2.6	5.2	64.8	62.0	2.9	4.2	

(continued)

Appendix Table D.6 (continued)

Outcome (%)	Male Subgroup			Female Subgroup			Difference Between Subgroups	
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group		Difference (Impact)
Summary outcomes								
Ever in good academic standing	40.1	39.0	1.1	5.1	38.1	36.9	1.2	4.2
Never in good academic standing	49.0	46.2	2.8	5.2	45.6	49.6	-4.0	4.3
No status ^b	11.0	14.8	-3.9	3.5	16.3	13.5	2.8	3.1
Sample size (total = 898)	173	189			275	261		

SOURCE: MDRC calculations using Chaffey College probation data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

A two-tailed t-test was applied to differences of impacts between subgroups. Statistical significance levels are indicated as: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Estimates are adjusted by round of random assignment.

^aThis outcome includes academic probation (attempted at least 12 credits since starting at the college and has a cumulative grade point average below 2.0, or below a C average) and progress probation (attempted at least 12 credits and has completed less than half of the credits attempted).

^bThe “No status” category includes sample members who were not enrolled during the semester and therefore did not have an assigned probation status.

The Opening Doors Demonstration

Appendix Table D.7

Program Participation, by Probation Status at Random Assignment:
Opening Doors Program

Chaffey College Report

Outcome	Students on Probation One Semester			Students on Probation Two or More Semesters			Difference Between Subgroups		
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group		Difference (Impact)	Standard Error
Registered for any courses (%)	77.3	80.8	-3.5	3.5	79.3	72.6	6.7	4.6	†
College Success Course I (%)									
Registered for College Success lecture	49.1	1.4	47.7 ***	3.1	55.9	4.2	51.7 ***	4.1	
Registered for College Success workshop	49.1	1.1	48.0 ***	3.0	55.9	4.2	51.7 ***	4.1	
Success Centers									
Ever visited (%)	56.1	45.4	10.8 **	4.2	59.3	38.7	20.6 ***	5.3	
Total number of visits	7.2	4.4	2.8 ***	0.9	7.5	3.9	3.6 ***	1.4	
0 (%)	43.9	54.6	-10.8 **	4.2	40.7	61.3	-20.6 ***	5.3	
1-8 (%)	29.0	27.3	1.7	3.8	34.1	26.2	7.9	4.9	
9 or more (%)	27.1	18.1	9.1 **	3.5	25.2	12.5	12.7 ***	4.1	
Total hours spent	8.2	5.7	2.5 *	1.4	8.4	4.9	3.6 **	1.8	
Sample size (total = 898)	269	282			179	168			

SOURCES: MDRC calculations from Chaffey College transcript and Success Center participation data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

A two-tailed t-test was applied to differences of impacts between subgroups. Statistical significance levels are indicated as: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Estimates are adjusted by round of random assignment.

The Opening Doors Demonstration

Appendix Table D.8

Transcript Outcomes, by Probation Status at Random Assignment, Program Semester:
Opening Doors Program

Chaffey College Report

Outcome	Students on Probation One Semester			Students on Probation Two or More Semesters			Difference Between Subgroups
	Program Group	Control Group	Difference (Impact) Standard Error	Program Group	Control Group	Difference (Impact) Standard Error	
Registered for any courses (%)	77.3	80.8	-3.5 3.5	79.3	72.6	6.7 4.6	†
Number of courses attempted	3.1	2.7	0.4 ** 0.2	3.1	2.3	0.8 *** 0.2	
Number of credits attempted	8.1	8.2	-0.1 0.4	7.6	6.7	0.9 * 0.6	
Regular credits	6.1	7.7	-1.6 *** 0.4	5.7	6.2	-0.5 0.5	
Non-degree credits ^a	2.0	0.6	1.5 *** 0.2	1.9	0.5	1.5 *** 0.2	
Passed all courses (%)	24.9	23.4	1.5 3.7	30.2	26.7	3.5 4.8	
Number of courses passed	1.9	1.6	0.3 ** 0.1	1.8	1.3	0.5 *** 0.2	
Withdrew from any courses (%)	34.6	32.3	2.3 4.0	27.4	25.0	2.4 4.7	
Number of course withdrawals	0.6	0.5	0.0 0.1	0.5	0.4	0.1 0.1	
Number of credits earned	4.6	4.4	0.2 0.4	4.5	3.7	0.7 0.5	
Regular credits	3.2	4.1	-0.9 ** 0.3	3.2	3.5	-0.3 0.4	
Non-degree credits ^a	1.4	0.3	1.1 *** 0.1	1.3	0.2	1.1 *** 0.2	
Term GPA ^b (%)							
No GPA ^c	27.9	25.5	2.3 3.8	26.8	31.0	-4.2 4.9	
0-1.9	40.9	45.0	-4.1 4.2	35.7	38.2	-2.5 5.2	
2.0 or higher	31.2	29.4	1.8 3.9	37.5	30.9	6.6 5.0	

(continued)

Appendix Table D.8 (continued)

Outcome	Students on Probation One Semester			Students on Probation Two or More Semesters			Difference Between Subgroups	
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group		Difference (Impact)
Degree-applicable term GPA ^d (%)								
No GPA ^e	31.2	25.9	5.3	3.8	35.2	32.1	3.0	5.1
0-1.9	40.9	46.1	-5.2	4.2	33.5	36.4	-2.9	5.1
2.0 or higher	27.9	28.0	-0.1	3.8	31.3	31.5	-0.2	5.0
Sample size (total = 898)	269	282			179	168		

SOURCE: MDRC calculations from Chaffey College transcript data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

A two-tailed t-test was applied to differences of impacts between subgroups. Statistical significance levels are indicated as: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Estimates are adjusted by round of random assignment.

GPA = grade point average.

^aNon-degree credits include developmental credits and credits for the College Success courses and other college preparatory courses.

^bGrades earned in all courses except for developmental courses are used in the calculation of term GPA.

^cThe “No GPA” category includes students who did not enroll and students who took only developmental courses, which are not included in GPA calculations.

^dGrades earned only in degree-applicable courses, which excludes the College Success course and other non-degree-applicable courses, are used in this calculation of GPA.

^eThe “No GPA” category includes students who did not enroll and students who took only non-degree-applicable courses, which are not included in degree-applicable GPA calculations.

The Opening Doors Demonstration

Appendix Table D.9

Cumulative Outcomes, by Probation Status at Random Assignment,
Program Semester Through Third Postprogram Semester:
Opening Doors Program

Chaffey College Report

Outcome	Students on Probation One Semester			Students on Probation Two or More Semesters			Difference Between Subgroups
	Program Group	Control Group	Difference (Impact) Standard Error	Program Group	Control Group	Difference (Impact) Standard Error	
Registered for any courses (%)	86.2	86.9	-0.6 2.9	84.9	84.5	0.4 3.9	
Number of semesters registered	2.4	2.5	-0.1 0.1	2.6	2.3	0.3 0.2	†
Number of credits earned	12.3	13.2	-0.9 1.2	12.7	10.4	2.3 * 1.4	†
Regular credits	10.5	12.5	-2.0 * 1.1	10.9	9.8	1.0 1.3	†
Non-degree credits ^a	1.8	0.7	1.1 *** 0.2	1.8	0.5	1.3 *** 0.2	
Cumulative GPA ^b (%)							
No GPA ^c	17.5	18.1	-0.6 3.3	18.4	18.5	0.0 4.2	
0-1.9	49.1	45.0	4.0 4.2	44.6	44.1	0.5 5.3	
2.0 or higher	33.5	36.9	-3.4 4.1	36.9	37.4	-0.5 5.1	
Cumulative degree-applicable GPA ^d (%)							
No GPA ^e	19.7	18.1	1.6 3.3	22.9	19.1	3.8 4.4	
0-1.9	49.8	45.7	4.1 4.2	43.0	43.5	-0.6 5.3	
2.0 or higher	30.5	36.2	-5.7 4.0	34.1	37.4	-3.3 5.1	
Sample size (total = 898)	269	282		179	168		

(continued)

Appendix Table D.9 (continued)

SOURCE: MDRC calculations from Chaffey College transcript data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

A two-tailed t-test was applied to differences of impacts between subgroups. Statistical significance levels are indicated as: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Estimates are adjusted by round of random assignment.

GPA = grade point average.

Cumulative outcomes used data from the fall 2005, spring 2006, summer 2006, fall 2006, and spring 2007 semesters.

^aNon-degree credits include developmental credits and credits for the College Success courses and other college preparatory courses.

^bThis cumulative GPA does not include grades from courses taken before random assignment. It is based on credit-bearing courses taken from the program semester through the third postprogram semester. Courses in which students did not receive a passing grade and subsequently repeated are not included in cumulative GPA calculations, per Chaffey College policy.

^cThe “No GPA” category includes students who did not enroll and students who took only developmental courses, which are not included in GPA calculations.

^dThis cumulative GPA does not include grades from courses taken before random assignment. It only includes grades earned in courses taken from the program semester through the third postprogram semester, and excludes credit from the College Success course and other non-degree-applicable courses.

^eThe “No GPA” category includes students who did not enroll and students who took only non-degree-applicable courses, which are not included in degree-applicable GPA calculations.

The Opening Doors Demonstration

Appendix Table D.10

Probation Status, by Probation Status at Random Assignment, Program Semester Through Third Postprogram Semester:
Opening Doors Program

Chaffey College Report

Outcome (%)	Students on Probation One Semester			Students on Probation Two or More Semesters			Difference Between Subgroups
	Program Group	Control Group	Standard Error	Program Group	Control Group	Standard Error	
<u>At end of program semester</u>							
Good academic standing	29.7	27.0	2.8	28.0	22.0	6.0	4.6
On probation ^a	47.6	53.9	-6.3	51.4	50.6	0.7	5.4
No status ^b	22.7	19.2	3.5	20.7	27.4	-6.7	4.6
<u>At end of first postprogram semester</u>							
Good academic standing	28.6	25.2	3.4	29.1	20.8	8.3 *	4.6
On probation ^a	33.5	38.6	-5.2	34.6	39.3	-4.7	5.2
No status ^b	37.9	36.2	1.8	36.3	39.9	-3.6	5.2
<u>At end of second postprogram semester</u>							
Good academic standing	25.6	24.5	1.2	28.5	20.2	8.4 *	4.6
On probation ^a	18.2	22.3	-4.1	22.9	23.8	-0.9	4.6
No status ^b	56.1	53.2	3.0	48.5	56.0	-7.5	5.3
<u>At end of third postprogram semester</u>							
Good academic standing	19.0	24.8	-5.9 *	24.1	16.6	7.4 *	4.3
On probation ^a	16.7	14.5	2.2	16.8	20.2	-3.5	4.2
No status ^b	64.3	60.6	3.7	59.2	63.1	-3.9	5.2

(continued)

Appendix Table D.10 (continued)

Outcome (%)	Students on Probation One Semester			Students on Probation Two or More Semesters			Difference Between Subgroups
	Program Group	Control Group	Difference (Impact) Standard Error	Program Group	Control Group	Difference (Impact) Standard Error	
Summary outcomes							
Ever in good academic standing	39.8	40.4	-0.7 4.1	37.5	33.3	4.2	5.1
Never in good academic standing	46.5	46.4	0.0 4.2	47.4	51.3	-3.8	5.3
No status ^b	13.8	13.1	0.6 2.9	15.1	15.5	-0.4	3.9
Sample size (total = 898)	269	282		179	168		

SOURCE: MDRC calculations using Chaffey College probation data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

A two-tailed t-test was applied to differences of impacts between subgroups. Statistical significance levels are indicated as: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Estimates are adjusted by round of random assignment.

^aThis outcome includes academic probation (attempted at least 12 credits since starting at the college and has a cumulative grade point average below 2.0, or below a C average) and progress probation (attempted at least 12 credits and has completed less than half of the credits attempted).

^bThe “No status” category includes sample members who were not enrolled during the semester and therefore did not have an assigned probation status.

The Opening Doors Demonstration

Appendix Table D.11

**Social, Psychological, and Health Measures of Sample Members at Baseline:
Opening Doors Program
Chaffey College Report**

Measure	Sample Size	Full Sample	Program Group	Control Group	Difference (Impact)	Standard Error	Effect Size
General social support ^a	832	3.21	3.24	3.19	0.05 *	0.03	0.12
Perceived stress ^b	842	2.41	2.37	2.44	-0.07	0.05	-0.09
K6 score for psychological distress ^c	835	5.23	5.12	5.34	-0.22	0.31	-0.05
Indicator of high psychological distress ^d (%)	835	8.02	7.64	8.41	-0.77	1.88	-0.03
Health status fair or poor (%)	864	7.87	6.49	9.24	-2.74	1.83	-0.10
Body mass index (BMI) ^e (kg/m ²)	826	25.18	25.26	25.10	0.16	0.39	0.03
Overweight or obese (BMI ≥ 25) ^f (%)	826	39.71	40.57	38.84	1.73	3.41	0.04
Current smoker (%)	849	9.07	8.25	9.89	-1.64	1.97	-0.06

SOURCE: MDRC calculations from the Opening Doors baseline survey.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

Estimates are adjusted by round of random assignment.

^a8-item scale about the presence of social support; response categories range from 1 = “strongly disagree” to 4 = “strongly agree.” Items are averaged.

^b4-item scale about feelings of social stress; response categories range from 1 = “none of the time” to 5 = “all of the time.” Items are averaged.

^c6-item scale about nonspecific psychological distress; response categories range from 0 = “none of the time” to 4 = “all of the time.” Items are summed.

^dIndicator if the K6 Screening Scale measure of psychological distress (see footnote c) exceeds 12.

^eBMI = weight in kilograms divided by height in meters squared.

^fStandard weight-status categories associated with BMI ranges for adults: underweight < 18.5; normal weight = 18.5 to 24.9; overweight = 25.0 to 29.9; and obese = 30 or greater.

The Opening Doors Demonstration
Appendix Table D.12
Social and Psychological Outcomes:
Opening Doors Program
Chaffey College Report

Outcome	Sample Size	Program Group	Control Group	Difference (Impact)	Standard Error	Effect Size
<u>Outlook and identity</u>						
Optimism ^a	608	3.04	3.02	0.02	0.04	0.04
Goal orientation ^b	610	3.45	3.41	0.04	0.04	0.07
Life engagement ^c	608	3.42	3.41	0.01	0.04	0.02
Self esteem ^d	610	3.43	3.39	0.04	0.04	0.09
Sense of self ^e	609	3.49	3.47	0.02	0.03	0.05
<u>Social support and civic engagement</u>						
General social support ^f	606	3.33	3.28	0.05	0.03	0.13
Friends value education ^g	601	3.12	2.95	0.17 **	0.07	0.21
Did unpaid volunteer or community work in the past year (%)	608	25.54	27.41	-1.87	3.58	-0.04
Civic engagement ^h	603	0.36	0.36	-0.01	0.02	-0.03
<u>Antisocial behavior</u> (%)						
Spent time in reform school or prison in past year	611	2.32	3.24	-0.92	1.33	-0.06
Close friend spent time in reform school or prison in past year	611	16.83	24.36	-7.53 **	3.27	-0.19

(continued)

Appendix Table D.12 (continued)

SOURCE: MDRC calculations from the Opening Doors 12-Month Survey.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

Estimates are adjusted by round of random assignment.

The Opening Doors 12-Month Survey was administered to the Opening Doors sample members, but not to the Enhanced Opening Doors sample members.

^a6-item scale about feelings of optimism; response categories range from 1 = “strongly disagree” to 4 = “strongly agree.” The six items are averaged.

^b3-item scale about feeling focused on one's goals; response categories range from 1 = “strongly disagree” to 4 = “strongly agree.” The three items are averaged.

^c6-item scale about feelings that life is purposeful and worthwhile; response categories range from 1 = “strongly disagree” to 4 = “strongly agree.” The six items are averaged.

^d4-item scale about feelings of self-esteem; response categories range from 1 = “strongly disagree” to 4 = “strongly agree.” The four items are averaged.

^e13-item scale about feeling a strong sense of who one is, who one wants to be, and connections to others; response categories range from 1 = “strongly disagree” to 4 = “strongly agree.” The 13 items are averaged.

^f8-item scale about the presence of social support; response categories range from 1 = “strongly disagree” to 4 = “strongly agree.” The eight items are averaged.

^g5-item scale about the importance of education to friends; response categories range from 1 = “not very” to 4 = “extremely.” The five items are averaged.

^h4-item scale of activities indicative of civic engagement (registered to vote; voted in presidential election; donated time or money to a political campaign; attended a political speech, rally, or march). Each item is coded as a 0 (“no”) or 1 (“yes”), and the four items are averaged.

The Opening Doors Demonstration

Appendix Table D.13

**Health Outcomes:
Opening Doors Program
Chaffey College Report**

Outcome	Sample Size	Program Group	Control Group	Difference (Impact)	Standard Error	Effect Size
Perceived stress ^a	608	2.02	2.07	-0.05	0.06	-0.07
K6 score for psychological distress ^b	607	4.63	4.81	-0.18	0.33	-0.05
Indicator of high psychological distress ^c (%)	607	4.64	4.26	0.37	1.68	0.02
Health status fair or poor (%)	610	11.61	11.67	-0.06	2.60	0.00
Body mass index (BMI) ^d (kg/m ²)	554	25.11	25.31	-0.19	0.45	-0.04
Overweight or obese (BMI ≥ 25) ^e (%)	554	41.40	43.81	-2.41	4.21	-0.05
Current smoker (%)	610	10.92	15.92	-5.00	2.76	-0.15

SOURCE: MDRC calculations from the Opening Doors 12-Month Survey.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

Estimates are adjusted by round of random assignment.

The Opening Doors 12-Month Survey was administered to the Chaffey Opening Doors sample members, but not to the Enhanced Opening Doors sample members.

^a4-item scale about feelings of social stress; response categories range from 1 = “none of the time” to 5 = “all of the time.” Items are averaged.

^b6-item scale about nonspecific psychological distress; response categories range from 0 = “none of the time” to 4 = “all of the time.” Items are summed.

^cIndicator if the K6 Screening Scale measure of psychological distress (see note b) exceeds 12.

^dBMI = weight in kilograms divided by height in meters squared.

^eStandard weight-status categories associated with BMI ranges for adults: underweight less than 18.5; normal weight = 18.5 to 24.9; overweight = 25.0 to 29.9; and obese = 30 or greater.

Appendix E
Description of Scales Presented in Chapter 4

The following multi-item scale measures are presented in Chapter 4 and were created using data from the Opening Doors 12-Month Survey. Multi-item scales are useful for measuring complex constructs, such as those outlined below, because such constructs cannot be assessed easily with a single-item measure. Most of these scale measures have been widely used in related literature, and footnotes are added to reference the original source from which scales were drawn or adapted. Three measures — “sense of self,” “friends value education,” and “civic engagement” — were developed for the Opening Doors demonstration.¹ The measures of “civic engagement” and “psychological distress” are coded as *summative scales*, which means that the values assigned to each response are added together to create a summary scale score. For the remaining measures, a summary scale score is calculated and then divided by the number of items that make up the scale, to create an average scale score. Finally, Cronbach’s alpha, an indicator of how well the items included in the scale measure a common underlying construct,² is presented for each scale.

Social and Psychological Outcomes

Outlook and Identity

Optimism³ (6-item scale; Cronbach’s alpha = 0.63)⁴

1. In uncertain times, I usually expect the best.
2. If something can go wrong for me, it will. [responses were reversed in order to calculate the scale score]
3. I am always optimistic about my future.
4. I hardly ever expect things to go my way. [responses were reversed]
5. I rarely count on good things happening to me. [responses were reversed]
6. Overall, I expect more good things to happen to me than bad.

Response categories: Strongly disagree (1)
 Somewhat disagree (2)
 Somewhat agree (3)
 Strongly agree (4)

Responses were summed and averaged. Scores range from 1 to 4.

¹Questions included in these new measures are similar to those used in other research.

²Cronbach (1951).

³Scheier, Carver, and Bridges (1994).

⁴Data on a subset of measures are available at both baseline and the 12-month follow-up. All Cronbach’s alphas shown above were calculated using 12-month follow-up data.

Goal Orientation⁵ (3-item scale; Cronbach's alpha = 0.69)

1. I don't think much about my long-term goals. [responses were reversed in order to calculate the scale score]
2. I have many long-term goals that I will work to achieve.
3. It is important for me to take time to plan out where I'm going in life.

Response categories: Strongly disagree (1)
 Somewhat disagree (2)
 Somewhat agree (3)
 Strongly agree (4)

Responses were summed and averaged. Scores range from 1 to 4.

Life Engagement⁶ (6-item scale, Cronbach's alpha = 0.82)

1. There is not enough purpose in my life. [responses were reversed in order to calculate the scale score]
2. I don't care very much about the things I do. [responses were reversed]
3. To me, the things I do are all worthwhile.
4. I have lots of reasons for living.
5. Most of what I do seems trivial and unimportant to me. [responses were reversed]
6. I value my activities a lot.

Response categories: Strongly disagree (1)
 Somewhat disagree (2)
 Somewhat agree (3)
 Strongly agree (4)

Responses were summed and averaged. Scores range from 1 to 4.

⁵Drawn from a measure of "reactive responding"; see Taylor and Seeman (1999).

⁶Scheier et al. (2006).

Self-Esteem⁷ (4-item scale; Cronbach's alpha = 0.74)

1. I am able to do things as well as most other people.
2. I feel that I'm a person of worth, or at least on an equal basis with others.
3. I feel that I have a number of good qualities.
4. I take a positive attitude toward myself.

Response categories: Strongly disagree (1)
 Somewhat disagree (2)
 Somewhat agree (3)
 Strongly agree (4)

Responses were summed and averaged. Scores range from 1 to 4.

Sense of Self (13-item scale; Cronbach's alpha = 0.89)

1. Your goals in life are becoming clearer.
2. People know they can count on you to "be there" for them.
3. You have a clear sense of your beliefs and values.
4. There is at least one person who knows "the real you."
5. You have a good deal of freedom to explore things in life that interest you.
6. You feel respected by others as an adult.
7. There is at least one person with whom you can talk about anything.
8. You feel that you are important, that you "matter," to other people.
9. You have a pretty good sense of the path you want to take in life and the steps to take to get there.
10. You can envision the kind of person you'd like to become.
11. You feel your life is filled with meaning, a sense of purpose.
12. It is easy for you to make close friends.
13. People often seek your advice and support.

Response categories: Strongly disagree (1)
 Somewhat disagree (2)
 Somewhat agree (3)
 Strongly agree (4)

Responses were summed and averaged. Scores range from 1 to 4.

⁷Adapted from Rosenberg (1965).

Social Support and Civic Engagement

General Social Support⁸ (8-item scale; Cronbach's alpha = 0.78)

1. There are people I know will help me if I need it.
2. There is no one I feel comfortable talking about problems with. [responses were reversed in order to calculate the scale score]
3. I am with a group of people who think the same way I do about things.
4. If something went wrong, no one would help me. [responses were reversed]
5. I have a trustworthy person to turn to if I have problems.
6. I do not think that other people respect what I do. [responses were reversed]
7. There is no one who likes to do the things I do. [responses were reversed]
8. There are people who value my skills and abilities.

Response categories: Strongly disagree (1)
 Disagree (2)
 Agree (3)
 Strongly agree (4)

Responses were summed and averaged. Scores range from 1 to 4.

Friends Value Education (5-item scale; Cronbach's alpha = 0.90)

Among your friends, how important is it to...

1. Go to college?
2. Get good grades?
3. Complete a college degree or training program?
4. Use a college degree or program certificate to get a better job?
5. Pursue advanced study after college?

Response categories: Not very (1)
 Somewhat (2)
 Quite a bit (3)
 Extremely (4)

Responses were summed and averaged. Scores range from 1 to 4.

⁸Adapted from Cutrona and Russell (1987).

Civic Engagement (4-item summative scale; Cronbach's alpha = 0.43)

1. Are you registered to vote?
2. Did/do you plan to vote in the 2004 presidential election?⁹
3. Since [date of random assignment], have you donated your time or money to a political campaign?
4. Since [date of random assignment], have you attended a political speech, rally, or march?

Each item has two response categories (1 = Yes; 0 = No). The four items are added together and divided by 4. Scores range from 0 to 1.

Health Outcomes

Mental Health

Perceived Stress¹⁰ (4-item scale; Cronbach's alpha = 0.66)

In the last 30 days, how often have you felt...

1. You were unable to control the important things in your life?
2. Confident about your ability to handle your personal problems? [responses were reversed in order to calculate the scale score]
3. That things were going your way? [responses were reversed]
4. Difficulties were piling up so high that you could not overcome them?

Response categories:

- None of the time (1)
- A little of the time (2)
- Some of the time (3)
- Most of the time (4)
- All of the time (5)

Responses were summed and averaged. Scores range from 1 to 5.

⁹Questions were written for the Opening Doors demonstration survey, and sample members in some other sites began the program in 2003.

¹⁰Adapted from Cohen, Kamarck, and Mermelstein (1983); Cohen and Williamson (1988).

Psychological Distress¹¹ (6-item summative scale; Cronbach's alpha = 0.80)

During the past 30 days, about how often did you feel...

1. Nervous?
2. Hopeless?
3. Restless or fidgety?
4. So depressed that nothing could cheer you up?
5. That everything was an effort?
6. Worthless?

Response categories: None of the time (0)
 A little of the time (1)
 Some of the time (2)
 Most of the time (3)
 All of the time (4)

Responses were summed and averaged. Scores range from 0 to 24, with a cut-off point of 13 to determine nonspecific psychological distress.

¹¹Kessler et al. (2002).

Appendix F

Supplementary Tables for Chapter 5

The Opening Doors Demonstration

Appendix Table F.1

**Enrollment at Chaffey College and Other Institutions, First and
Second Program Semesters:
Enhanced Opening Doors Program
Chaffey College Report**

Outcome	Program Group	Control Group	Difference (Impact)	Standard Error
<u>First program semester (%)</u>				
Enrolled in any college	88.4	86.8	1.6	3.1
Enrolled in any 2-year college	88.4	86.4	2.0	3.2
Enrolled in any 4-year college	0.0	0.9	-0.9	0.6
<u>Second program semester (%)</u>				
Enrolled in any college	72.8	69.1	3.7	4.3
Enrolled in any 2-year college	72.8	67.7	5.1	4.3
Enrolled in any 4-year college	0.0	2.3	-2.3 **	1.0
<u>Summary outcomes</u>				
Enrolled in any college (%)	92.4	91.8	0.6	2.6
Enrolled in any 2-year college (%)	92.4	91.4	1.1	2.6
Enrolled in any 4-year college (%)	0.0	2.3	-2.3 **	1.0
Number of semesters enrolled in any college	1.6	1.6	0.1	0.1
Sample size (total = 444)	224	220		

SOURCES: MDRC calculations using the StudentTracker service from the National Student Clearinghouse data and Chaffey College transcript data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between the research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

Estimates are adjusted by round of random assignment.

The National Student Clearinghouse collects enrollment data on about 90 percent of students at higher education institutions. Students have the right to opt out of having their information sent. Over 40 percent of the sample opted out. In these cases, data were supplemented with information from Chaffey College transcript data.

Missing values are not included in individual variable distributions.

The Opening Doors Demonstration

Appendix Table F.2

Program Participation, by Gender, First and Second Program Semesters:
Enhanced Opening Doors Program

Chaffey College Report

Outcome	Male Subgroup			Female Subgroup			Difference Between Subgroups
	Program Group	Control Group	Standard Error	Program Group	Control Group	Standard Error	
<u>First program semester</u>							
Registered for any courses (%)	89.6	71.2	18.4 ***	82.5	86.8	4.4	†††
College Success Course I (%)							
Registered for College Success lecture	71.3	1.2	70.0 ***	72.9	0.0	72.9 ***	3.8
Registered for College Success workshop	71.3	1.2	70.0 ***	72.9	0.0	72.9 ***	3.8
Success Centers							
Ever visited (%)	65.4	25.5	39.9 ***	70.9	35.7	35.1 ***	5.7
Total number of visits	5.0	1.4	3.6 ***	5.8	2.0	3.7 ***	1.0
0 (%)	34.6	74.5	-39.9 ***	29.1	64.3	-35.1 ***	5.7
1-4 (%)	30.0	16.8	13.2 **	32.3	19.6	12.7 **	5.3
5 or more (%)	35.4	8.7	26.7 ***	38.6	16.1	22.5 ***	5.2
Total hours spent	5.9	1.4	4.6 ***	5.5	1.9	3.6 ***	1.1
<u>Second program semester</u>							
Registered for any courses (%)	72.4	55.5	16.9 **	63.6	61.9	1.7	5.9
Registered for College Success Course II (%)	33.3	0.0	33.3 ***	26.2	0.0	26.2 ***	3.8
Success Centers							
Ever visited (%)	30.0	11.9	18.2 ***	27.6	25.7	2.0	††
Total number of visits	2.8	0.4	2.4 ***	2.3	1.8	0.5	††
0 (%)	70.0	88.1	-18.2 ***	72.4	74.3	-2.0	††
1-4 (%)	12.9	8.2	4.7	7.2	11.8	-4.6	3.5
5 or more (%)	17.2	3.7	13.5 ***	20.4	13.9	6.6	4.6
Total hours spent	4.0	0.5	3.5 **	3.0	1.7	1.4 *	0.7
Sample size (total = 444)	87	83		137	137		(continued)

Appendix Table F.2 (continued)

SOURCES: MDRC calculations from Chaffey College transcript and Success Center participation data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

A two-tailed t-test was applied to differences of impacts between subgroups. Statistical significance levels are indicated as: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Estimates are adjusted by round of random assignment.

The Opening Doors Demonstration

Appendix Table F.3

Transcript Outcomes, by Gender, First and Second Program Semesters:
Enhanced Opening Doors Program

Chaffey College Report

Outcome	Male Subgroup			Female Subgroup			Difference Between Subgroups
	Program Group	Control Group	Difference (Impact) Standard Error	Program Group	Control Group	Difference (Impact) Standard Error	
First program semester							
Registered for any courses (%)	89.6	71.2	18.4 ***	82.5	86.8	-4.3	4.4 †††
Number of courses attempted	3.1	2.1	1.0 ***	3.3	2.6	0.7 ***	0.2
Number of credits attempted	7.4	6.3	1.0	7.9	7.7	0.2	0.6
Regular credits	4.6	5.7	-1.1	4.8	7.1	-2.3 ***	0.5
Non-degree credits ^a	2.8	0.6	2.1 ***	3.0	0.5	2.5 ***	0.3
Passed all courses (%)	26.5	13.1	13.4 **	26.3	22.6	3.7	5.2
Number of courses passed	1.8	0.8	0.9 ***	2.1	1.3	0.9 ***	0.2
Withdraw from any courses (%)	33.2	31.4	1.8	32.1	32.9	-0.8	5.7
Number of course withdrawals	0.6	0.6	0.0	0.5	0.5	0.0	0.1
Number of credits earned	4.1	2.4	1.7 ***	4.8	3.5	1.3 **	0.5
Regular credits	2.2	2.2	0.0	2.6	3.3	-0.6	0.4
Non-degree credits ^a	1.8	0.2	1.7 ***	2.2	0.3	1.9 ***	0.2
Term GPA ^b (%)							
No GPA ^c	17.4	36.0	-18.5 ***	23.9	24.3	-0.4	5.2 ††
0-1.9	45.7	46.1	-0.4	33.7	51.7	-18.0 ***	5.9 †
2.0 or higher	36.9	17.9	19.0 ***	42.4	24.0	18.4 ***	5.6

(continued)

Appendix Table F.3 (continued)

Outcome	Male Subgroup			Female Subgroup			Difference Between Subgroups	
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group		Difference (Impact)
Degree-applicable term GPA ^d (%)								
No GPA ^e	38.1	35.9	2.2	7.5	37.1	25.7	11.4 **	5.6
0-1.9	41.1	47.2	-6.1	7.7	36.7	50.2	-13.5 **	5.9
2.0 or higher	20.7	16.8	3.9	6.1	26.2	24.1	2.1	5.3
<u>Second program semester</u>								
Registered for any courses (%)	72.4	55.5	16.9 **	7.3	63.6	61.9	1.7	5.9
Number of courses attempted	2.3	1.8	0.5 *	0.3	2.1	2.0	0.2	0.2
Number of credits attempted	6.8	5.2	1.6 *	0.8	6.4	5.8	0.5	0.7
Regular credits	5.3	5.1	0.2	0.8	5.2	5.5	-0.3	0.6
Non-degree credits ^a	1.5	0.1	1.3 ***	0.3	1.1	0.3	0.8 ***	0.2
Passed all courses (%)	23.4	9.3	14.1 **	5.6	22.6	16.8	5.9	4.8
Number of courses passed	1.3	0.7	0.7 ***	0.2	1.3	1.0	0.3 *	0.2
Withdrawn from any courses (%)	22.7	23.2	-0.5	6.5	19.8	30.6	-10.8 **	5.2
Number of course withdrawals	0.4	0.4	0.0	0.1	0.3	0.4	-0.1	0.1
Number of credits earned	3.7	1.9	1.8 ***	0.6	3.8	2.8	1.0 *	0.5
Regular credits	2.7	1.9	0.9	0.5	3.0	2.7	0.3	0.5
Non-degree credits ^a	1.0	0.0	1.0 ***	0.2	0.8	0.1	0.7 ***	0.1
Term GPA ^b (%)								
No GPA ^c	31.0	50.6	-19.6 ***	7.5	41.5	43.2	-1.7	6.0
0-1.9	41.1	36.5	4.6	7.5	28.4	34.4	-6.0	5.6
2.0 or higher	27.9	12.9	15.0 **	6.1	30.1	22.4	7.7	5.3

(continued)

Appendix Table F.3 (continued)

Outcome	Male Subgroup			Female Subgroup			Difference Between Subgroups
	Program Group	Control Group	Difference (Impact)	Program Group	Control Group	Difference (Impact)	
Degree-applicable term GPA ^d (%)							
No GPA ^e	39.0	50.7	-11.6	45.8	43.2	2.6	6.0
0-1.9	37.7	36.3	1.4	29.9	34.3	-4.4	5.7
2.0 or higher	23.2	13.0	10.2 *	24.3	22.4	1.8	5.1
Sample size (total = 444)	87	83		137	137		

SOURCE: MDRC calculations from Chaffey College transcript data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

A two-tailed t-test was applied to differences of impacts between subgroups. Statistical significance levels are indicated as: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Estimates are adjusted by round of random assignment.

GPA = grade point average.

^aNon-degree credits include developmental credits and credits for the College Success courses and other college preparatory courses.

^bGrades earned in all courses except for developmental courses are used in the calculation of term GPA.

^cThe “No GPA” category includes students who did not enroll and students who took only developmental courses, which are not included in GPA calculations.

^dGrades earned only in degree-applicable courses, which excludes the College Success course and other non-degree-applicable courses, are used in this calculation of GPA.

^eThe “No GPA” category includes students who did not enroll and students who took only non-degree-applicable courses, which are not included in degree-applicable GPA calculations.

The Opening Doors Demonstration

Appendix Table F.4

Cumulative Outcomes, by Gender, First and Second Program Semesters:
Enhanced Opening Doors Program

Chaffey College Report

Outcome	Male Subgroup			Female Subgroup			Difference Between Subgroups
	Program Group	Control Group	Standard Error	Program Group	Control Group	Standard Error	
Registered for any courses (%)	92.0	83.1	8.8 *	86.2	90.4	3.9	††
Number of semesters registered	1.6	1.3	0.4 ***	1.5	1.5	0.1	†††
Number of credits earned	7.8	4.3	3.5 ***	8.6	6.4	2.2 **	
Regular credits	5.0	4.1	0.9	5.7	6.0	-0.3	
Non-degree credits ^a	2.8	0.2	2.6 ***	2.9	0.4	2.6 ***	
Cumulative GPA ^b (%)							
No GPA ^c	11.5	25.3	-13.7 **	19.5	17.0	2.6	††
0-1.9	55.0	55.6	-0.6	42.4	56.8	-14.4 **	
2.0 or higher	33.5	19.1	14.4 **	38.0	26.2	11.8 **	
Cumulative degree-applicable GPA ^d (%)							
No GPA ^e	21.8	25.3	-3.5	27.6	17.7	9.9 *	
0-1.9	53.8	55.6	-1.8	38.2	56.7	-18.6 ***	†
2.0 or higher	24.3	19.1	5.3	34.3	25.6	8.7	
Sample size (444)	87	83		137	137		(continued)

Appendix Table F.4 (continued)

SOURCE: MDRC calculations from Chaffey College transcript data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

A two-tailed t-test was applied to differences of impacts between subgroups. Statistical significance levels are indicated as: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Estimates are adjusted by round of random assignment.

GPA = grade point average.

^aNon-degree credits include developmental credits and credits for the College Success courses and other college preparatory courses.

^bThis cumulative GPA does not include grades from courses taken before random assignment. It is based on credit-bearing courses taken from the first and second program semesters. Courses in which students did not receive a passing grade and subsequently repeated are not included in the cumulative GPA calculations, per Chaffey College policy.

^cThe “No GPA” category includes students who did not enroll and students who took only developmental courses, which are not included in GPA calculations.

^dThis cumulative GPA does not include grades from courses taken before random assignment. It only includes grades earned in courses taken from the program semesters, and excludes credit from the College Success course and other non-degree-applicable courses.

^eThe “No GPA” category includes students who did not enroll and students who took only non-degree-applicable courses, which are not included in degree-applicable GPA calculations.

The Opening Doors Demonstration
Appendix Table F.5
Probation Status, by Gender, First and Second Program Semesters:
Enhanced Opening Doors Program
Chaffey College Report

Outcome (%)	Male Subgroup			Female Subgroup			Difference Between Subgroups
	Program Group	Control Group	Standard Error	Program Group	Control Group	Standard Error	
<u>At end of first program semester</u>							
Good academic standing	21.9	6.0	5.3	21.9	16.1	4.8	
On probation ^a	67.7	65.2	7.3	60.6	70.8	5.7	
No status ^b	10.4	28.8	6.0	17.5	13.2	4.4	†††
<u>At end of second program semester</u>							
Good academic standing	22.0	8.3	5.5	25.6	16.7	4.9	
On probation ^a	50.4	47.2	7.7	38.0	45.3	6.0	
No status ^b	27.6	44.5	7.3	36.4	38.1	5.9	
<u>Summary outcomes</u>							
Ever in good academic standing	29.9	9.6	6.0	30.8	19.6	5.2	
Never in good academic standing	62.0	73.5	7.2	55.5	70.8	5.8	
No status ^b	8.0	16.9	5.1	13.8	9.6	3.9	††
Sample size (444)	87	83		137	137		

SOURCE: MDRC calculations using Chaffey College probation data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent, ** = 5 percent, * = 10 percent.

A two-tailed t-test was applied to differences of impacts between subgroups. Statistical significance levels are indicated as: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Estimates are adjusted by round of random assignment.

^aThis outcome includes academic probation (attempted at least 12 credits since starting at the college and has a cumulative grade point average below 2.0, or below a C average) and progress probation (attempted at least 12 credits and has completed less than half of the credits attempted).

^bThe “No status” category includes sample members who were not enrolled during the semester and therefore did not have an assigned probation status.

The Opening Doors Demonstration
Appendix Table F.6
Program Participation, by Probation Status at Random Assignment, First and Second Program Semesters:
Enhanced Opening Doors Program
Chaffey College Report

Outcome	Students on Probation One Semester			Students on Probation Two or More Semesters			Difference Between Subgroups
	Program Group	Control Group	Difference (Impact) Standard Error	Program Group	Control Group	Difference (Impact) Standard Error	
<u>First program semester</u>							
Registered for any courses (%)	87.4	88.3	-0.8 4.5	83.0	74.6	8.4 5.4	
College Success Course I (%)							
Registered for College Success lecture	71.3	1.1	70.2 *** 4.6	73.2	0.0	73.2 *** 4.1	
Registered for College Success workshop	71.3	1.1	70.2 *** 4.6	73.2	0.0	73.2 *** 4.1	
Success Centers							
Ever visited (%)	73.1	36.4	36.7 *** 6.4	64.3	28.0	36.3 *** 6.2	†
Total number of visits	7.0	1.9	5.0 *** 1.2	3.9	1.6	2.3 *** 0.7	†
0 (%)	26.9	63.6	-36.7 *** 6.4	35.7	72.0	-36.3 *** 6.2	††
1-4 (%)	26.0	22.4	3.6 5.9	36.7	15.2	21.5 *** 5.6	††
5 or more (%)	47.1	14.0	33.1 *** 6.0	27.6	12.8	14.8 *** 5.2	††
Total hours spent	7.5	1.8	5.7 *** 1.7	3.9	1.5	2.4 *** 0.9	†
<u>Second program semester</u>							
Registered for any courses (%)	71.3	59.9	11.4 * 6.5	62.5	59.3	3.3 6.5	
Registered for College Success Course II (%)	30.1	0.3	29.7 *** 4.5	27.7	0.0	27.6 *** 4.1	
Success Centers							
Ever visited (%)	32.7	18.9	13.8 ** 6.0	23.9	22.2	1.8 5.6	
Total number of visits	3.0	1.2	1.9 ** 0.7	1.9	1.3	0.6 0.6	
0 (%)	67.3	81.1	-13.8 ** 6.0	76.1	77.8	-1.8 5.6	
1-4 (%)	9.4	9.2	0.2 3.9	8.8	12.0	-3.2 4.0	
5 or more (%)	23.3	9.7	13.6 *** 5.1	15.1	10.2	4.9 4.4	
Total hours spent	3.9	1.0	2.9 ** 1.2	2.9	1.4	1.5 * 0.8	
Sample size (total = 444)	112	102		112	118		

(continued)

Appendix Table F.6 (continued)

SOURCES: MDRC calculations from Chaffey College transcript and Success Center participation data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

A two-tailed t-test was applied to differences of impacts between subgroups. Statistical significance levels are indicated as: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Estimates are adjusted by round of random assignment.

The Opening Doors Demonstration
Appendix Table F.7
Transcript Outcomes, by Probation Status at Random Assignment, First and Second Program Semesters:
Enhanced Opening Doors Program
Chaffey College Report

Outcome	Students on Probation One Semester			Students on Probation Two or More Semesters			Difference Between Subgroups
	Program Group	Control Group	Difference (Impact) Standard Error	Program Group	Control Group	Difference (Impact) Standard Error	
<u>First program semester</u>							
Registered for any courses (%)	87.4	88.3	-0.8 4.5	83.0	74.6	8.4 5.4	
Number of courses attempted	3.4	2.8	0.6 ** 0.2	3.1	2.1	1.0 *** 0.2	
Number of credits attempted	8.2	8.1	0.1 0.6	7.1	6.3	0.8 0.6	
Regular credits	4.9	7.2	-2.3 *** 0.6	4.6	6.1	-1.5 ** 0.6	
Non-degree credits ^a	3.3	0.9	2.4 *** 0.3	2.5	0.3	2.2 *** 0.2	
Passed all courses (%)	29.6	17.5	12.1 ** 5.8	23.2	20.4	2.8 5.5	
Number of courses passed	2.2	1.2	1.0 *** 0.2	1.7	1.0	0.7 *** 0.2	
Withdrawn from any courses (%)	32.3	35.1	-2.9 6.5	33.0	29.7	3.4 6.2	
Number of course withdrawals	0.5	0.5	0.0 0.1	0.6	0.5	0.0 0.1	
Number of credits earned	5.3	3.3	2.0 *** 0.6	3.8	2.9	0.8 0.5	
Regular credits	2.9	3.0	-0.1 0.5	2.1	2.8	-0.6 0.5	
Non-degree credits ^a	2.4	0.3	2.1 *** 0.3	1.6	0.2	1.5 *** 0.2	††
Term GPA ^b (%)							
No GPA ^c	20.6	19.5	1.1 5.5	22.2	36.6	-14.4 ** 6.0	†
0-1.9	39.0	59.1	-20.1 *** 6.7	37.6	41.4	-3.8 6.5	†
2.0 or higher	40.4	21.4	19.0 *** 6.3	40.2	22.0	18.2 *** 6.0	

(continued)

Appendix Table F.7 (continued)

Outcome	Students on Probation One Semester			Students on Probation Two or More Semesters			Difference Between Subgroups	
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group		Difference (Impact)
Degree-applicable term GPA ^d (%)								
No GPA ^e	36.8	21.4	15.4 **	6.2	38.3	36.5	1.8	6.4
0-1.9	39.0	57.1	-18.1 ***	6.8	37.7	42.2	-4.6	6.5
2.0 or higher	24.2	21.5	2.8	5.8	24.0	21.2	2.8	5.5
<u>Second program semester</u>								
Registered for any courses (%)	71.3	59.9	11.4 *	6.5	62.5	59.3	3.3	6.5
Number of courses attempted	2.5	1.9	0.6 **	0.3	2.0	1.9	0.1	0.2
Number of credits attempted	7.3	5.6	1.7 **	0.8	5.7	5.6	0.1	0.7
Regular credits	5.8	5.2	0.6	0.7	4.7	5.4	-0.7	0.7
Non-degree credits ^a	1.5	0.4	1.1 ***	0.3	1.0	0.2	0.9 ***	0.2
Passed all courses (%)	23.3	13.6	9.7 *	5.3	22.2	14.5	7.7	5.1
Number of courses passed	1.5	0.8	0.7 ***	0.2	1.1	0.9	0.2	0.2
Withdrawn from any courses (%)	20.2	27.8	-7.6	5.8	21.7	27.8	-6.1	5.6
Number of course withdrawals	0.3	0.4	-0.1	0.1	0.4	0.4	0.0	0.1
Number of credits earned	4.3	2.3	2.0 ***	0.6	3.2	2.7	0.5	0.5
Regular credits	3.2	2.2	1.0 *	0.5	2.6	2.6	0.0	0.5
Non-degree credits ^a	1.1	0.1	1.0 ***	0.2	0.6	0.0	0.5 ***	0.1
Term GPA ^b (%)								
No GPA ^c	32.3	46.9	-14.6 **	6.7	42.8	45.0	-2.2	6.6
0-1.9	39.9	35.6	4.3	6.7	26.8	34.8	-8.0	6.1
2.0 or higher	27.8	17.5	10.3 *	5.8	30.4	20.3	10.2 *	5.7

(continued)

Appendix Table F.7 (continued)

Outcome	Students on Probation One Semester			Students on Probation Two or More Semesters			Difference Between Subgroups	
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group		Difference (Impact)
Degree-applicable term GPA ^d (%)								
No GPA ^e	36.8	46.9	-10.1	6.8	50.0	44.9	5.0	6.6
0-1.9	39.9	35.6	4.3	6.7	25.9	34.8	-8.9	6.1
2.0 or higher	23.3	17.5	5.8	5.6	24.2	20.3	3.9	5.5
Sample size (total = 444)	112	102			112	118		

SOURCE: MDRC calculations from Chaffey College transcript data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent, ** = 5 percent, * = 10 percent.

A two-tailed t-test was applied to differences of impacts between subgroups. Statistical significance levels are indicated as: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Estimates are adjusted by round of random assignment.

GPA = grade point average.

^aNon-degree credits include developmental credits and credits for the College Success courses and other college preparatory courses.

^bGrades earned in all courses except for developmental courses are used in the calculation of term GPA.

^cThe “No GPA” category includes students who did not enroll and students who took only developmental courses, which are not included in GPA calculations.

^dGrades earned only in degree-applicable courses, which excludes the College Success course and other non-degree-applicable courses, are used in this calculation of GPA.

^eThe “No GPA” category includes students who did not enroll and students who took only non-degree-applicable courses, which are not included in degree-applicable calculations.

The Opening Doors Demonstration
Appendix Table F.8
Cumulative Outcomes, by Probation Status at Random Assignment, First and Second Program Semesters:
Enhanced Opening Doors Program
Chaffey College Report

Outcome	Students on Probation One Semester			Students on Probation Two or More Semesters			Difference Between Subgroups
	Program Group	Control Group	Difference (Impact) Standard Error	Program Group	Control Group	Difference (Impact) Standard Error	
Registered for any courses (%)	91.0	93.2	-2.1 3.7	85.7	83.1	2.6 4.8	
Number of semesters registered	1.6	1.5	0.1 0.1	1.5	1.3	0.1 0.1	
Number of credits earned	9.6	5.6	4.0 *** 1.0	7.0	5.6	1.4 1.0 †	
Regular credits	6.0	5.2	0.9 0.9	4.8	5.4	-0.6 0.9	
Non-degree credits ^a	3.5	0.4	3.1 *** 0.4	2.2	0.2	2.0 *** 0.2 ††	
Cumulative GPA ^b (%)							
No GPA ^c	14.3	13.7	0.7 4.8	18.7	25.5	-6.8 5.5	
0-1.9	50.7	64.9	-14.3 ** 6.7	43.8	49.1	-5.4 6.6	
2.0 or higher	35.0	21.4	13.6 ** 6.2	37.5	25.4	12.1 ** 6.1	
Cumulative degree-applicable GPA ^d (%)							
No GPA ^e	23.3	14.6	8.7 5.4	27.6	25.5	2.2 5.9	
0-1.9	47.1	64.0	-16.9 ** 6.8	41.2	49.9	-8.7 6.6	
2.0 or higher	29.6	21.4	8.2 6.0	31.2	24.7	6.5 5.9	
Sample size (total = 444)	112	102		112	118		

(continued)

Appendix Table F.8 (continued)

SOURCE: MDRC calculations from Chaffey College transcript data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

A two-tailed t-test was applied to differences of impacts between subgroups. Statistical significance levels are indicated as: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Estimates are adjusted by round of random assignment.

GPA = grade point average.

^aNon-degree credits include developmental credits and credits for the College Success courses and other college preparatory courses.

^bThis cumulative GPA does not include grades from courses taken before random assignment. It only includes grades earned in courses taken from the program semesters, and excludes credit from the College Success course and other non-degree-applicable courses.

^cThe “No GPA” category includes students who did not enroll and students who took only developmental courses, which are not included in GPA calculations.

^dThis cumulative GPA does not include grades from courses taken before random assignment. It is based on credit-bearing courses taken from the first and second program semesters. Courses in which students did not receive a passing grade and subsequently repeated are not included in the cumulative GPA calculations, per Chaffey College policy.

^eThe “No GPA” category includes students who did not enroll and students who took only non-degree-applicable courses, which are not included in degree-applicable calculations.

The Opening Doors Demonstration

Appendix Table F.9

Probation Status, by Probation Status at Random Assignment, First and Second Program Semesters:
Enhanced Opening Doors Program

Chaffey College Report

Outcome (%)	Students on Probation One Semester			Students on Probation Two or More Semesters			Difference Between Subgroups	
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group		Difference (Impact)
<u>At end of first program semester</u>								
Good academic standing	28.7	13.6	15.1 ***	5.6	15.0	11.1	3.9	4.4
On probation ^a	58.8	74.7	-16.0 **	6.4	68.0	63.5	4.5	6.3
No status ^b	12.6	11.7	0.8	4.5	17.0	25.4	-8.4	5.4
<u>At end of second program semester</u>								
Good academic standing	26.0	14.6	11.4 **	5.5	22.3	12.7	9.5 *	5.0
On probation ^a	45.3	45.4	-0.1	6.9	40.3	46.5	-6.3	6.6
No status ^b	28.7	40.1	-11.4 *	6.5	37.5	40.7	-3.3	6.5
<u>Summary outcomes</u>								
Ever in good academic standing	36.8	18.5	18.3 ***	6.1	24.1	13.6	10.4 **	5.1
Never in good academic standing	54.3	74.7	-20.5 ***	6.5	61.6	69.5	-7.8	6.3
No status ^b	9.0	6.8	2.1	3.7	14.3	16.9	-2.6	4.8
Sample size (total = 444)	112	102			112	118		

SOURCE: MDRC calculations using Chaffey College probation data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

A two-tailed t-test was applied to differences of impacts between subgroups. Statistical significance levels are indicated as: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Estimates are adjusted by round of random assignment.

^aThis outcome includes academic probation (attempted at least 12 credits since starting at the college and has a cumulative grade point average below 2.0, or below a C average) and progress probation (attempted at least 12 credits and has completed less than half of the credits attempted).

^bThe “No status” category includes sample members who were not enrolled during the semester and therefore did not have an assigned probation status.

Appendix G

Supplementary Tables for Chapter 6

The Opening Doors Demonstration
Appendix Table G.1
Program Participation, First and Second Semesters:
Opening Doors Program and Enhanced Opening Doors Program

Chaffey College Report

Outcome	Opening Doors Program			Enhanced Opening Doors Program			Difference Between Programs	
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group		Difference (Impact)
<u>First semester</u>								
Registered for any courses (%)	78.1	77.8	0.4	2.8	85.3	80.9	4.4	3.6
College Success Course I (%)								
Registered for College Success lecture	51.8	2.4	49.4 ***	2.5	72.3	0.5	71.9 ***	3.1
Registered for College Success workshop	51.8	2.2	49.6 ***	2.5	72.3	0.5	71.9 ***	3.1
Success Centers								
Ever visited (%)	57.4	42.9	14.5 ***	3.3	68.8	31.8	37.0 ***	4.4
Total number of visits ^a	7.3	4.3	3.1 ***	0.8	5.5	1.8	3.7 ***	0.7
Total hours spent	8.3	5.4	2.9 ***	1.1	5.7	1.7	4.0 ***	0.9
<u>Second semester</u>								
Registered for any courses (%)	62.7	62.5	0.3	3.2	67.0	59.5	7.4	4.6
Registered for College Success Course II (%)	2.9	0.0	2.9 ***	0.8	29.0	0.0	29.0 ***	3.1
Success Centers								
Ever visited (%)	27.7	26.5	1.2	3.0	28.6	20.5	8.1 **	4.1
Total number of visits ^a	2.4	1.8	0.6	0.4	2.5	1.3	1.2 ***	0.5
Total hours spent	2.8	2.2	0.6	0.7	3.4	1.2	2.2 ***	0.7
Sample size	448	450			224	220		

(continued)

Appendix Table G.1 (continued)

SOURCES: MDRC calculations from Chaffey College transcript and Success Center participation data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

A two-tailed t-test was applied to differences of impacts between programs. Statistical significance levels are indicated as: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Estimates are adjusted by round of random assignment.

^aDuring the first semester the expected number of visits to the Success Center for the Opening Doors program was nine visits, and the expected number of visits for the Enhanced Opening Doors program was five visits.

**The Opening Doors Demonstration
Appendix Table G.2**

**Transcript Outcomes, First and Second Semesters:
Opening Doors Program and Enhanced Opening Doors Program**

Chaffey College Report

Outcome	Opening Doors Program			Enhanced Opening Doors Program			Difference Between Programs	
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group		Difference (Impact)
<u>First semester</u>								
Registered for any courses (%)	78.1	77.8	0.4	2.8	85.3	80.9	4.4	3.6
Number of courses attempted	3.1	2.6	0.5 ***	0.1	3.2	2.4	0.8 ***	0.2
Number of credits attempted	7.9	7.7	0.3	0.4	7.7	7.2	0.5	0.4
Regular credits	5.9	7.1	-1.2 ***	0.3	4.8	6.6	-1.8 ***	0.4
Non-degree credits ^a	2.0	0.5	1.5 ***	0.1	2.9	0.6	2.3 ***	0.2
Passed all courses (%)	27.0	24.7	2.3	2.9	26.3	19.1	7.2 *	4.0
Number of courses passed	1.9	1.5	0.4 ***	0.1	2.0	1.1	0.9 ***	0.2
Withdrawn from any courses (%)	31.7	29.5	2.2	3.1	32.6	32.3	0.3	4.5
Number of course withdrawals	0.5	0.5	0.1	0.1	0.5	0.5	0.0	0.1
Number of credits earned	4.5	4.1	0.4	0.3	4.5	3.1	1.4 ***	0.4
Regular credits	3.2	3.9	-0.7 **	0.3	2.5	2.9	-0.4	0.3
Non-degree credits ^a	1.3	0.3	1.1 ***	0.1	2.0	0.2	1.8 ***	0.2
Term GPA ^b (%)								
No GPA ^c	27.4	27.6	-0.1	3.0	21.4	28.7	-7.3 *	4.1
0-1.9	38.9	42.4	-3.5	3.3	38.4	49.5	-11.1 **	4.7
2.0 or higher	33.7	30.0	3.6	3.1	40.2	21.8	18.4 ***	4.3

(continued)

Appendix Table G.2 (continued)

Outcome	Opening Doors Program			Enhanced Opening Doors Program			Difference Between Programs	
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group		Difference (Impact)
Degree-applicable term GPA ^d (%)								
No GPA ^c	32.8	28.2	4.6	3.1	37.5	29.6	7.9 *	4.5
0-1.9	38.0	42.4	-4.4	3.2	38.4	49.1	-10.6 **	4.7
2.0 or higher	29.2	29.4	-0.2	3.0	24.1	21.4	2.7	4.0
<u>Second semester</u>								
Registered for any courses (%)	62.7	62.5	0.3	3.2	67.0	59.5	7.4	4.6
Number of courses attempted	1.9	1.9	-0.1	0.1	2.2	1.9	0.3 *	0.2
Number of credits attempted	5.6	5.9	-0.3	0.4	6.5	5.6	0.9 *	0.5
Regular credits	5.3	5.6	-0.3	0.4	5.3	5.3	-0.1	0.5
Non-degree credits ^a	0.3	0.3	0.0	0.1	1.3	0.3	1.0 ***	0.2
Passed all courses (%)	19.0	19.8	-0.8	2.6	22.8	14.1	8.7 **	3.7
Number of courses passed	1.1	1.1	0.0	0.1	1.3	0.9	0.5 ***	0.1
Withdrawn from any courses (%)	27.7	27.3	0.3	3.0	21.0	27.7	-6.7 *	4.1
Number of course withdrawals	0.4	0.5	-0.1	0.1	0.4	0.4	-0.1	0.1
Number of credits earned	3.1	3.1	0.0	0.3	3.8	2.5	1.3 ***	0.4
Regular credits	2.9	2.9	0.0	0.3	2.9	2.4	0.5	0.4
Non-degree credits ^a	0.2	0.1	0.0	0.1	0.8	0.1	0.8 ***	0.1
Term GPA ^b (%)								
No GPA ^c	43.5	45.3	-1.8	3.3	37.5	45.9	-8.4 *	4.7
0-1.9	31.7	28.7	3.0	3.1	33.5	35.0	-1.5	4.5
2.0 or higher	24.8	26.0	-1.3	2.9	29.0	19.1	9.9 **	4.0

(continued)

Appendix Table G.2 (continued)

Outcome	Opening Doors Program			Enhanced Opening Doors Program			Difference Between Programs	
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group		Difference (Impact)
Degree-applicable term GPA ^d (%)								
No GPA ^e	44.2	46.4	-2.2	3.3	43.3	45.9	-2.6	4.7
0-1.9	31.3	27.1	4.2	3.0	33.0	35.0	-2.0	4.5
2.0 or higher	24.5	26.5	-1.9	2.9	23.7	19.1	4.6	3.9
Sample size	448	450			224	220		

SOURCE: MDRC calculations from Chaffey College transcript data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent, ** = 5 percent, * = 10 percent.

A two-tailed t-test was applied to differences of impacts between programs. Statistical significance levels are indicated as: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Estimates are adjusted by round of random assignment.

GPA = grade point average.

^aNon-degree credits include developmental credits and credits for the College Success courses and other college preparatory courses.

^bGrades earned in all courses except for developmental courses are used in the calculation of term GPA.

^cThe “No GPA” category includes students who did not enroll and students who took only developmental courses, which are not included in GPA calculations.

^dGrades earned only in degree-applicable courses, which excludes the College Success course and other non-degree-applicable courses, are used in this calculation of GPA.

^eThe “No GPA” category includes students who did not enroll and students who took only non-degree-applicable courses, which are not included in degree-applicable calculations.

The Opening Doors Demonstration

Appendix Table G.3

Cumulative Outcomes, First and Second Semesters:
Opening Doors Program and Enhanced Opening Doors Program

Chaffey College Report

Outcome	Opening Doors Program			Enhanced Opening Doors Program			Difference Between Programs	
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group		Difference (Impact)
Registered for any courses (%)	82.8	83.3	-0.5	2.5	88.4	87.7	0.7	3.1
Number of semesters registered	1.4	1.4	0.0	0.1	1.5	1.4	0.1 *	0.1
Number of credits earned	7.6	7.2	0.4	0.5	8.3	5.6	2.7 ***	0.7
Regular credits	6.1	6.8	-0.7	0.5	5.4	5.3	0.1	0.6
Non-degree credits ^a	1.5	0.4	1.1 ***	0.1	2.9	0.3	2.6 ***	0.2
Cumulative GPA ^b (%)								
No GPA ^c	22.1	21.3	0.8	2.8	16.5	20.0	-3.5	3.7
0-1.9	41.4	42.2	-0.8	3.3	47.3	56.3	-9.0 *	4.7
2.0 or higher	36.6	36.5	0.1	3.2	36.2	23.6	12.5 ***	4.3
Cumulative degree-applicable GPA ^d (%)								
No GPA ^e	25.4	21.8	3.7	2.8	25.4	20.5	5.0	4.0
0-1.9	41.4	42.6	-1.3	3.3	44.2	56.3	-12.1 **	4.7
2.0 or higher	33.2	35.6	-2.4	3.1	30.3	23.2	7.2 *	4.2
Sample size	448	450			224	220		

(continued)

Appendix Table G.3 (continued)

SOURCE: MDRC calculations from Chaffey College transcript data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

A two-tailed t-test was applied to differences of impacts between programs. Statistical significance levels are indicated as: ††† = 1 percent; †† = 5 percent; † = 10 percent.

Estimates are adjusted by round of random assignment.

GPA = grade point average.

^aNon-degree credits include developmental credits and credits for the College Success courses and other college preparatory courses.

^bThis cumulative GPA does not include grades from courses taken before random assignment. It is based on credit-bearing courses taken from the first and second semesters. Courses in which students did not receive a passing grade and subsequently repeated are not included in cumulative GPA calculations, per Chaffey College policy.

^cThe “No GPA” category includes students who did not enroll and students who took only developmental courses, which are not included in GPA calculations.

^dThis cumulative GPA does not include grades from courses taken before random assignment. It only includes grades earned in courses taken from the program semesters, and excludes credit from the College Success course and other non-degree-applicable courses.

^eThe “No GPA” category includes students who did not enroll and students who took only non-degree-applicable courses, which are not included in degree-applicable GPA calculations.

The Opening Doors Demonstration
 Appendix Table G.4
 Probation Status, First and Second Semesters:
 Opening Doors Program and Enhanced Opening Doors Program
 Chaffey College Report

Outcome (%)	Opening Doors Program			Enhanced Opening Doors Program			Difference Between Programs
	Program Group	Control Group	Standard Error	Program Group	Control Group	Standard Error	
<u>At end of first semester</u>							
Good academic standing	29.0	25.2	3.8	21.9	12.3	9.6 ***	3.6
On probation ^a	49.2	52.6	-3.4	63.4	68.6	-5.2	4.5
No status ^b	21.9	22.2	-0.4	14.7	19.1	-4.4	3.6
<u>At end of second semester</u>							
Good academic standing	28.8	23.6	5.2 *	24.1	13.6	10.5 ***	3.7
On probation ^a	33.9	38.9	-4.9	42.9	45.9	-3.0	4.7
No status ^b	37.3	37.5	-0.3	33.0	40.5	-7.4	4.6
<u>Summary outcomes</u>							
Ever in good academic standing	35.0	30.7	4.3	30.4	15.9	14.5 ***	4.0 ††
Never in good academic standing	47.8	52.6	-4.8	58.0	71.8	-13.8 ***	4.5
No status ^b	17.2	16.7	0.5	11.6	12.3	-0.7	3.1
Sample size	448	450		224	220		

(continued)

Appendix Table G.4 (continued)

SOURCE: MDRC calculations using Chaffey College probation data.

NOTES: Rounding may cause slight discrepancies in sums and differences.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: *** = 1 percent, ** = 5 percent, * = 10 percent.

A two-tailed t-test was applied to differences of impacts between programs. Statistical significance levels are indicated as: ††† = 1 percent, †† = 5 percent, † = 10 percent.

Estimates are adjusted by round of random assignment.

^aThis outcome includes academic probation (attempted at least 12 credits since starting at the college and has a cumulative grade point average below 2.0, or below a C average) and progress probation (attempted at least 12 credits and has completed less than half of the credits attempted).

^bThe “No status” category includes sample members who were not enrolled during the semester and therefore did not have an assigned probation status.

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