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FINDING SUCCESS IN THE "CAULDRON OF COMPETITION:'
THE EFFECTIVENESS OF ACADEMIC SUPPORT PROGRAMS

Leslie Yalof Garfield* and Kelly Koenig Levi**

I. INTRODUCTION

This summer, Justice Clarence Thomas raised concerns about the success of law students who are admitted into law school under an affirmative action admissions policy. In Grutter v. Bolinger, Justice Thomas asserted that the consideration of race or ethnicity as a plus factor in a particular applicant's file has the effect of admitting to law school students who are "overmatched" by many of their classmates. As a result, Justice Thomas wrote, "These overmatched students . . . find that they cannot succeed in the cauldron of competition." Indeed, nothing can be further from the truth.

For the past three decades, law schools throughout the United States and Canada have adopted Academic Support Programs (ASPs), which are designed to assist law students, including those "overmatched" students to whom Justice Thomas referred in Grutter. These programs

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3. Id. at 2362 (Thomas, J., concurring in part and dissenting in part).
4. Id. ("These overmatched students take the bait, only to find that they cannot succeed in the cauldron of competition. And this mismatch crisis is not restricted to elite institutions.").
5. Id.
provide academic assistance to students whose academic credentials and objective standardized test scores are not necessarily on par with the scores and credentials of most of the entering class.\textsuperscript{6} This article provides an in-depth study of these programs and concludes that with the benefit of ASPs, students who are admitted to law school with lower objective scores than a majority of their classmates are able to compete on an even playing field.\textsuperscript{7}

In the late 1970s and early 1980s, partly in response to affirmative action admissions policies,\textsuperscript{8} law schools recognized both the moral and

\begin{warning}\	extsuperscript{6} As a general matter, affirmative action admissions programs can tip the balance for an applicant whose Law School Admissions Test (LSAT) and undergraduate grade point average (GPA) are less competitive than the scores of most of the entering class. An ASP provides a host of programs that provide skills training services to academically at-risk students. Most schools identify a student as “academically at-risk” prior to the student’s matriculation, based on his or her LSAT score and undergraduate GPA.

\textsuperscript{7} See infra Sections IV and V.


Despite the success of the Harvard summer program, concerned politicians, government officials, and educators found that the school’s best efforts remained insufficient to address the fact that under representation of disadvantaged groups still persisted in the legal field nationwide. In response, the Office of Economic Opportunity sponsored a series of meetings with leading legal educators. These meetings led to the creation of a nationwide pilot program known as CLEO, which stands for the Council on Legal Education Opportunity. Nancy Fulop, The 1969 CLEO Summer Institute Reports: A Summary, U. Toledo. L. Rev. 633, 634 (1970).

CLEO was designed to accomplish goals similar to those of the Harvard summer program, but on a larger scale. Id. at 638. CLEO set up identical programs at law schools in seven regions throughout the country. Kathy L. Cerminara, Remembering Arthur: Some Suggestions for Law School Academic Support Programs, 21 Thurgood Marshall L. Rev. 249, 262–63 (1996). The program took the form of a six-week institute, which replicated the first semester of law school. Pamela Edwards, The Culture of Success: Improving the Academic Success Opportunities for Multicultural Students in Law School, 31 New Eng. L. Rev. 739, n.170 (1997) (page numbers not available). Today, these summer institutes continue
the practical dilemma of admitting students whose LSAT scores and undergraduate grade point averages (GPAs) were not competitive when compared with the scores of the rest of the entering class. It was felt that students with lower credentials were unable to compete academically; indeed, many students failed out of school, causing schools to lose the additional two years of revenue they had anticipated receiving from the matriculating student. More importantly, many administrators were left wondering whether it was fair to admit students who were unlikely to succeed in law school. These concerns gave birth to the academic support movement among law schools.

In 1989, recognizing a groundswell of academic support programs in law schools, the Law School Admissions Council (LSAC) initiated the national academic support movement by bringing together academic support professionals from law schools across the country. Since that time, there has been a proliferation of ASPs. Although the LSAC and most law schools have invested significant resources into developing and offering ASPs, few studies have evaluated the effectiveness of these programs.

In a form similar to the original design of the Harvard summer program. Shortly after the creation of CLEO, law schools began to devise their own minority recruitment programs, many of which took the form of affirmative action admissions programs. These programs followed Justice Powell’s view in Regents of University of California v. Bakke, which stated that a graduate school admissions program could consider race as a factor in its admissions process. As a result, law schools began admitting students whose admissions files suggested that they were likely to become respected attorneys, but whose objective criteria, such as LSAT scores and undergraduate GPAs, were not competitive with the scores of the majority of the entering class. See Susan Sturm & Lani Guinier, The Future of Affirmative Action: Reclaiming the Innovative Ideal, 84 Cal. L. Rev. 953, 961–62 (1996); Garfield, at 491. Affirmative action admissions policies provided another vehicle for enhancing minority representation in the classroom. While CLEO and affirmative action admission policies helped minority students gain admission to law school, they did not adequately prepare students for competing with many of their classmates who had been more successful in their undergraduate academic careers, at least as indicated by objective measures. Consequently, many CLEO students, as well as those admitted under another affirmative action admission program, were academically dismissed, or were forced to withdraw due to academic reasons at the conclusion of the first year. Kristine S. Knaplund & Richard H. Sander, The Art and Science of Academic Support, 45 J. Legal. Educ. 157, 158 (1995). In response to the low retention rate among CLEO students, as well as among minority students generally, many law schools began offering programs to assist these students in fulfilling their academic potential, thus helping them graduate, pass the bar examination, and become lawyers. See Cerminara at 253. These programs are commonly referred to as academic support programs (ASPs).

10. See Knaplund & Sander, at 158 nn. 6, 8.
11. See Knaplund & Sander, at 158 n. 8.
12. A full-day mini-workshop on academic support took place at the 1989 Association of American Law School’s (AALS) annual conference. Simultaneously, the LSAC committee on minority affairs began its initiative to promote the proliferation of ASPs by retaining a consultant to study and assist with the development of ASPs. See Lustbader, supra n. 8, at 842.
13. See Knaplund & Sander, supra n. 8.
With a grant from LSAC, the authors evaluated the effectiveness of ASPs in relation both to law schools and to law students. This comprehensive study is meant to help legal educators better evaluate whether there is an appropriate return on their investment of significant resources in academic support, and further, to assist educators in the creation of such programs and in the identification of the most appropriate candidates for academic support. In addition to providing an evaluation of how ASPs work and whom they best serve, the authors propose a statistical model which, through input of data, will enable others to evaluate the success of any school's ASP.

Of course, success is a highly subjective term that various ASP theorists measure differently. One can best define success, however, in terms of the general pedagogical purpose and goals of the ASP movement. ASPs are premised on the notion that students who enter law school with objective credentials that are inferior to those of the majority of their class, are academically at-risk of performing at the bottom of their class or in the worst case, of not achieving the minimum GPA necessary to remain in school following the first academic year. In its broadest sense, the purpose of ASPs is to provide assistance to academically at-risk students by helping them acquire the skills necessary to compete better with their more proficient peers. The primary goal of ASPs, therefore, is to increase the retention rate of academically at-risk students and, ideally, to help these students achieve law school grades that are competitive with those of the rest of their entering class. However, as law schools' reputations are increasingly influenced by bar exam pass rates, law schools have expanded the criteria for measuring success.


15. Pre-law indicators include, but are not limited to, LSAT score, undergraduate GPA, years out of college, part-time/full-time student status, and ethnicity.

16. Knaplund & Sander, supra n. 8, at 161. (A common goal of ASPs is to "[attempt] to improve the students' learning skills, so that they will be better able to digest future material and remain competitive with other students.").

17. Each year, U.S. News & World Report ranks law schools throughout the country into four tiers; and bar passage is one element considered in the ranking. Although they result from an imperfect methodology, U.S. News & World Report rankings are deemed important by potential students,
the effectiveness of their ASP's to include an ASP student's ability to pass the bar exam.\textsuperscript{18}

Ultimately, to ascertain whether a school's ASP is successful, ASP students should be compared to non-ASP students in the areas of retention rate, mean GPA, and bar pass rate. This study evaluated these measures from both a statistical and a theoretical standpoint. The results from the study suggest that, at least at the school in which this study took place, an ASP significantly enhances an academically at-risk student's ability to succeed in law school.

This study focused exclusively on Pace Law School's ASP over the five-year period from 1997–2002. The Pace ASP is representative of most sophisticated law school ASPs.\textsuperscript{19} Pace offers a comprehensive ASP to a variety of students, some of whom are invited to participate based on pre-law indicators. The diversity of the students in the Pace program was an added benefit to the study because it helped the authors to evaluate not only whether students benefit from an ASP, but also whether one particular group of students with similar individual qualities, such as ethnicity, part-time/full-time student status, gender, or socio-economic status, tend to benefit more from an ASP than do others.

This article provides an in-depth analysis of our comprehensive study of the Pace ASP. Section II of the article discusses the purpose and design of ASPs generally, and Pace Law School's program specifically. Section III describes the research design, methodology, and procedures used for this study. Section IV evaluates and analyzes the findings, with an in-depth analysis of the impact each service yields to ASP students, as well as the statistical significance of such benefits. Section V evaluates the importance of background criteria and the impact that such variables have on ASP participants and non-participants. Section V also discusses whether any of these background variables allow some students to derive a greater benefit from the program than other students participating in the same service. Section VI elaborates on the benefits of participation in an ASP, while Section VII elaborates on the impact of background variables on the performance of students.

This article suggests that ASP services benefit a wide variety of students, and that the more directly a student works with an academic attorneys, judges, and the public alike. This, therefore, is one factor causing law schools concern over their yearly bar pass rate. See U.S. News & World Report, Law School Rankings and Articles <http://www.usnews.com/usnews/gradrankings/law/lawindex_brief.php> (accessed June 25, 2003).

\textsuperscript{18} Each summer, LSAC funds at least one ASP conference. In June 2001, the Capital Law School held a conference focusing on academic support programs. In July 2003, the Texas Wesleyan University School of Law hosted a similar conference. Indeed, ASPs are increasingly focused towards assisting students in passing the bar.

\textsuperscript{19} See infra Section III.
support professional, the greater the likelihood that he or she will realize success. It also discusses the impact of student background criteria on ASP participants and non-participants, concluding that a student's LSAT score, undergraduate GPA, gender, ethnicity, socio-economic status, law school GPA, and part-time/full-time student status can, on occasion, influence academic success. No background factor, however, enabled any ASP student to receive a greater benefit from participation in the ASP than other ASP students who participated in the same service.

In considering certain variables and their impact on performance, this article offers suggestions that law schools can take into account when making admission and curriculum decisions, and when selecting students to participate in ASPs. In addition, the authors developed a research model that other schools can use to evaluate the success of their own programs. This model is significant in that, to the best of our knowledge, it is the first model developed to allow schools to scientifically assess the benefits of the resources they allocate to ASPs. The model appears in Section VIII. Finally, Section IX offers conclusions and recommendations.

II. ACADEMIC SUPPORT PROGRAMS: MODELS FOR ASSISTING ACADEMICALLY AT-RISK STUDENTS

Academic Support Programs are sponsored by educational institutions20 to improve the academic performance of two types of students: those who are identified as academically at-risk prior to their matriculation21 and those who, after their first semester at law school, have demonstrated that they are at risk of failing. While many law schools throughout the United States and Canada provide some form of an ASP to their students, there is a great disparity among these programs—particularly with regard to the form that the programs take.22

20. Many undergraduate and graduate schools offer ASPs or centers. For example, Pace University runs a Tutorial Services Center, which provides tutors to undergraduate students for substantive subjects and writing. For other examples of undergraduate ASPs, see University of Maryland University College, Academic Support Program <http://www.umuc.edu/prog/upg/asp/> (accessed June 4, 2003); Dartmouth College, Integrated Academic Support Program <http://www.dartmouth.edu/~firstyear/students/learning/iasp.html> (last updated Sept. 25, 2001); Emory College, Academic Support Program <http://www.emory.edu/collegelacademicsupport> (accessed June 4, 2003).

21. Because ASP programs have their roots in minority-based outreach programs, many schools initially used LSAT scores, undergraduate GPAs, and ethnic or racial classifications to identify program participants. See Amana, supra n. 8; see also Peters, supra n. 8; Bannai & Eaton, supra n. 8, at 821; Lustbader, supra n. 8, at 839.

22. See infra, nn. 26–41 and accompanying text.
A. ASP Program Designs at the National Level

The level of ASP assistance that schools provide to students varies significantly among law schools. Many, if not most, law schools in the United States and Canada gear their ASPs toward three groups of students: (1) pre-matriculated students, (2) first-year students, and (3) upper-level students. The programs are designed to give students a "heads-up" on the law school experience. Most schools focus on first-year and upper-level programs, as does this article.

First-year ASPs vary among schools, particularly with respect to the method of student selection, program design, and school funding. ASP professionals have identified three program design components that are essential to an effective ASP: (1) a workshop series, (2) individual skills sessions or tutoring, and (3) small study groups led by teaching assistants. Although programs differ from school to school, these three components and their general themes are common to all.

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23. Few schools offer pre-matriculated student programs; those that do typically run their programs during the weeks prior to law school entry.

24. The programs for entering students typically run in the weeks prior to matriculation for the first-year law students and have their genesis in the pre-ASP movement. CLEO was designed to help disadvantaged students make the transition from undergraduate school to law school, with a focus on improving the anticipated academic success of these students. Although current summer programs closely model the CLEO in their design, their classes include a larger and more diverse pool of incoming students. Brooklyn Law School, for example, offers a seven-week summer course that is open to minority students, students who have been graduated from their undergraduate institution 10 years or more, students who speak English as a second language, and students with physical or learning disabilities. See Brooklyn Law School, Academic Success Program <http://www.brooklaw.edu/students/success/summer.php> (last updated Feb. 28, 2002). The University of Denver and UCLA College of Law invite students to their summer programs if a student's pre-law indicators, such as his or her GPA or LSAT score, indicate that he or she may benefit from extra assistance. See University of Denver College of Law, Academic Support Program <http://www.law.du.edu/aap/summer.htm> (accessed Apr. 9, 2003); see E-mail from Kristen Holmquist, Lecturer in Law, UCLA College L., to Kelly Levi, Adjunct Prof. and Dir. of Academic Support, Pace L. Sch. (Apr. 11, 2003) (copy on file with authors). Other schools choose to open their summer programs to all incoming students. See E-mail from Herbert Ramy, Dir. of Academic Support Program, Suffolk L. Sch., to Kelly Levi, Adjunct Prof. and Dir. of Academic Support, Pace L. Sch. (Apr. 10, 2003) (copy on file with authors).

Schools that offer programs for entering students all use similar program designs. For example, most summer programs are voluntary. Cf. E-mail from Jennifer Kamita, Dir. of Academic Support, Loyola L. Sch. L.A., to Kelly Levi, Adjunct Prof. and Dir. of Academic Support, Pace L. Sch. (Apr. 10, 2003) (copy on file with authors). In addition, the programs all seem to focus on developing the law school skills that students need to succeed in law school and on the state bar exam. These skills include reading and briefing cases, note taking, outlining course materials, exam preparation and exam writing. Some programs concentrate on one set of course materials throughout the program, while others use multiple courses to illustrate the development of these skills. See University of Denver College of Law, Academic Support Program <http://www.law.du.edu/aap/summer.htm> (last updated Mar. 10, 2003) (example of program using one course).

25. The subject of school funding is beyond the scope of this article.
The workshop series offers students the opportunity to attend a variety of presentations, each of which focuses on the development of a specific skill. Generally, workshops are taught by faculty or academic support professionals, and attendance is voluntary.26 For example, Denver College of Law, Suffolk Law School, Northern Kentucky School of Law, DePaul College of Law, Hastings College of the Law, Roger Williams School of Law, Santa Clara Law School, and Miami Law School invite first-semester students to attend bi-weekly or monthly workshops to assist them in developing skills such as time management, case briefing, note taking, outlining, exam taking and improving general study skills.27

In addition to the workshop service, schools such as Denver Law School, Santa Clara School of Law, UCLA Law School, Miami Law School, and Hastings College of Law give first-year students the opportunity to work with upper-level students—often referred to as teaching assistants, teaching fellows, or session leaders28—to enhance skills development and to receive substantive tutoring or legal writing assistance.29 The teaching assistant program allows successful upper-

26. A portion of Roger Williams University School of Law’s workshop program is required during the first-year orientation program. See E-mail from Dennis Tonsing, Dean of Students and Academic Support Dir., Roger Williams U. Sch. L., to Kelly Levi, Adjunct Prof. and Dir. of Academic Support, Pace L. Sch. (Apr. 10, 2003) (copy on file with authors). Most schools with ASPs have some type of mini-program or introduction during orientation. The Chase College of Law orientation program includes a five-day mini-course titled Introduction to Legal Studies. See Northern Kentucky University Salmon P. Chase College of Law, Academic Learning, Support, and Development <http://www.nku.edu/~lawsup/ashand.htm> (last updated Sept. 6, 2002). Loyola Law School of Los Angeles conducts a Legal Methods/Introduction to Legal Reasoning training course during orientation. See Loyola Law School, Academic Support <http://www.lls.edu/academics/acadstat.html> (accessed Apr. 9, 2003).


28. See University of Denver College of Law, supra n. 27; Santa Clara University School of Law, supra n. 27; E-mail from Kristen Holmquist, supra n. 24.

29. Brooklyn Law School, Stetson College of Law, and Miami Law School offer legal writing assistance. See Brooklyn Law School, Academic Success Program <http://www.brooklaw.edu/students/success/writing.php>; Stetson University College of Law, Student Life Handbook Academic
level students to facilitate small groups of first-year students, assisting them in their development of vital law school skills. Generally, third-year students who have performed well in law school overall or in a particular subject meet with a group of first-year students to discuss a particular subject matter. In effect, the ideal teaching assistant program runs like a study group with a knowledgeable leader. Schools often use pre-law school indicators to target specific students for invitation to the teaching assistant programs.\(^\text{30}\) Other schools, however, invite all first-semester students to attend.\(^\text{31}\)

Many academic support professionals meet with first-year, first-semester students on a sporadic and voluntary basis for individual guidance and skills development.\(^\text{32}\) The subject of the individual meeting varies depending on student needs and desires. First-semester students often lack confidence in their understanding and ability. They tend to request individual assistance to confirm that they understand the material and how to apply it. Other students may request individual counseling regarding time management issues, outlining, exam preparation, exam writing, and legal writing.

As first-year students begin their second semester, many ASPs become more specific and targeted. In fact, during the second semester, many programs require or strongly encourage students with certain GPAs to participate in an individual service. For example, Suffolk Law School requires any student who received a grade of C– or below on any exam to work with the academic support office, either via individual instruction or in a group setting.\(^\text{33}\) Similarly, academic support professionals at Brooklyn Law School and the Denver College of Law strongly encourage students with low exam grades to take advantage of individualized academic and personal counseling.\(^\text{34}\) At most schools,
such individual focus takes place concurrently with continued tutoring by the teaching assistant.\textsuperscript{35} Of course, students in academic jeopardy following the first semester are strongly encouraged to continue, or to enroll for the first time, in any available teaching assistant service.

A small number of schools offer an academic support class to first-year students. For example, UCLA College of Law gives students the opportunity to apply for participation in a special section of the Constitutional Law course where students cover not only the same substantive material as do the non-academic support sections, but also focus extensively on individual assignments and exam writing skills.\textsuperscript{36} Selection is based on first-semester grades and an administrative assessment of whether the class would be helpful to the specific student.\textsuperscript{37} Loyola Law School of Los Angeles continues its pre-law summer program, known as Summer Institute, into the first-year curriculum.\textsuperscript{38} Although attendance is still voluntary during the first semester, students have the opportunity to continue in a class setting that focuses on basic legal and analytical skills. Second-semester participants are chosen on the basis of first-semester grades.\textsuperscript{39} The Hastings College of Law allows students to take a legal analysis course for academic credit. This course is designed to help students to develop and refine the analytical and exam writing skills that are necessary for success throughout the first-year and upper-level curriculum.\textsuperscript{40} Northern Kentucky University (Chase College of Law) requires first-year students to take Basic Legal Skills, a course which covers various skills including case reading and synthesis, objective and persuasive legal writing, and statutory analysis.\textsuperscript{41}

\textsuperscript{35} See e.g., Santa Clara University School of Law, Student Resources <http://www.scu.edu/law/resources/academic_success.html> (accessed Apr. 9, 2003).
\textsuperscript{36} See E-mail from Kristin Holmquist, supra n. 24.
\textsuperscript{37} Id.
\textsuperscript{38} See Loyola Law School, supra n. 26; E-mail from Jennifer Kamita, supra n. 24.
\textsuperscript{39} See Loyola Law School, supra, n. 26.
\textsuperscript{40} See University of California Hastings College of Law, supra n. 27.
\textsuperscript{41} ASPs have expanded to include services to upper-level students. See Garfield, supra n. 8. Law schools have concluded that, by refining their analytical skills throughout law school, students are more satisfied with their academic careers, better able to retain information, and more likely to pass the bar. Nearly all schools with ASPs invite upper-level students to continue to meet with academic support staff—sometimes regularly and sometimes infrequently. A growing number of schools, however, require or strongly encourage specific upper-level students to engage in academic support services. At Suffolk Law School and Denver School of Law, upper-level students in academic jeopardy are required to meet with an academic support instructor on an individual basis. See E-mail from Herbert Ramy, supra n. 24; E-mail from Dan Wilson, Dir. of Academic Achievement Program, Denver L. Sch., to Kelly Levi, Adjunct Prof. and Dir. of Academic Support, Pace L. Sch. (Apr. 10, 2003) (copy on file with authors). Similarly, Widener University School of Law requires all second year-students with a GPA below 2.3 to take a three-credit course titled Intensive Legal Analysis, which allows students (1) to perform various writing assignments and (2) to meet
B. The Pace Academic Support Program Design

Pace Law School, the setting for this study, offers a comprehensive ASP. The program began in 1990 with the goal of retaining students, particularly minority students, who were admitted under the school’s affirmative action admissions program. Initially, the program focused on first-year students by offering them individual and group services, which were the genesis of the current program. Today, the Pace ASP includes three fundamental programs for first-year students: (1) the Individual Skills Development (ISD), (2) the First Year Skills Workshop Series (Workshop Series), and (3) the Dean’s Scholar Program.

As the goals of Pace’s ASP have expanded, so too has the program. The current program includes a pre-law summer program, an ISD service for upper-level students, an upper-level course that includes a mandatory skills component for second-year students who have a cumulative GPA below 2.50, and an optional supplemental bar individually with the professor regularly during the semester, while simultaneously covering important substantive material such as Article II of the Uniform Commercial Code. See E-mail from Teresa Wallace, supra n. 30. Loyola Law School of Los Angeles strongly encourages upper-level students on academic probation to enroll in a course titled The Legal Process. This course focuses on a new substantive area of the law each year, but always requires multiple writing assignments and provides substantial written feedback. See E-mail from Jennifer Kamita, supra n. 24. The class is co-taught by an academic support professional and a faculty member. See id. UCLA College of Law requires upper-level students on academic probation to enroll in one of two academic support sections of upper-level courses. See E-mail from Kristen Holmquist, supra n. 24. Students nearing academic probation are strongly encouraged to enroll. Like the corresponding Constitutional Law section for first-year students, upper-level students can participate in Wills and Trusts or Community Property, both of which include an extra hour of skills development each week. See id.

42. See David M. White, The Requirement of Race-Conscious Evaluations of LSAT Score for Equitable Law School Admissions, 12 Berkeley La Raza L.J. 399, 406 (2001) (“Applicants from the five elite colleges who applied to Boalt in the years 1996-1998 included a total of 1,366 students from minority groups. Each student from a minority group was matched with all white students from the same college who also had four-year UGPAs that were nearly identical with the minority student’s (within <plu_min> .10 on a 4.0 scale). The results were remarkably similar to those obtained by Gannon two decades earlier. When compared with white students who graduated from the same elite college with the same GPAs (<plu_min> .10 on a 4.0 scale), black applicants scored an average of 9.30 points lower on the LSAT. Chicanos and Latinos scored 6.87 points lower, and Native Americans scored 3.77 points lower (score scale 120-180).”) The Pace admissions policy at that time was designed to promote diversity in the classroom, but had the effect of admitting students with LSAT scores that were not competitive with the scores of a majority of the class. As a result, these students had a more difficult time competing with their peers. The ASP program grew out of concern that the school was admitting students who were academically at-risk and that such students could not compete and would not remain in school. See E-mail from Angela D’Agostino, Dean for Students, Pace L. Sch., to Leslie Garfield, Assoc. Prof., Pace L. Sch. (Jan. 14, 2004) (copy on file with authors).

43. The Student Enrichment Program (SEP), which runs for three weeks during the summer, is open to all incoming students.

44. The skills-based component is added to the substantive Wills course and Payments course. A tenured faculty member teaches both the substantive course and the skills component. Neither is evaluated in this study.
preparation course available to all students graduating each spring semester.45 Pace, therefore, boasts a comprehensive ASP. Most schools, however, limit formal student programs to first-year students, while offering individual support to upper-level students.46 For this reason, this study focused primarily on Pace Law School's first-year ASP, but also evaluated upper-level students who participated in Pace's ISD service.

The ISD service provides support through independent study with an academic support professional. Participation in an ISD service is open to any entering student. Students generally choose to participate because they desire to seek support from a professional. Pace takes an active role in encouraging participation in this program. First-year students, for example, who earn a GPA below 2.8, and especially those who receive grades near or below the 2.3 GPA that is required to maintain good academic standing, are strongly encouraged to work with the ASP director on a weekly basis.47 Upper-level students with a GPA below 2.8 also receive a letter from the associate dean of academic affairs suggesting that they contact the academic support professional for additional help. Students in the first semester of law school may also choose to work with the academic support professional.48

During the fall semester of a student's first year, the academic support director works with any student—sometimes regularly and sometimes less frequently—to enhance study and preparation skills, including case briefing, outlining, exam preparation and exam writing. Following fall semester finals, the service expands in both scope and breadth. Because students have received first-semester grades, the ISD meetings take the form of reviewing those specific techniques, which arguably influenced the students' exam performance. Students are encouraged to learn the substantive law and practice analytical and exam writing skills through the use of single and multi-issue hypothetical questions throughout the semester. Students are required to dedicate several hours each week, in addition to the time they spend in their ISD

45. The supplemental bar course is open to all graduating students; students with a grade point average at or below 2.9 are strongly encouraged to enroll. The course runs for four days and includes a three-day multistate review course and a New York essay writing workshop. Students contribute a portion of the cost, and Pace Law School subsidizes the rest. Approximately 75-80% of graduating students enroll.

46. See e.g. E-mail from Linda Feldman, supra n. 34; E-mail Dan Wilson, supra n. 34; E-mail from Herb Ramy, supra n. 24.

47. Each year, data compiled following the release of the July Bar exam results demonstrate that students completing Pace Law School with a GPA of 2.8 or below have difficulty passing the New York Bar exam on the first try. In 2002, fewer than 50% of students with a 2.8 passed on the first try. The percent decreased substantially as the GPA decreased.

meetings, to practicing skills such as outlining course materials and drafting essay answers to hypothetical questions that correspond to course materials. The ASP professional reviews the students' outlines and essay answers on a weekly basis to help identify errors and problems. The ASP professional then asks the students to rewrite their work until they acquire the skills that are necessary to self-identify key pitfalls and to write a solid essay. The director then moves to more advanced hypothetical questions, and later to practice exam questions.

The upper-level ISD student generally has two concerns: (1) meeting the minimum GPA requirements for remaining in school, and (2) passing the New York Bar exam. A five-year statistical evaluation of Pace's New York Bar pass rate supports the conclusion that students graduating from Pace with a GPA below 2.8 have difficulty passing the New York Bar exam on the first try. The law school administration, therefore, encourages students in this grade range to focus on further developing analytical and writing skills during their later law school years. As a result, the ASP director works with students in this range to practice writing essays and synthesizing course material throughout the semester. Students meet with the director on a weekly basis, at which time they discuss the student's weekly assignment, which often involves outlining course materials and drafting answers to essay questions.

Pace's Workshop Series is open to first-year students. Like many other ASPs at Pace, this service spans the entire first semester and focuses on a series of skills including: case reading and briefing, note taking, outlining course materials, exam preparation and exam writing. The workshops are offered during the day and evening to accommodate both day and evening students. Students are not required to attend and receive no credit for so doing. Those who do attend, however, are expected to do minimal preparation work and to engage in the workshop discussions. Students who do not attend the fall Workshop Series and who require assistance with these basic skills during the second semester are able to view the Workshop Series on videotape. At Pace, which has offered the Workshop Series for first-semester students since early 1990, students are invited to attend through announcements at student orientation, e-mail notices, and postings on the Pace ASP website.

The final component of the Pace ASP is the Dean's Scholar Program, which is the school's label for its teaching assistant program. The faculty initiated the Dean's Scholar Program to help first-year students.49 Until 2000, admission to the Workshop Series was based on background criteria, including LSAT scores. From fall 2000 forward, the program has been offered to all first-year students.50 Students who attended the live workshops are also given access to these videos.51 In June 2003, Pace renamed the Dean's Scholar Program the Academic Skills Program.

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49. Until 2000, admission to the Workshop Series was based on background criteria, including LSAT scores. From fall 2000 forward, the program has been offered to all first-year students.
50. Students who attended the live workshops are also given access to these videos.
51. In June 2003, Pace renamed the Dean's Scholar Program the Academic Skills Program.
students adjust to the analytical nature of law school learning. The program remains in force and has proved to be a very popular academic support service. Students participate in the Dean’s Scholar Program only by invitation. As a general rule, entering students who represent the bottom third of the class’s incoming LSAT scores are invited, but not required, to attend the Dean’s Scholar Program.

While the academic support professional has the administrative responsibility for the Dean’s Scholar Program, under the program’s design, it is upper-level students who have direct contact with first-year students. These dean’s scholars are top third and fourth-year students who function in a capacity similar to that of teaching assistants, teaching fellows, or session leaders at other schools. They facilitate weekly study groups and offer a weekly office hour for each of the substantive first-year courses. Together with a dean’s scholar, approximately twelve students in each group review the course material by focusing on hypothetical questions and outlining course materials. The goal is for the students to hone their substantive knowledge while developing analytical skills and organizing legal arguments into written documents.

The Dean’s Scholar Program includes a weekly study group for invited students only, as well as a weekly office hour that is open to all students. Although the program runs throughout the year, attendance in both the group sessions and the weekly office hour usually wanes during the spring semester. Furthermore, second-semester students facing academic jeopardy are permitted to participate in the spring Dean’s Scholar Program despite not having been invited to participate during the fall semester.

The various ASP services emphasize the Pace program’s emphasis on skills development. Students are not tutored in any aspect of the program; rather, they are encouraged to learn how to learn the law. Dean’s Scholars are not substantive tutors, but instead seek to help students incorporate the substantive material learned in class into written form in preparation for exams. Likewise, skills, and not substance, are the focus of the Workshop Series. In fact, the substantive materials used in the Workshop Series include a set of criminal law materials that is not

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52. Each semester, Dean’s Scholar students articulate that they enjoy working in a group setting, which allows them to develop relationships with fellow students and to speak to an upper-level student without the fear that they often feel in conversing with a faculty member.

53. In the fall of 1997, entering students with an LSAT of 149 or below were invited to participate in the Dean’s Scholar Program. Those entering in the fall of 1998 with an LSAT of 151 or below, in the fall of 1999 with an LSAT of 147 or below, in the fall of 2000 with an LSAT of 152 or below, and in the fall of 2001 with an LSAT of 149 or below were all invited to participate.

54. Pace Law School includes a part-time day and evening program that allows students to complete law school in four years, rather than three years.
part of the first-year criminal law curriculum. Finally, the Director does not tutor students during the ISD sessions. Rather, students are expected to review the law by way of outlining their course materials, and thereafter, are required to use that knowledge to answer various legal problems in written form.

Because the Pace ASP reflects the components of most law school programs, it serves as the perfect model for an analysis of ASPs generally. On the national level, however, budget constraints and faculty commitments have placed limits on many schools' abilities to offer similarly comprehensive ASPs. For this reason, each component of the Pace ASP is evaluated separately.

III. RESEARCH DESIGN AND METHODOLOGY

A. Research Design

This study was designed as an archival study\(^5\) in which student variables\(^6\) were analyzed to evaluate whether Pace Law School's ASP yields any benefit to student participants. Specifically, the study was designed to investigate whether the ASP has a profound effect on (1) a student's first-semester and subsequent semester GPA or cumulative GPA; (2) a student's likelihood of retention at the school; and (3) a student's ability to pass the New York Bar exam on the first try. The study was conducted by evaluating student performance in the three components of the Pace ASP: participation in the ISD service, participation in the Workshop Series, and participation in the Dean's Scholar Program.

A secondary question, around which the statistical design was modeled, was whether any particular set of student variables supported a greater likelihood of success from the ASP. The variables identified for research included LSAT score, undergraduate GPA, ethnicity, gender, law school GPA,\(^7\) part-time/full-time student status, and socio-economic status.\(^8\) These variables were again considered in terms of the three programs offered through Pace Law School's ASP.

There are concerns that an ASP requires significant financial and professional resources, without much available quantitative support.

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55. An archival study looks at historical records (archives) to measure behaviors and/or events that occurred in the past and, therefore, studies relationships among them.

56. See infra, Section III (B)(4).

57. Law school grade point average is used as a variable to evaluate Bar passage only.

58. See infra Section III (B)(4). An age variable is not included in this study due to difficulties in importing excel data into the Statistical Package for the Social Sciences.
This being the case, the study provides a statistical model that can help other schools assess the effectiveness of their own ASPs and justify their expenditures in such programs. The model design was considered, evaluated, and reshaped at each stage of the research. Because this model is the result of only one study at one school, emphasis was placed on the development of a model that would be workable and adaptable to schools with similar, but not identical, ASPs.

B. Procedures

1. Quantitative Methods

This study employed linear and logistic regression and a range of exploratory data analyses. The exploratory data analyses that were conducted included means, variance, correlations, cross-tabulations with chi-square analyses, and t-tests. Each of these methods of analysis provided a different way of characterizing and understanding the sample. The study then employed analyses of covariance (ANCOVA) and logistic regression to assess the effectiveness of the ASP services.

2. Population and Sample Design

The student sample for this study included students who did and students who did not participate in specific services offered through Pace Law School's ASP over the academic years 1997-2001. The sample was drawn from the pool of regular ASP participants and non-participants at Pace University School of Law, a private law school that provides one of the most comprehensive ASPs in the country. The sample frame consisted of all Pace law students who had regularly participated in the Workshop Series and the Dean's Scholar Program, the ISD service, and those who were eligible to participate but chose not to. Both groups of students—regular participants and non-participants—were analyzed separately, based on the year in which they participated in the program. Regular participants included students who attended at least 80% of the relevant ASP service during a given semester.

As indicated above, the sample consisted of all first-year students, including both students who had and students who had not participated in the ASP during the any of the academic years beginning in 1997 and ending in 2002. More specifically, the sample included the following five groups of first-year students taken from the years identified above: (1) students who participated in neither the Dean's Scholar Program nor the Workshop Series; (2) students who participated in the Dean's Scholar Program only; (3) students who participated in the Workshop Series
only; (4) students who participated in both programs;\textsuperscript{59} and (5) students who participated in the ISD service during the 2000–2001 and 2001–2002 academic years. The sample also included one group of upper-level students who participated in the ISD service during the 2000–2001 and 2001–2002 academic years.

It is possible that some participants developed the skills emphasized in the academic support service by means of other sources. Other possible sources include outside exam writing programs, study guides, and other study groups.\textsuperscript{60} It is, however, unlikely that these sources could provide the level of skill development obtainable from a semester-long service or semester-long series. The time spent with these other sources is generally minimal and less intense than that spent in the first-year ASP at Pace.

3. Collection of Quantitative Data and Measurement Techniques

Data was collected from admission applications, law school grades, and materials provided by The New York State Board of Law Examiners.\textsuperscript{61} Objective data, including outcome variables such as law school GPA and Bar exam passage were recorded without transformation. Socio-economic background was determined from the students' applications and the student-reported permanent addresses. For each student, the household median annual income was obtained by zip code from the U.S. Census Bureau website. This information was then split into a dichotomous variable. Those students who came from a background with an annual income of less than $50,000 were labeled economically disadvantaged, while students who came from a background with an annual income of $50,000 or more were labeled as economically advantaged. Ethnicity was truncated into five categories: Caucasian, Asian/Pacific Islander, Hispanic/Latino American, African American, and other. The LSAT score and undergraduate GPA were obtained from the students' transcripts without transformation. Part-time students included part-time day and evening students; full-time students included full-time day students only.

\textsuperscript{59} The workshop data includes participants and non-participants during only the fall 2000 and 2001 semester workshops.

\textsuperscript{60} Each fall, outside services provide full day (or even more lengthy) exam writing workshops. Furthermore, it is common for students to rely on commercial law school study guides to help them learn the law. These guides often present the law in outline form. Although they might provide comfort to new law students, students often rely on them, failing to practice applying vital analytical and critical reading skills required to understand the law on their own.

\textsuperscript{61} The New York State Board of Law Examiners oversees the New York State Bar exam and provides each law school dean with pass/fail information pertaining to the students who sat for the Bar from that school.
The Workshop Series, the Dean's Scholar Program, and the ISD service did not vary in substance during the years included in this study. It was, therefore, appropriate to study these services to determine whether, and to whom, they provided any benefit.

4. Statistical Data Analysis

For each of the five years of data, and for each criterion of interest, linear models were examined for predicting the criterion. The most important predictors were those variables that indicated which students regularly participated in Pace's ASPs. The LSAT score, undergraduate GPA, gender, ethnicity, part-time/full-time student status, socio-economic status, and law school cumulative GPA were used to control for any differences between students participating in the ASP, as well as for students not participating in the ASP.

Beyond these simple models, interactions were examined between participation and other variables in order to identify which student characteristics were or were not beneficial. For instance, it was possible that participation made a larger difference for students with lower LSAT scores than it did for those students with higher scores. The question of whether full-time students received a greater benefit from the ASP than did part-time students was also investigated. Such information could be helpful when determining who might benefit most from being included in an ASP at Pace Law School or at any other law school.

Analyses of covariance were carried out using various outcome variables to assess whether Pace Law School's ASP yielded a benefit to participants. Outcome variables included the law school GPA simultaneous to or immediately subsequent to participation in an identified ASP service, retention, and Bar exam results. These are the three measures that most ASPs seek to improve and, thus, are the outcomes on which faculty and deans focus when assessing return on investment. Other outcomes, such as obtaining internships, securing jobs, and qualifying to participate in moot court or trial program experience, were not included and would be better evaluated by examining other programs and departments, such as a Career Development Department or a law school's Legal Writing Program.

62. But see Section VI(C)(1) for discussion regarding change in director and director oversight among the years studied.
IV. FINDINGS: A QUANTITATIVE EVALUATION OF ASP STUDENT PERFORMANCE

A. A Profile of the Pace ASP Student

A significant minority of Pace Law students participated in some form of ASP during the years 1997-2002. Specifically, 23% of Pace students participated in one or more of the ASP services. Forty-seven percent of the students admitted during these years were invited to participate in the Dean's Scholar Program and 17% participated. In contrast, all entering first-year students were invited to participate in the Workshop Series during the 2000 and 2001 fall semesters, and 13% participated in the program. Thirty-seven first-year and upper-level students participated in the ISD service during the 2000 and 2001 academic years.

Students in the program presented a higher diversity rate than did the overall student population. The statistical sample of ASP participants consisted of 67% females and 33% males. Of these students, 56% were full-time students, 11% were part-time day students, and 33% were part-time evening students. Ethnic categorization revealed that 66.3% were Caucasian, 5.5% were Asian Americans, 10.3% were Hispanic/Latinos, and 15.6% were African Americans. Twenty-eight percent came from an economically disadvantaged background and 71.5% came from an economically advantaged background. In contrast, the Pace Law School student body for the years studied consisted of 56% females and 44% males. Of these students, 61% were full-time students, 7% were part-time day students, and 32% were part-time evening students. Ethnically, 78% were Caucasian, 5% were Asian Americans, 7% were Hispanic/Latinos, and 8% were African Americans. Twenty-six percent came from an economically disadvantaged background and 74% came from an economically advantaged background.

Overall, students who participated in the ASP appeared to improve their GPA as compared to those who entered law school with similar statistics, but did not participate in the program. ASP students with an LSAT score of 150 or lower completed their first year with a mean GPA of 2.74, compared to a 2.69 for similarly situated non-ASP students. ASP students with an LSAT score above 150 completed their first-year with a GPA of 2.86.

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63. Due to a change in program curriculum, the analyses of the Workshop Series pertain only to students entering in 2000 and 2001. See supra n. 59.
64. n = 282.
65. n = 1219.
66. See infra Section IV parts (B)-(E).
mean GPA of 2.98, compared to a 2.92 for similarly situated non-ASP students. Students in the program also boasted a high retention rate. A total of 97.7% of the students who participated in or completed the Pace ASP remained in school, compared to a retention rate of 95% for all students. Only six students who participated in any academic support service were dismissed or voluntarily withdrew from Pace Law School. Finally, students who participated in individual ASP services boasted a higher Bar pass rate than did all other Pace students.

When evaluating the benefits of each of the academic support services studied, students who participated in the ISD service demonstrated the greatest benefit with respect to GPA and Bar passage. Students participating in the Workshop Series also showed significant benefit with respect to both first-semester and cumulative GPA. In addition, students participating in the Dean’s Scholar Program reaped a significant benefit during three of the five years studied. Finally, students who participated in any of the three services studied boasted a higher retention rate than students who did not participate. Indeed, each service proved to have had an important impact on retention rates at Pace Law School.

**B. Academic Performance of Students Who Participated in the Individual Skills Development Service (ISD)**

The results of a t-test comparing the cumulative GPAs for semesters prior to participation in ISD to the GPA for the semester in which participation occurred were statistically significant. This indicates that for those students who participated in the ISD service, there was a significant increase in GPA from the semesters before participation to the semester during participation. Students who participated in the ISD

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67. One and one-half percent were academically dismissed and .8% voluntarily withdrew from Pace Law School.

68. \( n = 1040 \).

69. See infra Section IV, parts (B)–(E).

70. See infra Section IV(B)(3). Eighty percent of ISD students passed the New York Bar exam on the first try. Dean’s Scholar participants did not pass at a greater rate than did non-participants. See infra Section IV(D)(3).

71. See infra Section IV(B)(1), (B)(3).

72. See infra Section IV(C)(1).

73. See infra Section IV(C).

74. See infra Section IV(B)–(D).

75. For upper-class students (second semester and up) who participated in the ISD service, a statistically significant t-test was computed comparing the GPA before participation to the GPA during participation \( t = -3.447, df = 23, p = .002 \), indicating that for those upper class students who participated in the ISD service, there was a significant increase in GPA from the semester before participation (mean before = 2.62) to the semester during participation (mean during = 2.92).
service realized the most significant short-term and long-term success in increasing law school GPA when compared to participation in other ASP services at Pace Law School.26

To evaluate the most appropriate timing for providing an ASP, our statistically non-significant t-test was computed comparing the GPA during participation to the GPA after participation ($t = 2.44, df = 7, p = .006$), indicating that there was not a significant difference for those upper-class students who participated in the ISD service between the GPA from the semester during participation to the semester after participation ($\text{mean}_{\text{after}} = 3.05$).

An ANCOVA was computed to examine the effect of the ISD service controlling for other covariates on cumulative GPA. The overall model was found to be statistically significant ($F = 21.756, df = 10, p = .000$), indicating the overall model is significantly predictive of cumulative GPA. The coefficient of determination ($r^2 = .171$) indicates that 17.1% of the variation in cumulative GPA is being explained by the overall model. A statistically significant effect was found for ethnicity ($F = 3.92, df = 4, p = .004$), indicating a significant difference in cumulative GPA among ethnic groups. A contrast analysis indicated that there was a significant difference between Hispanics/Latinos (mean = 2.713) and Caucasians (mean = 2.898), and between African Americans (mean = 2.747) and Caucasians. A statistically significant effect was found for the LSAT ($\beta = 0.027, t = 9.078, p = .000$), indicating that as LSAT scores increase, cumulative GPA increases. A statistically significant effect was found for undergraduate GPA ($\beta = 0.252, t = 7.03, p = .000$), indicating that as undergraduate GPA increases, cumulative GPA increases.

Although the cross-tabulation examined between the ISD service and Bar passage was found to be statistically non-significant ($\chi^2 = 407, df = 1, p = .523$), only one of the thirty-seven participants in the ISD service was academically dismissed and none voluntarily withdrew. A logistic regression was also computed on retention to examine the effect of the ISD service controlling for all other variables and was found to be statistically non-significant ($\chi^2 = 11.401, df = 11, p = .410$), indicating that the overall model was not significantly predictive of retention.

The cross-tabulation examined between the ISD service and Bar passage was found to be statistically non-significant ($\chi^2 = 448, df = 1, p = .503$), but only five ISD participants have taken the Bar, and four of them passed; it is likely that these statistics will change as more students attempt the Bar. A logistic regression was computed to examine the effect of ISD controlling for other variables on Bar passage success and was found to be statistically significant ($\chi^2 = 73.511, df = 11, p = .000$), indicating the overall model's effect on Bar passage. LSAT was found to be statistically significant ($\beta = 0.125, df = 1, p = .000$), indicating a positive association between LSAT score and Bar passage. Undergraduate GPA was found to be statistically significant ($\beta = 1.269, df = 1, p = .000$), indicating a positive association between undergraduate GPA and Bar passage. It appears that these two covariates were driving the model accounting for most of the variation on Bar passage. When law school GPA was included in the model, it remained statistically significant ($\chi^2 = 213.01, df = 12, p = .000$); however, the only significant predictors are gender ($\beta = 0.615, df = 1, p = .041$) and law school GPA ($\beta = 6.18, df = 1, p = .000$). These results indicate that males have a higher likelihood of passing the Bar than do females, and that although undergraduate GPA and LSAT score are positively associated with Bar passage, law school GPA explains most of the variation above and beyond undergraduate GPA and LSAT score.

76. *See infra Section IV(B)(1).* The study briefly evaluated ISD participants for the fall 2002 semester as well, and once again, students showed a significant improvement in GPA from the semester before their ISD participation to the semester of participation. More specifically, when evaluating seven non-first-semester students who participated in ISD, the findings show that they had a mean cumulative GPA of 2.44 prior to ISD, and a mean GPA of 3.32 during the semester in which they participated in ISD, showing a mean improvement of .88.

A statistically significant t-test was computed comparing the GPA during participation to the GPA after ($t = -13.16, df = 6, p = .000$), indicating that for those students who participated in the ISD service in the fall 2002 semester, there was a significant increase in GPA from the semester prior to participation ($\text{mean}_{\text{prior}} = 2.44$) to the semester during participation ($\text{mean}_{\text{during}} = 3.32$).
analysis divided ISD participants into two groups: (1) students who participated in ISD during their second or subsequent semester at law school, and (2) students who participated in ISD during their first semester. Of the thirty-seven students who participated in the ISD service, 77 ten participated during their first semester, while the remaining twenty-seven participated during their second semester or in a semester thereafter. The ten students who participated during their first semester achieved an impressive mean GPA, while the latter group increased their GPAs by a significant amount. 78 These results suggest that students in both groups benefited significantly from the ASP. 79

1. Effect on Academic Performance

Figure 1: Individual Skills Development and Grade Point Average

![GPA Comparison Chart]

i. Category 1: Students who participated in ISD during their second or subsequent semesters

Prior to participating in ISD, students in this category maintained a cumulative GPA ranging from 1.53 to 3.22, with a mean GPA of 2.62. 80 During the semester in which these students participated in the ISD service, their cumulative GPAs improved to between 2.24 and 3.71, with a mean GPA of 2.92. 81 The group as a whole continued to benefit from the skills acquired during their semester in ISD. During the semester...

77. Although an academic support professional was always present to meet with students on an individual basis, the ISD service formally began in the fall of 2000. The sample size of 37 is low because the study is limited to students who regularly participated in ISD. Each semester, up to 40 students begin working with the academic support director on a weekly basis, but fewer are able to maintain this level of contact consistently throughout the semester.

78. See infra Section IV(B)(1).

79. See id.

80. See supra n. 75.

81. Id.
following participation in ISD, these students earned a mean GPA of 3.05.\textsuperscript{82}

\textit{ii. Category 2: Students who participated in ISD during their first semester}

First-semester students earned a cumulative GPA ranging from 2.93 to 3.73, with a mean GPA of 3.40, when they participated in ISD.\textsuperscript{83} These students earned a GPA ranging from 3.04 to 3.54, with a mean of 3.22, during the semester immediately following their participation in the ISD service.\textsuperscript{84} Prior to participating in ISD, participating students had not matriculated in law school and, therefore, there were no data with which to compare pre versus post-ISD performance for this group. Thus, any significance or predicted effect lacked legitimacy.

2. \textit{Effect on Retention}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{ISD_participation_retention.png}
\caption{Individual Skills and Retention}
\end{figure}

The findings, which appear in Figure 2, show the relationship between ISD participation and retention. Specifically, thirty-six ISD students completed or were still attending Pace Law School. Only one student was academically dismissed.\textsuperscript{85} This translated into a retention rate of 97.7\% for students who participated in the ISD service, compared to a 95\% retention rate for all Pace law students.

3. \textit{Effect on Bar Pass Rate}

The statistical sample of this group was limited. At the time of writing, only five students who participated in ISD between 2000 and

\textsuperscript{82} Id.
\textsuperscript{83} Id.
\textsuperscript{84} Id.
\textsuperscript{85} Id.
2002 had taken the New York Bar exam. Of these students, four students passed the exam on their first attempt and one failed. This translates into an 80% pass rate for ISD students, compared to a 69% and 70.5% pass rate for all first-time takers of the New York Bar from Pace.

C. Workshop Series

1. Effect on Academic Performance

A statistically significant t-test was computed when comparing the first-semester GPA of the participants in the Workshop Series to the first-semester GPA of all non-participants, which indicates that there was a significant difference between the performance of those students who participated in the Workshop Series and those who did not. A statistically significant t-test was computed comparing the participants of the Workshop Series and all of the non-participants on the basis of first-semester GPA (t = -3.334, df = 444, p = .001), indicating that those students who participated in the Workshop Series had a significantly higher GPA (mean = 3.07) than those students who did not participate (mean = 2.80).

An ANCOVA was computed to examine the effect of the Workshop Series on first-semester GPA controlling for covariates. The overall model was found to be statistically significant (F = 13.818, df = 11, p = .000), indicating that the overall model is significantly predictive of first-semester GPA. The coefficient of determination (r² = .266) indicates that 26.6% of the variation in first-semester GPA is explained by the overall model. A statistically significant effect was found for the Workshop Series (F = 9.378, df = 1, p = .000), indicating a significant difference in first-semester GPA between participants and non-participants of the Workshop Series. A contrast analysis indicated that there was a significant difference between participants in the Workshop Series (mean = 2.941) and non-participants (mean = 2.719). A statistically significant effect was found for the LSAT (β = 0.043, t = 7.477, p = .000), indicating that as LSAT scores increase, cumulative GPA increases. A statistically significant effect was found for undergraduate GPA (β = 0.415, t = 6.855, p = .000), indicating that as undergraduate GPA increases, first-semester GPA increases.

A cross-tabulation was examined between the Workshop Series and retention, and was found to be statistically significant (χ² = 4.807, df = 1, p = .028), showing a 100% retention rate. A logistic regression was computed to examine the effect of the Workshop Series controlling for other variables on retention, and was found to be statistically significant (χ² = 24.53, df = 1, p = .011), indicating the overall model's significant effect on retention. However, none of the predictors were found to have a statistically significant effect on retention. This result does not support the earlier reported result with the cross-tabulation analysis between the Workshop Series and retention, which was found to be statistically significant. This may be due in part to the other predictors included in the model (i.e. LSAT and undergraduate GPA) accounting for the partial variation that the Workshop Series is explaining.

This study includes the fifty-nine students who regularly attended the Workshop Series during the fall 2000 and 2001 semesters, meaning that they attended at least three of the four workshops offered. These students, referred to as participants, are compared against students who did not regularly attend the workshops and those who did not attend at all, referred to as non-participants.
participants was 2.79. The analysis also yielded a difference in cumulative GPA between the two groups. The cumulative GPA for participants was 3.07, while that for non-participants was 2.8.

Figure 3: Workshop Series and Grade Point Average

![Figure 3: Workshop Series and Grade Point Average](image)

2. **Effect on Retention**

The results of our study showed that a greater percentage of students who participated in the Workshop Series in the fall of 2000 or 2001 were far more likely to remain at Pace Law School than those who did not participate. Specifically, of the fifty-eight students who participated in the Workshop Series during these two semesters, all were still attending Pace Law School—a 100% retention rate. In contrast, of the 346 first-year students who did not participate in the workshops during these two semesters, twenty-nine left Pace Law School as a result of academic dismissal or voluntary withdrawal, resulting in a 91.6% retention rate.

Table 1: Cross-Tabulation between the Workshop Series and Retention

<table>
<thead>
<tr>
<th>Participation in Workshop Series</th>
<th>Completed/Attending</th>
<th>Dismissed/Withdrawn</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Participation in Workshop Series</td>
<td>346 (92.3%)</td>
<td>29 (7.7%)</td>
</tr>
<tr>
<td>Participation in Workshop Series</td>
<td>58 (100%)</td>
<td>0 (0%)</td>
</tr>
</tbody>
</table>

89. See supra n. 87. Workshop participants include all students who regularly participated in the fall 2000 or 2001 Workshop Series and, therefore, might include students who also participated in other ASP services.

90. See id.

91. See id. Full-time students who participated in the fall 2000 Workshop Series graduated in May 2003.

92. See id. and Table 1. Full-time students who participated in the fall 2000 Workshop Series will take the New York Bar exam in July 2003.
D. Dean’s Scholar Program

1. Effect on First-Semester Grade Point Average

An analysis of variance was computed to look for significant mean differences in the effect the Dean’s Scholar Program participation had on first-semester GPA. The overall model was found to be statistically significant, indicating that the Dean’s Scholar Program had a significant effect on the first-semester GPA.93 This study included analyses only from the fall weekly study groups94 and divided the students into three categories: (1) no invitation, no participation, (2) invitation, no participation, and (3) invitation, participation. Only students who regularly participated in the weekly study groups were included in the third (participation) category.95

Students in the first category (no invitation, no participation) entered law school with an LSAT score that was significantly higher than that of students in the second category (invitation, no participation). Therefore, it is not surprising that the former group performed slightly better than did the latter.96 There was also a significant difference between students in the first category (no invitation, no participation) and students in the third category (invitation, participation).97

93. See infra n. 97 and Figure 4.
94. Dean’s Scholars are required to offer one office hour per week. All students are welcome to participate in the Dean’s Scholar study groups, although some students are specifically invited to do so. Students who attended office hours but did not participate in any other ASP services are not included in this study.
95. To be deemed a regular participant, the student must have attended at least 80% of the weekly study groups during the fall semester. See supra Section II(B).
96. See infra Section VII, and Table 2.
97. An analysis of variance was computed to examine for significant mean differences in first-semester GPA resulting from participation in the Dean’s Scholar Program. The overall model was found to be statistically significant (F = 57.209, df = 2, p = .000), indicating that the Dean’s Scholar Program has a significant effect on first-semester GPA. Those students who were not invited and did not participate in the Dean’s Scholars Program (mean$_{gpa}$ = 2.97) performed significantly better than did those students who were invited but did not participate (mean$_{gpa}$ = 2.646; mean$_{diff}$ = .331, p = .000). There was also a significant difference (mean$_{diff}$ = .3274, p = .000) between those students who were not invited (mean$_{gpa}$ = 2.97) as compared to those students who were invited and participated (mean$_{gpa}$ = 2.646).

An ANCOVA was computed to examine the effect of the Dean’s Scholar Program on first-semester GPA controlling for other covariates. The overall model was found to be statistically significant (F = 27.809, df = 12, p = .000), indicating that the overall model is significantly predictive of first-semester GPA. The coefficient of determination ($r^2 = .242$) indicates that 24.2% of the variation in first-semester GPA is explained by the overall model. The Dean’s Scholar Program was found to be a statistically non-significant predictor (F = 1.462, df = 2, p = .232), indicating that the Dean’s Scholar Program has no effect on first-semester GPA. However, the following factors were found to be statistically significant: part-time/full-time student status (F = 4.013, df = 2, p = .018), ethnicity (F = 4.901, df = 4, p = .001), socioeconomic background (F = 5.685, df = 1, p = .017), LSAT ($\beta = 0.033, t = 7.611, p = .000$), and undergraduate GPA ($\beta = 0.31, t = 8.562, p = .000$), all indicating a significant effect on first-semester GPA.
The Dean's Scholar Program includes a weekly study group for invited students only, and a weekly office hour for invited and non-invited students.\footnote{Dean's Scholars are required to offer one office hour per week. All students are welcome to participate in the Dean's Scholar office hours, although some students are specifically invited to do so. Students who attended office hours but did not participate in another other ASP services were not included in this study.} This study included analyses from the weekly study groups only, and divided the students into three categories: (1) no invitation, no participation, (2) invitation, no participation, and (3) invitation, participation. Once again, only students who regularly participated in the weekly study groups were included in the participation category.\footnote{To be deemed a regular participant, the student must have attended at least 80% of the weekly study groups during the fall semester. \textit{See supra} Section II(B).} The overall model, which included data for all five years, showed that: (1) students in the first category (no invitation, no participation) earned a mean first-semester GPA of 2.98, (2) students in the second category (invitation, no participation) earned a GPA of 2.65, and (3) students in the third category (invitation, participation) also earned a GPA of 2.65.\footnote{See Table 2.} The findings with respect to the higher GPA for Category 1 (no invitation, no participation) were not surprising because students in this category entered law school with a higher LSAT score.

Part-time day students (mean$_{LSAT}$ = 2.61) performed significantly lower than did full-time day students (mean$_{LSAT}$ = 2.75); Hispanics/Latinos (mean$_{LSAT}$ = 2.61) and African Americans (mean$_{LSAT}$ = 2.63) performed significantly lower than did their Caucasian counterparts (mean$_{LSAT}$ = 2.81); and the economically disadvantaged (mean$_{LSAT}$ = 2.67) performed significantly lower than did the economically advantaged (mean$_{LSAT}$ = 2.75). There is a positive association between LSAT score and first-semester GPA, and there is a positive association between undergraduate GPA and first-semester GPA.

A cross-tabulation was examined between the Dean's Scholar Program and retention, and was found to be statistically significant ($\chi^2 = 6.584, df = 2, p = .037$). Another cross-tabulation was examined between the Dean's Scholar Program and Bar passage, and was found to be statistically significant ($\chi^2 = 25.298, df = 2, p = .000$). It appears that students who were not invited and did not participate in the program have a higher likelihood of passing the New York Bar exam on the first try.

A logistic regression was computed to examine the effect of the Dean's Scholar Program controlling for other variables on retention, and was found to be not statistically significant ($\chi^2 = 18.408, df = 12, p = .104$), indicating that the overall model is not significantly predictive of retention. However, a logistic regression was computed to examine the effect of the Dean's Scholar Program controlling for other variables on Bar passage, and was found to be statistically significant ($\chi^2 = 218.527, df = 13, p = .000$), indicating the overall model's significant effect on Bar passage. Gender was found to be statistically significant ($\beta = 0.615, df = 1, p = .044$), indicating that males have a greater likelihood than do females of passing the New York Bar exam on the first attempt. Law school cumulative GPA was also found to be statistically significant ($\beta = 6.549, df = 1, p = .000$), indicating that as law school GPA increases there is a greater likelihood of passing the Bar. However, when law school GPA is not included in the model, it remains statistically significant ($\chi^2 = 72.056, df = 12, p = .000$). Only LSAT ($\beta = 0.157, df = 1, p = .000$) and undergraduate GPA ($\beta = 1.266, df = 1, p = .000$) are significantly predicting on Bar performance. It appears that law school GPA accounts for most of the variation explaining Bar passage, above and beyond LSAT score and undergraduate GPA.

98. See Table 2.
than students in the other two categories; and as other studies have previously demonstrated, LSAT score affects the first-semester law school GPA. The findings with respect to the comparison of Category 2 (invitation, no participation) to Category 3 (invitation participation), however, were more surprising because the results did not indicate that students who participated in the program out-performed non-participants with comparable LSAT scores.

**Figure 4: Dean's Scholar Program and Grade Point Average**

Further evaluation of these data, however, demonstrates that academic performance in the Dean's Scholar Program directly correlates to the quality of the administration of the program. Table 2 shows that in 1997, 2000, and 2001, the Dean's Scholar Program participants out-performed invited non-participants.

The negative findings for the 1998 and 1999 academic years, which are also displayed in Table 2, are attributable to a deviation in the program over these two years. It is important to note that during these two years, the administration of the program was not unified, and there was little coordination between the Dean's Scholar sessions and the academic support professional.

**Table 2: Dean's Scholar Program and First-Semester GPA over Five Years**

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No Invitation, No Participation</td>
<td>2.98</td>
<td>2.98</td>
<td>2.95</td>
<td>3.13</td>
<td>2.91</td>
</tr>
<tr>
<td>Invitation, No participation</td>
<td>2.6</td>
<td>2.77</td>
<td>2.65</td>
<td>2.59</td>
<td>2.65</td>
</tr>
<tr>
<td>Invitation, Participation</td>
<td>2.7</td>
<td>2.56</td>
<td>2.58</td>
<td>2.65</td>
<td>2.94</td>
</tr>
</tbody>
</table>

In each of four years (1997–2000), students in Category 1 (no

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101. See Berger *infra* n. 159.

102. During the 1998 fall semester, the academic support professional took a leave from her ASP responsibilities; during the 1999 fall semester, the ASP professional was on sabbatical. A new director began in the fall of 2000.
invitation, no participation) out-performed students in categories 2 (invitation, no participation) and 3 (invitation, participation). This, however, was expected because Category 1 students (no invitation, no participation) had higher LSAT scores than did Category 2 students (invitation, no participation) and Category 3 students (invitation participation). In three of the five years (1997, 2000, and 2001), Category 3 students (invitation, participation) out-performed students in Category 2 (invitation, no participation). These findings demonstrate that Dean's Scholar participants out-performed non-participants with comparable LSAT scores. Furthermore, and most intriguing, participants in the 2001 program out-performed both Category 2 students (invitation, no participation) with LSAT scores comparable to those of the participants, and Category 1 students (no invitation, no participation) who entered law school with higher LSAT scores than did all invited students.

2. Effect on Retention

Of the 185 students in Category 3 (invitation, participation), 179, or 97%, completed or were continuing their education at Pace Law School. Only six students, or 3%, of the students in Category 3 (invitation participation) left Pace as a result of academic dismissal or voluntary withdrawal. In comparison, of the 319 students in Category 2 (invitation, no participation), 295, or 92%, completed or were continuing their education at Pace Law School. Of these students, twenty-four, or 8%, left Pace as a result of academic dismissal or voluntary withdrawal.

Figure 5: Dean's Scholar Program and Retention

103. See supra n. 97, and Figure 5.
104. See id.
105. See id.
3. Effect on Bar Passage

Of the Category 3 students (invitation, participation) involved in the 1997, 1998 and 1999 Dean’s Scholar Programs, forty-two students failed the New York Bar exam on the first attempt, while thirty-seven students passed, yielding a 47% pass rate. In contrast, of the Category 2 students (invitation, no participation), fifty students failed the exam on the first attempt and seventy-four passed, yielding a 60% pass rate. Category 1 students (no invitation, no participation) were most successful—fifty-five failed on the first attempt while 174 passed, yielding a 76% pass rate.\(^{106}\)

Figure 6: Dean’s Scholar Program and Bar Passage

E. Workshop Series and Dean’s Scholar Program

1. Effect on First-Semester Grade Point Average

Eighteen students participated in both the Workshop Series and the Dean’s Scholar Program during the fall 2000 and fall 2001 semesters combined. Study results show that those students who participated in both programs earned a mean first-semester GPA of 2.89.\(^{107}\) Those who participated only in the Workshop Series only earned a mean first-semester GPA of 3.14, while those who participated only in the Dean’s Scholar Program only earned a mean first-semester GPA of 2.63.\(^{108}\)

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106. See supra n. 97 and Figure 6. When the Dean’s Scholar Program was evaluated on a year-to-year basis, it did not appear that participation increased a student’s likelihood of passing the New York Bar on the first try. As of June, 2003, Dean’s Scholar participants from 1997 and 1998, and the full-time students from 1999 had taken the Bar.

107. See infra n. 108 and Figure 7.

108. The 3.14 first-semester GPA includes students who participated only in workshops (no other ASP service). This number is different from the 3.06 referred to in the workshop analysis, which includes students who participated in the Workshop Series and, possibly, another service as well.

An analysis of variance was computed to examine for significant mean differences in first-semester GPA and participation in both the Workshop Series and the Dean’s Scholar Program. The
Figure 7 shows that the overall model was significant. Although there was no significant difference in first-semester performance when comparing participants of both programs with participants of either program, the model demonstrates significant effect when comparing Dean’s Scholar participants with Workshop Series participants—showing a positive effect on first-semester GPA for students who participated in the Workshop Series.\textsuperscript{109}

overall model was found to be statistically significant, \((F = 31.877, df = 4, p = .000)\), indicating that participation in both the Workshop Series and the Dean’s Scholar Program has a significant effect on first-semester GPA. Students who participated only in the Workshop Series (mean\(_{gpa}\) = 3.14) performed significantly better than did students who participated only in the Dean’s Scholar Program (mean\(_{gpa}\) = 2.63; mean\(_{gpa}\) = 0.51, \(p = 0.000\)). There was also a significant difference (mean\(_{gpa}\) = 0.34, \(p = 0.000\)) between students who did not participate—and who were not invited to participate—in either the Dean’s Scholar Program or the Workshop Series (mean\(_{gpa}\) = 2.97), and students who participated only in the Dean’s Scholar Program (mean\(_{gpa}\) = 2.63). Students who participated only in the Workshop Series (mean\(_{gpa}\) = 3.14) performed significantly better than did those students who were invited, but did not participate in the Dean’s Scholar Program or the Workshop Series (mean\(_{gpa}\) = 2.63; mean\(_{gpa}\) = 0.50, \(p = 0.000\)). A significant difference was also found (mean\(_{gpa}\) = 0.33, \(p = 0.000\)) between students who were not invited and did not participate in the Dean’s Scholar Program or the Workshop Series (mean\(_{gpa}\) = 2.97) and students who were invited, but did not participate in the Dean’s Scholar Program or the Workshop Series (mean\(_{gpa}\) = 2.63).

An ANCOVA was computed to examine the effect of the participation of both the Workshop Series and the Dean’s Scholar Program on first-semester GPA, controlling for other covariates. The overall model was found to be statistically significant (\(F = 24.53, df = 14, p = .000\)), indicating that the overall model is significantly predictive of first-semester GPA. Participation in both the Workshop Series and the Dean’s Scholar Program was found to be a statistically significant predictor (\(F = 2.70, df = 4, p = .030\)), indicating that the Dean’s Scholar Program has a significant effect on first-semester GPA. There is also a significant positive effect (\(\beta = 0.203, t = 2.588, p = .010\)) on first-semester GPA (mean\(_{gpa}\) = 2.91) for those students who participated only in the Workshop Series. Part-time/full-time student status was also found to be statistically significant (\(F = 4.243, df = 2, p = .015\)), indicating a significant effect from part-time/full-time student status on first-semester GPA. The full-time day students (mean\(_{gpa}\) = 2.80) performed significantly better (mean\(_{gpa}\) = 0.134, \(p = .017\)) than did the part-time day students (mean\(_{gpa}\) = 2.67). Ethnicity proved to be statistically significant (\(F = 4.742, df = 4, p = .001\)); Hispanics/Latinos (mean\(_{gpa}\) = 2.67) performed significantly lower (mean\(_{gpa}\) = -0.201, \(p = .001\)) than did their Caucasian counterparts (mean\(_{gpa}\) = 2.87), and African Americans (mean\(_{gpa}\) = 2.69) performed significantly lower (mean\(_{gpa}\) = -0.183, \(p = .002\)) than did their Caucasian counterparts. Socio-economic status was found to be statistically significant (\(F = 4.833, df = 1, p = .028\)), the economically disadvantaged (mean\(_{gpa}\) = 2.73) performed significantly lower (mean\(_{gpa}\) = 0.075, \(p = .028\)) than did the economically advantaged (mean\(_{gpa}\) = 2.81). There was a significant effect found for LSAT score (\(\beta = 0.034, t = 7.77, p = .000\)) and undergraduate GPA (\(\beta = 0.31, t = 8.432, p = .000\)), both indicating a significant positive effect on first-semester GPA.

Interactions with both the Workshop Series and the Dean’s Scholar Program participation were also tested in subsequent models, but the interactions were not found to be statistically significant.

A cross-tabulation was examined between the Workshop Series and retention, and was found to be statistically significant (\(\chi^2 = 9.946, df = 4, p = .041\)); it appears that those students who participated in the ASP services have a higher likelihood of completion and/or retention. See Table 1.

A logistic regression was computed to examine the effect of participation on both the Workshop Series and the Dean’s Scholar Program on retention (controlling for other variables), and was found not to be statistically significant (\(\chi^2 = 23.59, df = 14, p = .055\)), indicating that the overall model is not significantly predictive of retention.

\textsuperscript{109} See supra n. 108.
2. Effect on Retention

Study findings indicate that students who participated in one of the non-individual academic support services had a higher likelihood of retention than did students who did not participate in either service. Table 3 shows that all eighteen students who participated in both the Workshop Series and the Dean's Scholar Program remained enrolled at Pace Law School. Participation in even one of the first-year services proved to be a significant predictor of retention, thus, showing that ASP participants had a higher likelihood of avoiding academic dismissal (or withdrawal), than did non-participants. More specifically, all forty Workshop Series participants remained enrolled at Pace Law School, while Dean’s Scholar Program participants were more than twice as likely to avoid academic dismissal or withdrawal than were students who were invited, but chose not to participate.\textsuperscript{110} In fact, despite the fact that six students were academically dismissed or voluntarily withdrew from Pace Law School, the Dean’s Scholar participants were 1.19 times more likely to avoid academic dismissal or withdrawal than were students who were not invited to participate.\textsuperscript{111} These findings are intriguing because all students who were invited to participate in the Dean’s Scholar Program had lower LSAT scores than did students who were not invited to participate.

\textsuperscript{110} See Table 3.

\textsuperscript{111} See id.
Table 3: Cross-Tabulation of Workshop Series and Dean’s Scholar Program and Retention

<table>
<thead>
<tr>
<th></th>
<th>Completed/Attending</th>
<th>Dismissed/Withdraw</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation in Both</td>
<td>18</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>Workshop Series Only</td>
<td>40</td>
<td>0</td>
<td>40</td>
</tr>
<tr>
<td>Dean’s Scholar Only</td>
<td>161</td>
<td>6</td>
<td>167</td>
</tr>
<tr>
<td>Invited to Dean’s Scholar but No Participation</td>
<td>279</td>
<td>24</td>
<td>303</td>
</tr>
<tr>
<td>Not Invited to Dean’s Scholar and No Participation</td>
<td>540</td>
<td>24</td>
<td>564</td>
</tr>
<tr>
<td>Total</td>
<td>1,038</td>
<td>54</td>
<td>1,092</td>
</tr>
</tbody>
</table>

V. **THE SIGNIFICANCE OF BACKGROUND CRITERIA ON GRADE POINT AVERAGE, RETENTION AND BAR PASSAGE**

In addition to evaluating outcome variables of academic performance, retention, and Bar passage alone, the study evaluated how background criteria impact the performance of both academic support participants and non-participants. For example, did gender or LSAT score impact Bar passage of Pace’s academic support participants and eligible non-participants? Did Pace students with higher law school GPA pass the New York Bar at greater percentages than did students with lower law school GPAs? Did any background criteria, including but not limited to, socio-economic status, ethnicity, and undergraduate GPA, predict one ASP participant’s success over another student who participated in the same ASP services? The study sought to answer these and other similar questions.

A. **Evaluating Background Criteria of Participants and Non-Participants**

The study demonstrates that when comparing participants in each ASP service against eligible non-participants, several variables were predictive of GPA and Bar passage. These variables included LSAT score, undergraduate GPA, gender, ethnicity, socio-economic status, law
school GPA, and part-time/full-time student status. No variable proved to be a predictor of retention.\textsuperscript{112}

1. \textit{Individual Skills Development}

When analyzing the ISD service, which included ISD participants and all eligible non-participants, the results demonstrate that ethnicity, LSAT score, and undergraduate GPA were significant predictors of cumulative GPA. Cumulative law school GPA, for example, increased as LSAT score and undergraduate GPA increased.\textsuperscript{113} Furthermore, the study showed that ethnicity was significant in that Hispanics/Latinos and African Americans under-performed Caucasians and Asian Americans.\textsuperscript{114}

LSAT score and undergraduate GPA also drove the Bar passage of these students.\textsuperscript{115} A student’s likelihood of passing the New York Bar exam on the first attempt increased as a student’s LSAT score and undergraduate GPA increased. When including law school GPA as a variable, gender and law school GPA became predictive of Bar passage, showing that males were more likely than females to pass the New York Bar exam on the first attempt, and that students with higher law school GPA were more likely to pass the Bar on the first try than students with a lower law school GPA.\textsuperscript{116}

\begin{table}[H]
\centering
\begin{tabular}{|l|c|c|c|c|}
\hline
 & \textbf{N} & \textbf{Mean} & \textbf{SD} & \textbf{Min.} & \textbf{Max.} \\
\hline
First-semester GPA & 1,114 & 2.83 & 0.54 & 0 & 4.00 \\
Cumulative GPA & 1,121 & 2.91 & 0.53 & 0 & 3.86 \\
Undergraduate GPA & 1,204 & 3.08 & 0.42 & 1.97 & 4.00 \\
LSAT & 1,218 & 151.08 & 5.21 & 137 & 170 \\
\hline
\end{tabular}
\caption{Means, standard deviations, and ranges for GPAs and LSAT scores}
\end{table}

\textsuperscript{112} Table 4 reports the means, standard deviations, and ranges for first-semester grade point average (the GPA listed is from the semester of program participation), cumulative GPA, undergraduate GPA, and LSAT scores. Table 4 displays the correlations between LSAT, undergraduate GPA, first-semester GPA, and cumulative GPA.

\begin{table}[H]
\centering
\begin{tabular}{|l|c|c|}
\hline
 & First-Semester GPA & Cumulative GPA \\
\hline
Undergraduate & 0.28* & 0.23* \\
LSAT & 0.39* & 0.33* \\
\hline
\end{tabular}
\caption{Correlations between First-Semester GPA, Cumulative GPA, Undergrad GPA and LSAT. * (p < 0.05)}
\end{table}

\textsuperscript{113} See supra n. 75.
\textsuperscript{114} See id.
\textsuperscript{115} See id.
\textsuperscript{116} See id.
2. **Workshop Series**

The study evaluated the same variables in the analysis of the Workshop Series, which included all workshop participants and all eligible non-participants. Once again LSAT score and undergraduate GPA were predictive of a student’s first-semester GPA. As LSAT and undergraduate GPA increased, so did the first-semester law school GPA.\(^{117}\)

3. **Dean’s Scholar Program**

The analysis of variables with respect to the Dean’s Scholar Program included all Dean’s Scholar participants and all invited non-participants during the relevant years of the study. When evaluating the first-semester GPA of these students, several variables proved significant. Specifically, LSAT score, undergraduate GPA, ethnicity, part-time/full-time student status, and socio-economic status were all significant predictors of success.\(^{118}\) A student’s LSAT score, undergraduate GPA, and ethnicity produced the same results as the ISD sample.\(^{119}\) Moreover, part-time day students performed significantly less well than did full-time day students, and economically disadvantaged students performed significantly lower than did those who were economically advantaged.\(^{120}\)

With respect to Bar passage, law school GPA was the most significant predictor of success. When this variable was removed from the model, gender and undergraduate GPA became significant predictors.\(^{121}\) Again, first-time passage increased as undergraduate GPA increased, and males were more likely than females to pass the New York Bar exam on the first try.\(^{122}\)

4. **Workshop Series and Dean’s Scholar Program**

The same variables were tested when comparing participants and all eligible non-participants of both the Workshop Series and the Dean’s Scholar Program. Once again, the LSAT score and undergraduate GPA had a positive effect on the first-semester GPA. As each, or both, increased, first-semester GPA increased.\(^{123}\) Part-time/full-time student status also proved to be a significant predictor of first-semester GPA, as

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117. See id.
118. See supra n. 97.
119. See id.
120. See id.
121. See id.
122. See id.
123. See supra n. 108.
The data also showed that ethnicity and socio-economic status were significant. Once again, Caucasians out-performed Hispanic/Latinos and African Americans, and economically advantaged students out-performed their economically disadvantaged counterparts.

B. Evaluating Background Criteria of Participants

The same variables or covariates—excluding law school GPA—were tested to determine if any impacted the performance of the specific students who participated in ISD, the Workshop Series, the Dean’s Scholar Program, and in both the Workshop Series and the Dean’s Scholar Program. In short, LSAT score, undergraduate GPA, ethnicity, gender, socio-economic status, and part-time/full-time student status were evaluated to see if certain students achieved a greater benefit from an academic support service than did others participating in the same service.

At no time did the results show that any variable predicted an ASP student’s ability to out-perform another ASP student. For example, none of the variables above proved indicative an ISD student’s ability to out-perform another ISD student, showing that no variable gave one participant an advantage over another participant. The same held true for the Workshop Series students, the Dean’s Scholar students, and students who participated in both the Workshop Series and the Dean’s Scholar Program. Likewise, none of these variables appeared to give any ASP student an edge with respect to retention and Bar passage.

VI. THE PROVEN BENEFITS OF PARTICIPATION IN AN ACADEMIC SUPPORT PROGRAM

ASPs meet the identified goal of decreasing a student’s short-term and long-term propensity to become academically at-risk. Students who participated in an ASP earned a higher GPA, were more likely to remain in school, and were more likely to pass the New York Bar exam on the first try than were those who chose not to participate in the services offered through an ASP.

124. See id.
125. See id.
126. See supra nn. 75, 87, 97, and 108.
127. See supra Section IV. Eighty percent of ISD students passed the New York Bar on the first try, showing the strong connection between ISD participation and Bar passage. Dean’s Scholar participants, however, did not pass the Bar at a greater rate than did non-Dean’s Scholar participants. See supra Section IV(D) and Figure 6.
While each of the three programs identified in the study yielded a benefit to Pace students, the value of the benefit varied among the services. There was a clear and direct correlation between a student's academic success following participation in a service and the level of interaction the student had with the ASP professional. Students benefited most from services that offered the most direct supervision from an academic support professional. Therefore, students in ISD services increased their GPA the most significantly when compared to students in the other services with similar objective criteria. Students who participated in the Workshop Series, on the other hand, performed slightly less well than did those in ISD; and students who participated in the Dean's Scholar Program, while showing an overall improvement in their GPAs over students who did not participate, did not demonstrate as significant an improvement in GPA as did those students who participated in the ISD service or Workshop Series.

A. Individual Skills Development Service

1. Effect on Grade Point Average

Study findings demonstrate that students who participated in an ISD after their first semester showed the strongest improvement and had the strongest indication of academic success. The ability of such students to raise their mean GPA by 0.30 between the semester prior to participating in ISD and the semester in which they participated in ISD suggests that learning in an ASP setting enhanced a student's ability to apply the newly acquired analytical and writing skills to subsequent course work, exams and papers. Furthermore, the finding that these students were able to increase their mean GPA by an additional 0.13 between the semester in which they participated in ISD and the subsequent semester demonstrated that even minor academic intervention goes a long way toward proving the ability of an ASP to communicate permanent and vital law school skills.

Students who voluntarily participated in ISD during their first semester earned a GPA ranging from 2.93 to 3.73 with a mean of 3.40, which was significantly higher than that of those who participated following completion of the first semester. These students who participated during their first semester earned a mean GPA of 3.22 during the semester immediately following the semester in which they

128. See Introduction.
129. See supra Section IV(B) and Figure 1.
130. See supra Section IV(B)(1).
participated in ISD. However, we must also consider immeasurable and more subjective criteria such as student motivation when evaluating the reasons for this outcome. Unlike post first-semester students who are often targeted for ISD based on their GPA, it is likely that students who voluntarily seek out an academic support professional for individual assistance during the first few months of school are extremely motivated students who might lack confidence, but do not necessarily lack skills. Furthermore, it is possible—perhaps even likely—that such students are aware of the skills necessary to succeed in law school, but lack the confidence to develop these skills without reassurance from an academic support director.

2. **Effect on Retention**

The effect of ISD on retention is compelling. Thirty-six ISD students completed or were still attending Pace Law School. Only one student was academically dismissed. This translated into a retention rate of 97.7%, compared to a 95% retention rate for all Pace law students. Indeed, the ISD service appeared to meet the goal of retaining Pace law students.

Of course, the most likely reason for this higher rate of retention is the fact that students who participated in ISD were able to raise their GPA above the school’s minimum requirements. However, one could also hypothesize a non-qualitative reason for the increased retention rate. Specifically, allowing students to work with an academic support professional communicates to students that the school is invested in their academic success. Studies have indicated that a school’s commitment to a student’s future provides a psychological benefit that provides the student with an additional stimulus to succeed.

3. **Effect on Bar Pass Rate**

Eighty percent of students who participated in ISD passed the New York Bar exam on the first try, in comparison to the 69% and 70.5% pass rate for all Pace students during 2001 and 2002 respectively. Despite the small sample size, these results suggest that ISD not only assisted students to develop vital law school skills, but also that the acquisition of

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131. Prior to the 2001–2002 academic year, students needed to maintain a 2.0 to remain in good academic standing at Pace Law School. Beginning with the incoming class of the 2001–2002 academic year, students completing their first year with a GPA below 2.3 must appear before the Academic Standing Committee and are dismissed unless the Committee finds unique circumstances to allow the student to continue. If the student is allowed to continue, he or she must face Committee scrutiny one semester later.

132. Lustbader, supra n. 8. at sections IX and X.

133. This data reflects the Pace pass rate for students taking the exam for the first time.
such skills proved vital for success in passing the New York Bar exam. As discussed in Section II, ISD students focus on the acquisition of analytical and writing skills, both of which are necessary to complete both the multiple choice and essay portions of the Bar exam.\footnote{134}{The New York Bar exam is considered to be one of the most challenging bar exams in the country. The exam consists of three parts: (1) a 200-question multiple choice test, referred to as the Multistate Bar Examination (MBE), which requires students to read and analyze lengthy fact patterns; (2) a New York essay portion, which requires students to answer five multi-subject and multi-issue legal problems in a well-constructed and well-written essay, and to provide shorter answers to fifty short answer questions about New York law; and (3) a practical portion, referred to as the Multistate Performance Test (MPT), which requires students to read a case file and perform legal skills, such as drafting a memorandum, closing argument, or set of interrogatories.}

Independent quantitative studies undertaken at Pace have indicated that a student’s law school GPA has a direct correlation to a student’s ability to pass The New York Bar exam on the first try—students with a GPA of 2.6 or below generally do not pass the Bar on the first try.\footnote{135}{At best, 10% of Pace students with this cumulative GPA pass the New York Bar exam on the first try.} Students with a GPA between 2.6 and 2.8 pass at a rate of 46%, and students with a GPA of 2.9 or above tend to pass the Bar on their first try at a rate of approximately 90%. The ability of post-first-semester ISD students to raise their GPA from a mean grade of 2.6 to a mean grade of 3.1 suggests that their increased academic performance put them in a better position to pass the Bar on their first attempt. With this being a goal of the ASP, the findings demonstrate the significant benefit that can accrue from such a program.

Furthermore, because precompiled data showed that students graduating Pace Law School with a GPA of 3.40 had a 90% likelihood of passing the New York Bar exam on the first try, students who participate in ISD during their first semester are well on their way to passing the Bar. The ability of first-semester students to develop vital skills early on further enables them to master the analytical and writing skills vital for success on the New York Bar exam.

B. Workshop Series

1. Effect on Grade Point Average

Study findings demonstrate that workshop participants out-performed non-participants in both first-semester and cumulative GPAs.\footnote{136}{See supra Section IV(C) and Figure 3.} On the one hand, first-semester students benefited from the introduction of legal skills, including case briefing, note taking, outlining, exam preparation, and exam writing, into their curriculum. On the other
hand, the relatively stable and continuing difference in GPA between the two groups suggests that participants had developed first-year skills and were able to apply them beyond the first semester, although, as a group, they did not gain additional skills that would have allowed them to increase the disparity between the two groups’ cumulative GPAs. This is not surprising given that the skills acquired during the Workshop Series are basic skills geared toward the first-semester law student. Once a student acquires these skills, he or she should be able to apply them to the entire legal curriculum.

It is likely that some will dispute these findings and suggest that subjective factors were, likely, involved. For example, participation in the Workshop Series was voluntary, although students were encouraged to attend. As a result, it is necessary to consider that participants might have been more motivated than non-participants, and that they were, thus, more likely to spend more time studying throughout the semester and preparing for exams. It is, of course, possible that these students would have out-performed non-participants regardless of their participation in the Workshop Series. Furthermore, there is also a possibility that participants developed these vital skills on their own, in law school classes, or by attending a pre-law summer program or outside program, thereby suggesting that the suggested effect on first-semester performance by the Workshop Series participants was uncertain.

2. Effect on Retention

Study results demonstrate that students who participated in the Workshop Series continued at Pace Law School at a higher rate than did those who did not participate in the Workshop Series. In fact, retention for workshop participants was 100%. Despite these findings, the subjective, non-quantifiable factors discussed above must be considered. More specifically, it is possible that the students who voluntarily participated in the Workshop Series were more motivated, and thus, more likely to remain in school in general, than those students who chose not to attend the workshops.

C. Dean’s Scholar Program

1. Effect on Grades

Year-by-year analysis suggests that the role of an academic support director or professional is vital to the success of participants in the program, especially when a service involves the participation of upper-
level students in some type of leadership or teaching capacity.\footnote{See Table 2.} During the three years in which participating students out-performed non-participating students (1997, 2000, and 2001), a permanent director oversaw the Dean’s Scholar Program. In this capacity, the director selected the Dean’s Scholars who met with first-year students both individually and as a group on a regular basis prior to and throughout the fall semester. The Dean’s Scholars also attended a mandatory orientation program where they participated in a mock Dean’s Scholar session and were instructed on the goals of the program and various teaching methods. Thereafter, each Dean’s Scholar was required to meet with the director on a continuing basis to discuss the progress of the group and to get advice on any issues that arose throughout the semester. This degree of supervision was absent from the fall 1998 and 1999 Dean’s Scholar Programs, for which analyses show that Category 2 students (invitation, no participation) out-performed Category 3 students (invitation, participation).\footnote{See supra n. 97.} During these years, the academic support professional selected the Dean’s Scholars to work with the first-year students, but did not meet with the upper-level students throughout the semester; the professional also failed to ensure that the upper-level students were familiar with the various methods of group facilitation and teaching styles available to them.

The invitation process, based primarily on a student’s LSAT score, did not drive the differences between the 1997, 2000, and 2001 and the 1998 and 1999 programs. While students with an LSAT score of 151 or below were invited to the 1998 program, students with an LSAT of 147 or below were invited to the program in 1999. The lack of improvement for these years could not be attributed to these LSAT scores, as the three years in which Category 3 students out-performed Category 2 students included students with both higher and lower LSAT scores. Furthermore, if the overall LSAT score of Category 3 students had driven the performance, we would have expected that 1999 participants—who entered with an LSAT of 147 or below—would have earned the lowest first-semester GPA. As indicated in Table 7, it was the 1998 participants who earned the lowest first-semester GPA.

Subjective factors might, of course, have been involved. Just as students who voluntarily attended the workshops might have been more motivated as a group than were non-attendees, the Dean’s Scholar participants during 1998 and 1999 might have been less motivated, on average, than were the Dean’s Scholar participants during the other three
years studied. Similarly, the quality of the Dean's Scholars—the third and fourth year students who lead the weekly study groups—must be considered when evaluating student performance in a program involving upper-level students. Once again, these are immeasurable factors that might have impacted the findings.

2. **Effect on Retention**

Study findings suggest that the Dean's Scholar Program helped students to maintain a GPA required for academic standing purposes, and that these students were 8% more likely to maintain academic standing than were students who were invited, but who did not participate in the Dean's Scholar Program.140 In fact, the Dean's Scholar participants were more than twice as likely to avoid academic dismissal as students who were invited but chose not to participate.141 Nonetheless, it is possible—although subjective and speculative—that the group dynamic of the Dean's Scholar Program helped students assimilate into the law school setting and to become more familiar and comfortable with their peers. For one hour each week, Dean's Scholar students were encouraged to discuss legal problems in a group of ten or more students. Such assimilation, feelings of confidence, and possible bonding might have influenced students to remain in law school, rather than deciding to withdraw voluntarily.

3. **Effect on Bar Pass Rate**

The results of the study showed that participation in the Dean's Scholar Program during 1997 through 1999142 did not increase a student's likelihood of passing the New York Bar exam on the first try. Students who were not invited to participate in the Dean's Scholar Program passed the New York Bar exam at the highest rate.143 This result however, was not surprising given that this group (students who were not invited to participate) entered law school with a higher LSAT score than did all invited students. Indeed, as discussed in Section IV and later, a student's LSAT score is directly tied to success in the Bar exam.144 It is surprising, however, that students who were invited, but who did not participate, passed at a 13% higher rate than students who were invited

140. See Figure 4 and Table 2.
141. See Figure 5 and Sec. IV(D)(2).
142. Students participating in the program during 2000, 2001, and 2002 have not taken the New York Bar exam.
143. See supra Section IV(D)(3) and Figure 6.
144. See infra Section VI.
and chose to participate. It would require an evaluation of subjective criteria to determine what other factors might have contributed to the difference in pass rates between the two groups invited to participate in the 1997, 1998, and 1999 Dean's Scholar Programs.

D. Workshop Series and Dean's Scholar Program

1. Effect on Grade Point Average

Students who participated in both of these programs out-performed students who participated only in the Dean's Scholar Program. However, students who participated in both programs did not out-perform students who participated only in the Workshop Series. Much of this might be explained by the analysis of covariates, which indicated that a student's LSAT score and undergraduate GPA drove his or her first-semester GPA. On average, the Dean's Scholar students had a lower LSAT score than did the workshop students and, therefore, were likely to under-perform higher scoring students. Students who regularly participated only in the Workshop Series showed the most impressive mean GPA.

2. Effect on Retention

All eighteen students who participated in both the Workshop Series and Dean's Scholar Program maintained the required academic standing to be retained at Pace Law School. Despite these compelling findings, it is still necessary to consider subjective factors that might suggest that students who regularly participated in two voluntary ASP services were extremely motivated and determined students who were eager to do what was necessary to maintain a proper academic standing and succeed in law school.

VII. THE IMPACT OF BACKGROUND CRITERIA ON THE PERFORMANCE OF ACADEMIC SUPPORT PARTICIPANTS AND NON-PARTICIPANTS

A. Background Criteria and ASP Participants

As discussed above in Section V, the results from the study show that no external variable predicted an ASP student's ability to out-perform another student participating in the same service. For example,

145. See supra n. 97 and Figure 6.
146. See supra n. 108.
147. See id.
148. See supra nn. 75, 87, 97, and 108.
women who participated in ISD did not out-perform men who participated in ISD; Caucasians who participated in the Workshop Series did not out-perform African Americans who participated in the Workshop Series; and part-time students who participated in the Dean’s Scholar Program did not fail the Bar at a greater rate than did full-time students who participated in the Dean’s Scholar Program. No variable—including LSAT score, undergraduate GPA, part-time/full-time student status, ethnicity, gender, or socio-economic status—enabled participants to benefit significantly more than other participants. Rather, each student benefited similarly.

These results question the traditional models of ASP selection. Traditional models use these background criteria to select students for participation in all types of programs, including summer “head start programs,” first-semester and later programs, and third-year supplemental bar programs. Programs have tended to invite minority students, students who have been out of college for five years or more, and students with low LSAT scores or undergraduate GPAs. Other programs have targeted part-time students, figuring that they are working or raising families during the day and need extra assistance whenever possible. In fact, at the time of the study, the Pace program had adopted an aspect of the traditional model by inviting students to participate in the Dean’s Scholar Program based on their lower LSAT scores.

Study results, however, demonstrate that all students, regardless of background criteria, can benefit from academic support, and that no one racial, ethnic or other diversity group necessarily benefits more or less than another. Accordingly, academic support professionals and administrators should consider redesigning their selection procedures. Indeed, budget concerns, time, and staffing issues often make it unfeasible to have open enrollment for all academic support services. Nonetheless, results from the Workshop Series and ISD services analyzed in this study show that students do benefit from open programs.

This study also demonstrates that students benefit from programs that begin following the first semester and that are geared toward students who did not perform well during the first semester. In fact, ISD

149. See id.
150. See supra Section II(A) for discussion of “head start” programs.
151. See supra Section II(A) and n. 45 for discussion of supplemental bar programs.
152. See supra Section II(A).
153. See supra Section II(B).
154. See supra nn. 75, 87, 97, and 108.
155. See supra nn. 75 and 87.
students who were targeted to participate based on first-semester performance showed a vast improvement, thereby suggesting that administrations might well use first-semester GPAs as a basis for deciding which students to invite into later programs.

B. Background Criteria and ASP Participants and Non-Participants

The study also evaluated background criteria to determine whether any variable impacted the performance of both participants in an ASP service and eligible non-participants. The results proved interesting and useful to various law school constituencies, including academic support professionals, deans, admissions staff, and the students themselves. Not surprisingly, a student's LSAT score and undergraduate GPA proved to be accurate predictors of the first-semester law school GPA, overall law school chronological GPA, and Bar passage of ASP participants and non-participants. These findings with respect to law school GPAs comport with long-standing research showing that students with higher LSAT scores and undergraduate GPAs more often than not out-perform students with lower scores during the first semester of law school and beyond. Admissions officers at all law schools use such data when making selections each year. The findings showing a relationship between the LSAT score and undergraduate GPA and Bar passage were also expected. In fact, pre-compiled quantitative data showed the significant relationship between these variables. While 100% of Pace students with an LSAT score above a 161 pass the New York Bar exam on the first try, only 79% of students with an LSAT score between 152 and 160 passed, 18% of students with an LSAT score between 146 and 151 passed, and 10% of students with an LSAT of 145 or below. It is helpful to consider this information when admitting students into law school. Each school is significantly concerned with its bar pass rate and,

156. See supra n. 75.
157. See supra nn. 75, 87, 97, and 108.
160. See Stephen P. Klein, An Analysis of the Relationships Between Bar Examination Scores and an Applicant's Law School, Admissions Test Scores, Grades, Sex, and Racial/Ethnic Group, B. Examiner, Nov. 1980, at 14, 16-17 (finding a "strong correlation" between bar scores and both LSAT scores and law school grades).
161. Pace conducted analyses of Bar data using the authors' July 2001, 2002 and 2003 data.
as a result, must consider how various background criteria impact that pass rate.162

Law school GPA proved to be a significant predictor of a student's likelihood of passing the New York Bar exam on the first try.163 This finding, once again, comports with pre-compiled data at Pace Law School. More specifically, 100% of students who graduated Pace Law School with a GPA above 3.5 passed the New York Bar exam on the first try, 90% of students with a GPA between 3.0 and 3.49 passed, 46% of students with a GPA between 2.5 and 2.99 passed, and only 10% of students with a GPA below 2.5 passed. In addition to being useful to administrators who design programs, including law school bar programs, this information should be available to students for a variety of reasons. First, it is possible that learning this information early on in a law school career might motivate a student to raise his or her GPA out of concern for passing the bar exam. Furthermore, it is important for students to have knowledge of this information as they begin to consider the various bar preparation courses and other methods of preparation.

The results pertaining to other background criteria prove to be more interesting. First, a student's ethnicity was a significant factor; results showed that African Americans and Hispanics/Latinos performed less well than did Caucasians and Asian Americans with respect to both first-semester and cumulative GPAs.164 Second, a student's socio-economic background also proved to be significantly tied to both first-semester and cumulative GPAs; results showed that the economically advantaged outperformed the economically disadvantaged.165 These results were not unexpected—they comport to scholarly research.166 They are useful, however, for admissions staff, deans, and even law students themselves, as they may help these professionals better identify which students to include in ASPs.

Third, part-time/full-time student status proved significant in predicting first-semester GPA; results showed that full-time students out-

162. See Berger, supra n. 159, at 488.
163. See supra nn. 75, 87, 97, and 108.
164. Id.
165. Id.
performed part-time students.\textsuperscript{167} This finding was also not surprising, as many law schools, including Pace, encourage applicants with lower LSAT scores and undergraduate GPAs to matriculate into their part-time programs.\textsuperscript{168} It is also likely that most of these students spend a significant amount of time working or raising a family during the day and, as a result, are less able than full-time students to devote significant time to studying. These findings are also valuable to administrators, deans, and law students themselves. Finally, gender proved to be influential on Bar passage.\textsuperscript{169} Males were more likely than females to pass the New York Bar exam on the first try.\textsuperscript{170}

Although these data do not pertain to ASP students alone, they might be helpful to academic support professionals who must consider the needs of all students when developing both targeted and open programs. Furthermore, these results might be useful to other law school constituencies when making admission and curriculum decisions. Finally, these results should prove useful to current and future law students seeking to evaluate how background criteria might impact their academic performance.

VIII. SUGGESTED MODEL

One of the goals of this evaluation was to identify a model that deans, administrators, and academic support directors could use in evaluating programs. Although a number of variables might prove to be statistically significant in most analyses, their theoretical importance must be questioned, as must the question of whether they truly add any substance to the evaluation. Variables such as gender, ethnicity, socio-economic status, part-time/full-time student status, LSAT score, law school GPA, and undergraduate GPA would all seem to add substance to the evaluation, whether statistically significant or not. Indeed, the inclusion of these variables in the model not only controls for variation on the dependent variable, but also helps to identify which students are performing well and which students might be in need of academic support. These interactions, though insignificant in this evaluation, might help to identify which students are benefiting from the academic

\textsuperscript{167} See \textit{supra} nn. 97 and 108.

\textsuperscript{168} For example, the following are the mean LSAT scores of first-year, full-time day students at Pace Law School: 1999: 152; 2000: 153; 2001: 153; 2002: 154; 2003: 155; compared to the following mean LSAT scores of first-year, part-time students at Pace Law School: 1999: 149; 2000: 150; 2001: 149; 2002: 152; 2003: 151.

\textsuperscript{169} See \textit{supra} nn. 75 and 97.

\textsuperscript{170} \textit{Id.}
support services and whether the ASPs are beneficial for every participant.

For the current study, cross-tabulations, a t-test, and analysis of variance were carried out initially for each ASP service on each outcome to test whether there were any significant differences in participation in the ASP services. For GPA, analyses of covariance (ANCOVA) were examined while controlling for all other factors. Separate analyses of covariance were then examined with interactions. For the retention and Bar passage outcomes, logistic regression analyses were carried out while controlling for all other factors. Separate logistic regressions were then examined with interactions. The following models were tested:

**Model 1:**

\[
\text{First-Semester GPA} = \beta_0 + \beta_1 \text{ASP} + \beta_2 \text{Sex} + \beta_3 \text{Ethnicity} + \beta_4 \\
\text{Part-Time/Full-Time Status} + \beta_5 \text{SES} + \beta_6 \text{LSAT} + \beta_7 \\
\text{Undergraduate GPA} + E
\]

**Model 2:**

\[
\text{Retention} = \beta_0 + \beta_1 \text{ASP} + \beta_2 \text{Sex} + \beta_3 \text{Ethnicity} + \beta_4 \text{Part-Time/Full-Time Status} + \beta_5 \text{SES} + \beta_6 \text{LSAT} + \beta_7 \text{Undergraduate GPA} + E
\]

**Model 3:**

\[
\text{Bar passage} = \beta_0 + \beta_1 \text{ASP} + \beta_2 \text{Sex} + \beta_3 \text{Ethnicity} + \beta_4 \text{Part-Time/Full-Time Status} + \beta_5 \text{SES} + \beta_6 \text{LSAT} + \beta_7 \text{Undergraduate GPA} + \beta_8 \text{Law School Cumulative GPA} + E
\]

**Model 4:**

\[
\text{Outcomes} = \beta_0 + \beta_1 \text{ASP} + \beta_2 \text{Sex} + \beta_3 \text{Ethnicity} + \beta_4 \text{Part-Time/Full-Time Status} + \beta_5 \text{SES} + \beta_6 \text{LSAT} + \beta_7 \text{Undergraduate GPA} + \beta_8 \text{Law School Cumulative GPA} + \beta_9 \text{ASP} \times \text{Covariate} + E
\]

Each of the first three models above represents a statistical model used to examine the effect of all the independent variables—referred to as background criteria throughout this article—on the outcome variables tested, including GPA, retention, and Bar passage. The ASP variable included in each model can be replaced with any of the three services studied. The sample includes both participants and eligible non-participants of each ASP service studied. Model 4 adds the interactions of covariance, which examines whether specific background criteria
affect whether some ASP students out-perform or under-perform\textsuperscript{171} other students who participated in the same ASP service.

Based on the findings of this study, which showed that the biggest impact stems from individual contact with the academic support professional, it would also be useful to evaluate the relationship—both in terms of quality and quantity—between the student and the academic support professional for each service offered, the academic support professional’s supervision with regard to student teaching assistants, the academic support professional’s background, and his or her teaching style. Furthermore, it would be necessary to evaluate any supervisory or teaching role held by an upper-level student—referred to as a teaching assistant, tutor, dean’s scholar, or teaching fellow. Therefore the following statistical model is suggested for future law school academic support program evaluators to consider:

\[
\text{Outcome} = \beta_0 + \beta_1 \text{ASP} + \beta_2 \text{Sex} + \beta_3 \text{Ethnicity} + \beta_4 \text{Part-Time/Full-Time Status} + \beta_5 \text{SES} + \beta_6 \text{LSAT} + \beta_7 \text{Undergraduate GPA} + \beta_8 \text{Quality of ASP Student/Professional Relationship} + \beta_9 \text{Quantity of ASP Student/Professional Relationship} + \beta_{10} \text{ASP Professional's Contact with Student Teaching Assistants} + \beta_{11} \text{ASP Professional's Educational Background} + \beta_{12} \text{ASP Professional's Teaching Style} + E
\]

\text{IX. CONCLUSION AND RECOMMENDATIONS}

The results of this study support the view held by many academic support professionals and law school administrators that ASP services do, indeed, offer a benefit to students who regularly participate in such services. Academic improvement is most significant when the student regularly participates in an individual service provided by the academic support professional. Improvement is also significant when the student regularly participates in group programs taught by the academic support professional. Less academic benefit results when students regularly participate in an ASP service led by an upper-level student.

Each first-year service evaluated conveyed a benefit to participants in the form of immediate academic performance and retention at law school. The upper-level service studied demonstrated similar—and quite compelling—results. Furthermore, the study yielded interesting results with respect to which background criteria and pre-law indicators are

\textsuperscript{171} The model evaluates whether the students out-performed or under-performed other ASP students with respect to any of the three outcomes studied.
predictive of academic performance and Bar passage.\textsuperscript{172} Although many of the outcomes were not unexpected, many confirmed concerns widely held by law school professionals throughout the country. Finally, no analysis conducted showed an interaction that allowed us to find a statistical relationship between background criteria and success following participation in any of the ASP services studied. Therefore, it can be assumed that regardless of background criteria and pre-law indicators, each student has an equal likelihood of benefiting from academic support services.

Given the results of this study, deans and administrators constructing an ASP would be well advised to offer a program that begins after the first semester of law school. Selection and participation in the program should be based on a student's performance in his or her first semester of law school, as opposed to traditional models based on ethnicity, LSAT score, undergraduate GPA, and part-time/full-time student status. Ideally, an academic support professional should be available to work one-on-one with those students who have demonstrated a weakness in legal analysis, or who have failed in other ways to grasp fully the learning techniques necessary to succeed in law school. A separate workshop series or class lab, in which an ASP professional teaches in a small group setting, would also benefit students. A workshop series in the first semester of law school is also advised. Because the study could not fully evaluate how students might have performed prior to the Workshop Series, this study comfortably suggests that participation in a program offers students the benefit of learning skills from a professional in a small group setting.

This study combines the findings and discussion to provide a model for use by academic support professionals and law school administrations to evaluate and design their own programs. Finally, this study demonstrates that investing resources in an ASP is a wise choice because ASP services are proving to benefit a wide variety of students in terms of a wide variety of outcomes, thereby increasing law school retention and bar passage rates.

\textsuperscript{172} No variable was predictive of retention. See supra nn. 75, 87, 97, and 108.