WHAT DIFFERENCE DOES

DAY SCHOOL MAKE?

THE IMPACT OF DAY SCHOOL:
A COMPARATIVE
ANALYSIS OF JEWISH
COLLEGE STUDENTS

MAY 2007

Fern Chertok Leonard Saxe Charles Kadushin Graham Wright Aron Klein Annette Koren







Version 1.2 (May 17, 2007)

For revision history and list of corrections from preliminary version, please visit www.brandeis.edu/cmjs/files/PEJErevisions.pdf

© 2007 Brandeis University Maurice and Marilyn Cohen Center for Modern Jewish Studies

Electronic and print copies available from:
The Partnership for Excellence in Jewish Education
88 Broad Street
6th Floor
Boston, MA 02110
617-367-0001
www.peje.org

Electronic copies available from:
Maurice and Marilyn Cohen Center for Modern Jewish Studies
Brandeis University
Mailstop 014
415 South Street
Waltham, MA 02454
781-736-2060
www.brandeis.edu/cmjs

WHAT DIFFERENCE DOES

DAY SCHOOL MAKE?

THE IMPACT OF DAY SCHOOL: A COMPARATIVE ANALYSIS OF JEWISH COLLEGE STUDENTS

MAY 2007

Fern Chertok Leonard Saxe Charles Kadushin Graham Wright Aron Klein Annette Koren







PREFACE

In the ten years since PEJE was founded, the day school field has celebrated numerous achievements: more new schools, more major donors, more accessing of expertise, and, perhaps most importantly, more parents choosing day school for their children. Day school education is having tremendous impact on increasing numbers of children, families, and communities.

In order to maintain the current momentum and expand greatly the number of Jewish families considering day school education, the field demands quantifiable evidence to substantiate the anecdotal testimony. To that end, PEJE is very pleased to release the findings of this study conducted by Brandeis University's Maurice and Marilyn Cohen Center for Modern Jewish Studies.

This study reflects the highest standard of research and provides us with essential information for sustaining and nurturing day school excellence. From the rigorous design of this comparative study, findings have emerged that demonstrate the power of day schools to prepare students well academically, to enable them to move forward with a sense of civic responsibility into new and larger social communities, and to provide them with a solid grounding in Judaism, such that they are much more involved in campus Jewish life. We are especially gratified to see evidence that the day school emphasis on Jewish values appears to inoculate and protect graduates from a wide range of dysfunctional behaviors so prevalent on college campuses today.

Our hope is that these findings, including those that point to areas for improvement, will stimulate informed dialogue on day school impact among day school leaders and philanthropic sponsors and will guide future research. One of PEJE's key strategies is to suffuse the day school field with knowledge. As we widely disseminate this substantial body of research, we enlist all readers to use the knowledge contained in this study to promote day school education ever more widely.

I want to thank Alan Slifka and his foundation staff for challenging PEJE and for working with us to support and help shape this study. Indeed, the original idea for the study was suggested by Alan. His idea catalyzed the work of PEJE's Bonnie Hausman together with Len Saxe and Fern Chertok of the Cohen Center. I offer my thanks to them, as well as to the study's other funders.

Rabbi Joshua Elkin, Ed.D.

PEJE Executive Director

Joshus Ele

May 2007

ACKNOWLEDGEMENTS

Support for the conduct of the study was provided by the Partnership for Excellence in Jewish Education (PEJE) and a matching grant from the Alan B. Slifka Foundation, along with contributions from the Arie & Ida Crown Memorial, Alisa and Dan Doctoroff, the Jewish Community Foundation of Los Angeles, Naomi and Mark Ramer, Pamela and George Rohr, and an anonymous donor.

The authors express their profound appreciation to Rabbi Joshua Elkin, PEJE Executive Director, and Dr. Bonnie Hausman, Program Officer for Research and Evaluation at PEJE, for proposing that this study be conducted, as well as for their support and advice throughout. We also thank Amy Katz, Suzanne Kling, Herb Tobin, and Colin Codner at PEJE for their assistance.

The report benefited substantially from the comments of reviewers who shared reactions to earlier drafts. The reviewers included Drs. Bethamie Horowitz and Bill Robinson and Yossi Prager.

We are particularly appreciative of the many ways in which our work was made possible by the assistance of our colleagues and students at the Cohen Center at Brandeis, including Christie Cohen, Marissa Colon-Margolies, Deborah Grant, Daniel Havivi, MeLena Hessel, Daniel Hoffman, Ben Phillips, Nina Robinson, Mark Rosen, Dana Selinger-Abutbul, Dave Tobey, and Gail Wright.

TABLE OF CONTENTS

Preface	1
Acknowledgements	ii
Table of Contents	iii
Table of Exhibits	iv
Executive Summary	1
Introduction	5
Methods	9
Focus Groups	9
Survey Instrument	
Sampling Strategy	
Respondent Sample	
Educational Background of Sample	
Succeeding in the World of Secular Studies	17
Academic Preparation	17
Academic Confidence in College	
Math Confidence	21
Academic Performance in College	21
Selection of Major Field of Study	21
Responding to Individual Needs	25
Bursting the Day School "Bubble": Social Life on Campus	27
Social Climate in High School	27
Involvement in Campus Life	29
Social Connections in College	30
Use and Abuse of Alcohol	32
Remaining Involved in Jewish Life	35
Connection to Israel	39
Enrollment in Jewish Studies Courses	40
The Legacy of a "Values-Added" Education	43
Summary and Recommendations	45
Notes	49
D C	F1

TABLE OF EXHIBITS

Figure 1: Regional Breakdown of Undergraduate Sample Compared to
National Jewish Population
Figure 2: Day School Attendance by Denomination Raised
Figure 3: Number of Years of Day School Attendance for Students with
any Day School Experience
Figure 4: High School of Graduation
Figure 5: School Background
Figure 6: Perceptions of High School Academic Climate
Figure 7: Evaluations of Preparation for College Level Work
Figure 8: Distribution by Major Area of Study
Figure 9: Highest Degree Sought
Figure 10: Perceptions of High School
Figure 11: Perceptions of High School Social Climate
Figure 12: Involvement in Extra-Curricular Activities
Figure 13: Involvement in Extra-Curricular Activities
Figure 14: Source of Friendship Networks
Figure 15: Percentage Dating "All" or "Mostly" Jewish Peers
Figure 16: Importance of Being Jewish While in College
Figure 17: Participation in Jewish Campus Activities
Figure 18: Mean Jewish Campus Involvement Score
Figure 19: Attendance at Jewish Religious Services
Figure 20: Percentage Who Have Taken at Least One Jewish Studies Course
Figure 21: Percentage Strongly Considering a Jewish Communal Career

EXECUTIVE SUMMARY

In recent years, there has been a dramatic expansion of Jewish day school enrollment and capacity, driven by an increase in the number of non-Orthodox schools. Yet, despite their impressive growth, and high expectations for day schools as a strategy to ensure Jewish engagement, they are selected by only a small percentage of eligible families. Non-Orthodox parents are inhibited from selecting Jewish day schools by concerns regarding the quality of the secular education that these schools provide and their ability to address individual learning needs. Parents also worry that the lack of diversity in day schools will leave their children unable to function in a pluralistic society.

The present report describes the first national study specifically designed to determine the near-term effects of day schools on the academic, social, and Jewish trajectories of former students during their college years. The study considers the impact of day schooling in a variety of areas including Jewish identity and connections to Jewish communal life, as well as social and academic integration into college. Second, the study contextualizes the experiences of students from day schools through comparison with Jewish undergraduates from private and public school backgrounds.

The design of the on-line survey used in the project was informed by the results of focus groups with Jewish college students. The survey assesses undergraduates' perceptions of their educational and social experiences prior to college, the capacity of their previous education to address their individual learning styles and needs, their academic preparedness for secondary school and college level work, their social competence and academic self-confidence as they transitioned from high school to college campus, and their sense of individual responsibility for addressing social problems.

A two-frame sampling strategy allowed access to a large group of college-age alumni of Jewish day schools, as well as Jewish undergraduates from other pre-college educational choices. The primary sampling strategy entailed use of email lists obtained from twelve campus Hillel organizations. The supplementary sampling strategy involved the use of lists of college-age alumni from 16 Jewish day schools. Contact was attempted with more than 9,000 email addresses, and 3,312 Jewish undergraduates completed the survey.

Respondents represent a diversity of educational backgrounds. More than one-third attended a Jewish day school at some point during grades one through twelve. Over half graduated from a public high school, about a fifth graduated from a Jewish high school, and 15% from a non-Jewish independent school. The sample reflects the broad socio-demographic range of the population. The sample is relatively balanced for gender and features virtually equal representation from students in all four years of college. Comparison of the communities in which students graduated high school with the geographic distribution of the total U.S. Jewish population indicates that the obtained sample closely mirrors patterns of residence for American Jews.

RESULTS

Alumni of Jewish high schools gain admittance to colleges and universities that represent the full spectrum of institutions of higher education including the most highly selective. In fact, the majority of the respondents to the present survey attend colleges and universities in the top quartile of ranked schools. For purposes of testing the adequacy of day school preparation for college, and the impact of day school education on the ability of students to function in both Jewish and non-Jewish settings, the responses of day school graduates (Orthodox and non-Orthodox) were compared with those of public and private school respondents.

Academic Preparation in High School

Jewish high school alumni from a non-Orthodox background are the most positive about the level of intellectual challenge and engagement fostered by teachers in classes. This group's ratings of its preparation in the areas of history, writing, and study skills are on par with the ratings of alumni from private high schools and significantly higher than those of either Orthodox raised alumni of Jewish high schools or alumni of public schools. However, in math, science, and computer literacy, Jewish high school alumni from both Orthodox and non-Orthodox backgrounds perceive that they were significantly less well prepared as compared with both public and private high school peers.

Academic Performance in College

There are no significant differences in the self-reported GPAs of those who attended public, private, or day schools. Students from non-Orthodox backgrounds with six or more years of day school demonstrate the highest academic self-confidence. While day school students from an Orthodox background experience lower math confidence, they like other students who attended day schools, do not appear to experience any skill deficits that limit their willingness to select major fields of study that are dependent on skills related to math and science. Nor are they any more likely than other students to feel the need for tutoring or remedial work in math or science.

Response to Individual Learning Needs

Jewish high school alumni from non-Orthodox backgrounds are the most positive about the encouragement and support received from teachers, and are second only to private high school peers when it comes to their evaluations of the availability of extra help or attention to individual learning needs. By contrast, Jewish high school alumni from Orthodox backgrounds are consistently the least positive in their evaluations of their school's response to their individual learning needs and the availability of supplementary help. At both ends of the spectrum of ability, day schools appear to be less able to serve the needs of diverse learners, both those who are academically gifted and those who need additional or specialized educational supports.

Integration into College Life

Like other undergraduates, students who attended day schools participate in all aspects of undergraduate life and are well represented in the ranks of student leaders. Even as they maintain strong connections to their day school friends, the social networks of Jewish high school alumni are overwhelmingly comprised of new friends they have met in their dorms, in classes, and through the clubs and organizations in which they participate. At the same time, former day school students, especially those with extensive day school experience, have shown themselves to be more resistant than their public school peers to social pressures for the type of heavy drinking that leads to other risky situations and behaviors. The most striking feature of the social networks of those who attended day schools is the density of their connections with Jewish peers. Those with extensive day school experience are also more likely to restrict their dating to Jewish peers.

Jewish Campus Involvement

Whether the criterion is involvement in formal Jewish learning, enrollment in Jewish studies courses, observance of holidays, programs on the Holocaust, Israel and Jewish culture, opportunities to do community service sponsored by a Jewish organization, knowledge or Israel or informal celebrations of Jewish holidays with friends, those who have attended day schools are more involved compared with those who did not attend. In terms of most aspects of Jewish campus life and ritual observance, former day school attendees from Orthodox homes are far and away the most involved. But perhaps even more striking is the demonstrated power of day schools to build strong Jewish identities and connections among students who come from non-Orthodox backgrounds.

Civic Responsibility

Day schools, especially those that attract students from non-Orthodox backgrounds, succeed at imparting an orientation of civic and social responsibility to their students. Former day school students express a stronger sense of responsibility towards addressing the needs of the larger society by influencing social values, helping those in need, volunteering their time to social change efforts, and finding careers that allow them to be of service to the larger community as compared with their public and private school peers. Students with day school experience, especially those from Orthodox backgrounds, also express a greater commitment to the Jewish community, as reflected in their intent to pursue Jewish communal careers.

CONCLUSIONS

The results of the present study provide a very positive portrait of the successes of day school students, both in terms of the ways they are similar to and the ways they do better than their public and private school peers. Nevertheless, the finding that day school alumni, compared to other Jewish students, perceive themselves as less well prepared in math, science, and computer literacy suggests an area ripe for improvement. The present results also suggest that day schools need to attend to the individual learning needs of all their students, including those who may need greater challenge and enrichment as well as those who may require extra educational supports. Neither parents nor students should feel that educational needs are compromised.

Along with drawing attention to these areas for change, this report reveals areas of success and presents a substantial opportunity to communicate that success to a wider audience of parents. Although the present findings suggest that day schools can do more to improve math and science learning and to address the needs of diverse learners, the report also validates that day schools provide top-notch preparation for a broad range of colleges and universities, including those that are the most selective.

INTRODUCTION

The last decade has witnessed a dramatic expansion of Jewish day school enrollment and capacity. The number of students attending Jewish day schools in North America has more than doubled since the 1960s. According to a 2003-4 Jewish day school census (Schick, 2005), there are over 170,000 students in first through twelfth grade. Growth in enrollment has been coupled with substantial increases in the number of Jewish day schools available to students and a dramatic rise in non-Orthodox day schools. Communal leaders, both non-Orthodox and Orthodox, as well as researchers have lauded day schools as a key strategy to encourage the Jewish engagement of the next generation (AJC, 1999; Cohen & Kotler-Berkowitz, 2004).

Despite the impressive growth of Jewish day schools and high expectations that communal leaders hold for graduates, the fact remains that day schools are selected by only a small percentage of eligible families.² Although twelve years of day school education is the norm for Orthodox families, enrollment in non-Orthodox day schools peaks in the preschool and early elementary grades and continues to decline from that point with the sharpest drops occurring prior to high school (Schick, 2005). The number of students enrolled in non-Orthodox high schools have increased dramatically in the last decade; nevertheless, these schools enroll only a small fraction of Jewish teens.

The decision to enroll a child in a Jewish day school is a significant choice for parents. Educational decisions invoke and embody parental hopes and aspirations, as well as concerns for the emotional well-being and growth of their children. Several studies (Chertok & Saxe, 2004; Lieberman Research Worldwide, 2004; Saxe, Kelner, Rosen & Kadushin, 2001) converge in their conclusion that, to a great extent, non-Orthodox parents are inhibited from selecting Jewish day schools by concerns regarding the quality of the secular education that these schools provide. Parents are concerned that Jewish day schools will short-change their children's academic preparation for higher education. They are also concerned that the lack of diversity in day schools will leave their children with less experience of how to function in a pluralistic society. Moving non-Orthodox parents toward the "tipping point" with regard to day school selection demands that these central concerns be addressed.

The present report describes the first national study specifically designed to determine the near-term effects of day schools on the academic, social, and Jewish trajectories of former students during their college years. The study is unique in at least two ways. First, it considers the impact of day schooling on a wide range of outcomes important to students and parents, including Jewish identity and connections to Jewish communal life, as well as academic skills and college preparation. Like other educational settings, day schools exert influence in multiple ways, affecting students' intellectual development, as well as their

individual and communal identities, and their interpersonal relationships and perspectives. If day schools are going to be a desirable setting for a broad range of Jewish students, it is important to understand how they succeed across secular and non-secular domains. A particular focus of the study is how well a day school education will prepare students to enter and succeed in the academic and social arenas of higher education.

The present study is also unique because it examines the experiences of college students who have come from day schools and compares them to the experiences of undergraduate peers from private and public schools. The study is, thus, contextualized. Previous research on day school education has assessed the experiences of those who attended day school either without comparison to peers who did not attend this educational option or with comparisons to groups such as "all public school students," predominantly comprised of individuals from vastly different cultural and socio-economic backgrounds (Schick, 2000). Although such research documents positive perceptions of day school education, the comparison groups differ on too many dimensions and make it difficult to differentiate the influence of the schools themselves from the impact of various religious, cultural and socio-demographic characteristics. The present study takes a different approach and collects information exclusively from Jewish college undergraduates who represent a broad range of denominational backgrounds as well as the full spectrum of pre-college educational options including day schools, public schools, and non-Jewish private schools. The present study thus allows examination of the experience of those who attended day schools within a comparative framework and provides data to tease apart the role played by denominational background and educational history.

In the ideal research scenario, one would identify the entire population of college-age students who have attended day schools and then select a sample from this group to compare with peers from the population who did not attend a day school. Such population data are, unfortunately, not available. Even among Jewish high schools, contact information for college-age alumni is unavailable, incomplete, or out of date. Most day schools lack systematic means to gather and update alumni information. The approach taken in the present study focuses on sampling Jewish students enrolled in a sample of universities. The goal is to compare the impact of day school on academic, interpersonal, and religious/cultural dimensions.

In the following sections, the study design and methods are described and a summary of the characteristics of the sample in terms of their geographic, educational, and Jewish denominational history are presented. The report then considers the trajectories of former day school attendees and their Jewish peers on several broad areas including perceptions of academic preparation and attention to individual learning needs at the secondary school level, academic confidence and performance in college, integration and involvement in campus social and extra-curricular activities, participation in Jewish cam-

pus life, and development of civic responsibility. Following this detailed description of the data, the report concludes by considering the implications of the findings both for the continued development of day school education and for reaching a broader population of potential day school students.

METHODS³

FOCUS GROUPS

As part of the initial exploration of the experiences and issues relevant to former day school students, four focus groups were conducted with undergraduates who had attended day schools for at least one year. A total of 32 students participated in focus groups. Three of these groups were conducted at college campuses and one at a local Jewish Community Center (JCC). At each campus, the local Hillel organization assisted in the recruitment of focus group participants. The fourth group was held at a JCC in a metropolitan area with several day schools and was attended by students home for summer break. Undergraduates were recruited for this group with the cooperation of the five major day schools in the area, two of which were high schools.

Focus group participants were asked to reflect on their educational experiences in day school and in college and to share their thoughts about the lasting impact of having a day school education. Their responses were used in the development of survey items and are reflected in vignettes throughout this report.

SURVEY INSTRUMENT

An on-line survey was designed to assess college undergraduates' perceptions of their educational and social experiences prior to college, the capacity of their previous education to address their individual learning styles and needs, their academic preparedness for secondary school and college-level work, their social competence and academic self-confidence as they transitioned from high school to college campus, and their sense of individual responsibility for addressing social problems. The survey also included questions about social life at college, participation in extra-curricular activities including Jewish campus life and programming, perspectives on Israel, future degree and career plans and Jewish background and upbringing. The majority of the items were drawn from existing surveys of school social climate, civic responsibility, Jewish involvement, academic self-confidence, and drug and alcohol use that had been used extensively with adolescents and young adults.

SAMPLING STRATEGY

A two-frame sampling strategy was used to reach both a large group of college-age alumni of Jewish day schools, as well as Jewish undergraduates representing the full spectrum of pre-college educational choices. The primary sampling strategy was college based and entailed the use of contact information for Jewish undergraduates obtained through campus Hillel organizations. The study also employed a supplementary sampling strategy designed to ensure that sufficient numbers of day school alumni were reached. This oversample involved the use of lists of college-age alumni from Jewish day schools.

The Hillel organizations at fourteen colleges agreed to share their contact information and twelve of these lists proved to have sufficient information for use in this study. These colleges were selected because they represent a geographically diverse sample of schools that are known to have large Jewish populations and have been demonstrated to be academic destinations for Jewish high school alumni (PEJE, 2006). Previous research with college undergraduates suggests that although the students whose names appear on Hillel contact lists tend as a group to have stronger Jewish identities and to be more involved in Jewish campus activities, these lists are not limited to those who actively participate in Jewish campus life (Sales & Saxe, 2006).

Contact lists of college-age alumni were also received from 21 Jewish high schools. In addition, two primary/middle level day schools provided lists of their college-age alumni for inclusion. Of these, the lists from 16 schools provided sufficient information to contact alumni. Ten of these day schools are either non-denominational or pluralistic, three are Orthodox, two are Conservative and one is Reform.

Using a "snowball" sampling strategy, day school alumni who participated in the survey were asked to pass on a URL and/or a toll free telephone number to day school peers for survey registration. Forty-five additional day school attendees registered for the survey using this method. As each new list was obtained through any of the sampling strategies, names were checked against previously received lists and duplicate entries were eliminated.⁶

RESPONDENT SAMPLE

Of the 3,978 individuals who responded to an e-mail invitation to participate in the study, 3,312 were Jewish undergraduates and therefore eligible to complete the survey. The majority (82%) of the sample was derived through Hillel contact lists ensuring that comparison group information was available not only from students who had attended day schools but also from peers who did not have day school experience and currently attend the same colleges and universities.

The quality of the contact lists and the response rates for individual colleges or day schools varies widely, with an overall response rate of 33.2% and a raw response rate for the Hillel sample of 32.7% (once known bounced e-mails are eliminated). This is a conservative estimate for several reasons. First, an unknown number of e-mail invitations were blocked by spam filters and/or placed in "junk" mailboxes. There is also no way to know how many of the names on the Hillel contact lists corresponded with graduate students, faculty, staff, or community members all of whom would not be eligible to complete the survey. Thus, it is likely that the actual response rate is significantly higher. A response rate of one-third is also in line with the outcomes of other survey research conducted with the college population. For example, Sax et al. (2003) reports response rates of 17%-24% in a study comparing the efficacy of various survey methods among a sample of college students, and Porter and Umbach (2006) find an average response rate of 43% across 321 colleges with substantial variation among schools.

Although the response rate obtained in this study is in line with other research conducted with college undergraduates, it does raise concerns about how representative the resulting sample is of the larger population of Jewish undergraduates. Previous research has shown that when the focus is comparison across samples, rather than on developing point estimates of specific outcomes (e.g., GPA), representativeness is not essential (Kadushin, Phillips, & Saxe, 2005; Pew Research Center, 2004). A key question, however, is whether members of any particular group of potential respondents were either disproportionately attracted to or deterred from participation in the survey. For example, did the survey draw an over or under representative group of students with particularly positive or negative attitudes toward one type of schooling? To avoid this possibility, initial communications with potential respondents described the study using neutral language: "pre-college and college-level educational and social experiences." Although it is possible that students with the most negative high school experiences would not be drawn to the study, there is no reason to believe that this bias was expressed in only one of the comparison groups. Since all potential respondents received the same invitation within the same time frame, it is assumed that whatever biases exist in the sample are not restricted to one particular group but instead affect all comparison groups equally.

In terms of representativeness, although it is unlikely that the study sample is fully representative of Jewish college students, on some dimensions the sample reflects the broad socio-demographic range of the population. Thus, for example, the sample is relatively balanced for gender with females comprising just over half (57%) and features virtually equal representation from all four years of undergraduate standing. Almost universally (99%) respondents are full time students. Comparison of the communities in which students graduated high school with the geographic distribution of the total U.S. Jewish population, as measured by NJPS 2000-01, also suggests that the obtained sample closely mirrors patterns of residence for American Jews (Figure 1). The largest concentrations of respondents come from the Middle Atlantic and Pacific regions.

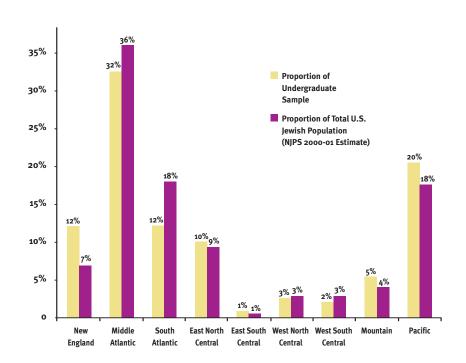


Figure 1: Regional Breakdown of Undergraduate Sample Compared to National Jewish Population

Respondents not only represent the full spectrum of Jewish denominational affiliations and identities, but the distribution of denominational identities in which students were raised is in line with population data on denominational identification: 9% Orthodox, 35% Reform, and 38% Conservative. Seven percent indicate that either "Secular" or "Just Jewish" was their only Jewish identity growing up.

EDUCATIONAL BACKGROUND OF SAMPLE

Overall, more than one-third of the sample (35%) attended a Jewish day school at some point in time during grades one through twelve. For two-thirds of this group (66%) their most recent day school experience was a Jewish high school and for another fifth (20%) their most recent experience was in Jewish middle school. As shown in Figure 2 among those raised in Orthodox or traditional homes day school education was almost universal (91%).

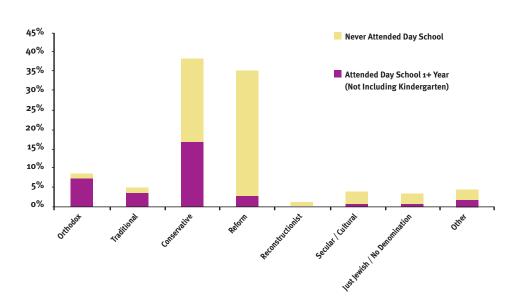


Figure 2: Day School Attendance by Denomination Raised⁷

Respondents also range from one year through twelve years of day school experience, with every possible variation represented (Figure 3). Almost two-tenths (16%) of those who ever attended a day school did so for nine years with the largest percentage (43%) having attended for all twelve years of pre-college education.

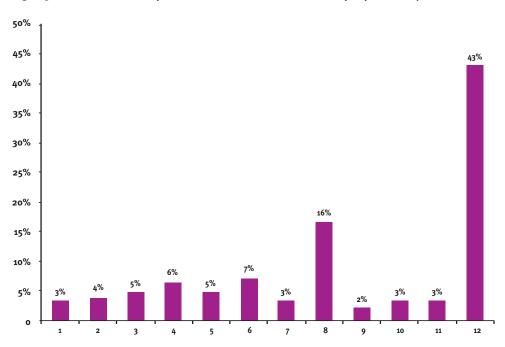


Figure 3: Number of Years of Day School Attendance for Students with any Day School Experience

Students in the respondent sample also represent a diversity of educational backgrounds. When asked from what type of high school they graduated, the largest percentage indicated a public school, with a small sub-group saying they attended a publicly funded charter or magnet school (Figure 4).8 About a fifth graduated from a Jewish high school and 15% from a non-Jewish independent school. Most of this latter group graduated from secular, private schools with a very small portion having graduated from religiously affiliated but non-Jewish schools such as a Lutheran or Quaker Friends high school.9

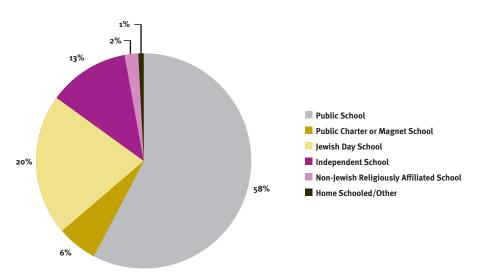


Figure 4: High School of Graduation

The present study contextualizes the impact of day school through comparisons between those who attended day schools, and Jewish peers who came from different educational backgrounds. In order to make valid comparisons, it is necessary to ensure that groups do not systematically differ on other dimensions that may impact the findings. The most obvious of these is denominational family background. As previously described, being Orthodox is highly correlated with going to day school, and for this reason the experiences of those raised in Orthodox homes are analyzed separately from those raised in non-Orthodox homes. This categorization is based on the denominational identity with which the students were raised and does not describe the affiliation of the day school(s) they attended.

In addition, the length of attendance at a day school is also considered. Students who attended day schools and were raised in non-Orthodox homes are divided into two categories; those with less than six years and those with six or more years of day school education. Six years was chosen as the criteria because it captures whether or not the student spent the majority of their pre-college education in a day school. This distinction refers to the total number of years of day school attendance and not to the number of consecutive years or to attendance at a particular grade level. Since over nine-tenths (92%) of day school alumni raised Orthodox attended day schools for nine years or more, the analyses do not further subdivide this category.¹⁰

Using these categories, just over one half (54%) of the sample primarily attended some form of public school, with another 10% attending private, non-Jewish schools (Figure 5). Among those with a day school history, the largest group (21%), were raised non-Orthodox and attended for six or more years. Just under one-tenth (7%) were raised non-Orthodox and attended for less than six years, and a very similar portion (8%) were raised Orthodox and attended day school.

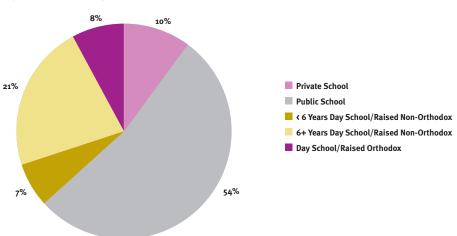


Figure 5: School Background

The previous discussion suggests that, in terms of gender, current year in school, denominational identity, and geographic distribution, the survey succeeded in reaching a diverse group of Jewish undergraduates who resemble the larger Jewish and college populations. The sample also includes large numbers of students whose pre-college educational careers occurred in public, day school, and non-Jewish private schools. The size and diversity of the sample also allows examination of the influence of denomination and length of school tenure on the outcomes of day school education.

The analyses described in the remaining sections of the report make use of two frameworks for categorizing and comparing respondents. When the focus is on experiences or evaluations of preparation specifically at the high school level, the groups being compared are those who graduated from public, private, and Jewish high schools and within the latter category a distinction is made between Jewish high school graduates who were raised in Orthodox or non-Orthodox homes. When the focus is on perceptions, attitudes and behaviors related to current college experience or to intended future goals, the groups compared are those described in Figure 5: respondents who primarily attended public or private school (with no day school experience), respondents from a non-Orthodox background who attended day schools for either six or more years or for less than six years, and respondents from an Orthodox background who attended day school.

SUCCEEDING IN THE WORLD OF SECULAR STUDIES

Rebecca" is an energetic and forthright freshman, who currently attends a prestigious women's college. She attended Orthodox day schools from first through twelfth grade and is proud to describe her Jewish high school as "rigorously over-programmed and over-organized. Just because we were a day school didn't mean we didn't hold to the highest educational standards." When asked how well she felt her Jewish high school prepared her for college she bursts out laughing and tells us "In high school I took 12 subjects—and had to do homework for all of them. Now in college, four classes are not such a big deal. Four classes and the work that goes with them are totally manageable." It is very clear to Rebecca that she is doing well in her freshman year of college largely due to the intellectual discipline and academic skills she learned in her Jewish high school. In fact she feels that she has a distinct advantage over peers who did not attend a day school: "From high school I know how to participate in seminars and a lot of other first year students do not."

High schools differ on many factors including social climate and pedagogical approach, but a key evaluative dimension is the degree to which they prepare students for the next level of education. This section examines the extent to which undergraduates feel their education prepared them for college and how well they have faced the academic challenges of higher education. Analyses focus not only on perceptions of high school preparation in specific subject areas but also on confidence in the ability to learn and academic performance in college.

ACADEMIC PREPARATION

Like Rebecca, whose story is presented above, students who attended Jewish high schools recall classes characterized by academic challenge and engagement (Figure 6). Regardless of their denominational background, Jewish high school alumni are significantly less likely to recall being bored in classes as compared to peers who attended public high schools, and on this dimension they recall an educational milieu similar to that reported by private high school alumni. In addition, Jewish high school alumni from non-Orthodox backgrounds are significantly more positive than any of the other groups, including Jewish high school alumni from Orthodox backgrounds, about the level of intellectual challenge they experienced and the efforts of teachers to engage them in classes.

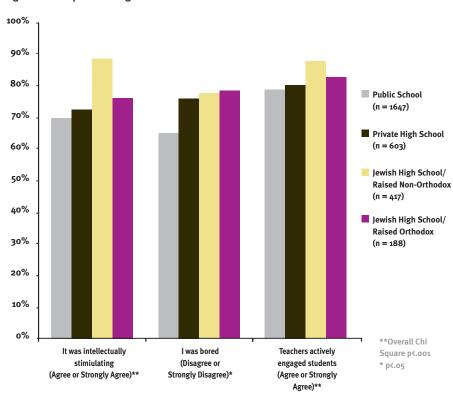


Figure 6: Perceptions of High School Academic Climate¹²

Analysis of respondents' judgments about high school preparation in specific curriculum and skill areas indicates that the ratings of Jewish high school alumni from non-Orthodox backgrounds concerning their preparation in the areas of history, writing, and study skills are on par with the ratings of alumni from private high schools and significantly higher than those of either Orthodox raised alumni of Jewish high schools or alumni of public schools (Figure 7). The story, however, is quite different with regard to preparation in the areas of math, science, or computer literacy. In these three areas of college preparatory work, Jewish high school alumni from both Orthodox and non-Orthodox backgrounds perceive their preparation in the areas of math, science, and computer literacy less favorably than do their public and private high school peers. The evaluations of preparation in these three areas are consistently and significantly lower among Jewish high school alumni from Orthodox backgrounds. Students' perceptions of academic climate and preparation provide a window into their understanding of their educational experiences in high school. Although it is not clear the extent to which these perceptions are grounded in accurate and objective assessments of classroom reality, their consistency among Jewish high school alumni indicates that they represent a widely held set of beliefs.

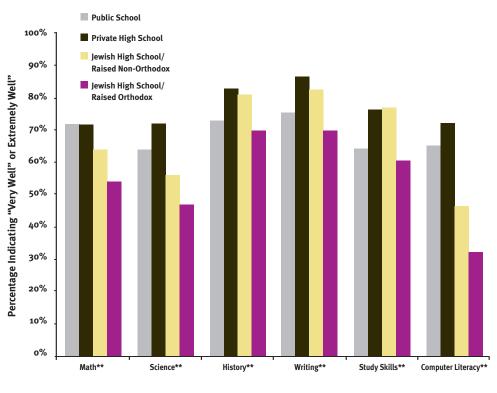


Figure 7: Evaluations of Preparation for College Level Work

**p < .001

A more objective measure of high school preparation is the ability of students to gain admittance to the college and universities at the top of their personal rankings. The majority (67%) of Jewish high school graduates in the sample, both from Orthodox and non-Orthodox backgrounds, report that the college they currently attend was their first choice. There are no significant differences between alumni of Jewish high schools and alumni of either public or private high schools in terms of the likelihood of attending one's first choice of college. This data, in combination with the finding that nearly one-half (42%) of respondents in the day school alumni sample and 72% of respondents from the Hillel sample are enrolled in colleges and universities in the top quartile of all ranked schools (U.S. News and World Report, 2007a; U.S. News and World Report, 2007b), strongly suggests that Jewish high school alumni gain admittance to colleges and universities that they find very desirable and that these schools represent the full spectrum of institutions of higher education including the most highly selective.

ACADEMIC CONFIDENCE IN COLLEGE

One of the compelling elements of Rebecca's story is the sense of confidence she exudes in her ability to master both course content and the course load of an academically demanding college. Educational self-efficacy is the belief that one can complete tasks needed to be successful in the academic arena (Bandura, 1997). Academic self-confidence has been demonstrated to relate positively to a variety of measures of success in college including GPA (Wood & Locke, 1987), persistence within a selected major (Elias & Loomis, 2000), and active engagement in classes (Warkentin & Griffin, 1994). Students with high academic confidence report that they approach the college experience as an exciting challenge and not as a threat to their self esteem (Chemers, Hu, & Garcia, 2001).

Student respondents in the present study were asked about their confidence regarding a variety of specific academic tasks including researching and writing term papers, doing well on different types of exams, managing time effectively, comprehending material presented in class or in textbooks, and participating in class discussions.¹³ Analysis of the data confirmed that all of these items could be collapsed into a single scale of confidence in one's academic abilities.¹⁴ Confidence in one's ability to master the material in a math course appears to be distinct from this global scale of academic self-confidence and was examined separately using a one-item scale.

The statistically significant¹⁵ predictors of academic self-confidence are gender, self reported GPA, and tenure in day school. Male undergraduates and those with higher GPAs report more confidence in their ability to perform well on academic tasks in the college setting. Students from non-Orthodox backgrounds who attended day schools for six or more years also demonstrate higher academic self-confidence as compared with their private and public schools peers and also as compared with day school peers who either were raised Orthodox or attended day school for less than six years.

The finding that female undergraduates, in contrast to male peers, report significantly less confidence in their ability to successfully accomplish tasks central to academic success in college is consistent with extensive research on the impact of gender on self-confidence. Starting in adolescence and continuing into college, women express less confidence in their academic abilities and hold lower expectations of their educational performance (Eccles et al., 1989; Tavani & Losh, 2003). With this research in mind, it is particularly interesting that among the female undergraduates surveyed in the present study, those from a non-Orthodox background who had attended six or more years of day school display significantly more academic confidence than their female peers who attended private schools, public schools, or their day school peers who were raised Orthodox.

MATH CONFIDENCE

The findings on confidence in the ability to master math content are, in part, similar to those for overall academic self-confidence. Once again as compared with their male peers, female undergraduates, across the board, are less confident in their math abilities as are students with lower GPAs. Although there are no significant differences among those who attended private or public schools and those who attended day schools for different lengths of time, denominational background does appear to significantly predict math confidence. Day school students who were raised Orthodox are significantly lower on math confidence as compared with their peers.

The finding that math confidence is lower among day school students raised Orthodox is especially important in light of the previously reported finding that Jewish high school alumni, especially those from Orthodox backgrounds, are significantly less positive (as compared with public and private high school alumni) in rating their high school training in math and science. It seems that as these students approach math-related college work, they feel limited by the level of math preparation they received in their day schools. The absence of differences in math confidence between non-Orthodox raised day school students and peers from private and public school backgrounds is just as important and suggests that these day school students do not experience their prior math preparation as a continuing handicap. The survey also found that students who attended day schools, regardless of denominational background, are no more likely (as compared with public or private school peers) to report that they have had or expect they will need tutoring or remedial work in math or science.

ACADEMIC PERFORMANCE IN COLLEGE

Perhaps the most commonly used benchmark of academic performance in college is the grade point average (GPA). In the present sample there are no significant differences in the self-reported GPAs of those who attended public, private, or day schools regardless of denominational background or length of attendance. The only significant predictor of GPA is gender with female students more likely to do better in college, as reflected in their GPA.

SELECTION OF MAJOR FIELD OF STUDY

Students in the sample are enrolled in over 75 major fields of study. Former day school students with more or less than six years of attendance and those from Orthodox and non-Orthodox backgrounds as well as private and public school alumni do not differ in their choice of major fields of study (Figure 8). Given the data previously reported on perceptions of pre-college preparation in math and science, and lower math confidence among day school students from an Orthodox background, it is worth noting that regardless of their educational history, the different groups of undergraduates in the sample are almost equally represented in majors dependent on facility with math including the physical and social sciences as well as business, accounting, and finance. The only exception

is in engineering-related fields where those with fewer than six years of day school and from non-Orthodox backgrounds appear to be somewhat overrepresented. Looking specifically at Jewish high school alumni reveals that evaluations of high school preparation in the areas of math and science do not predict choice of math related major fields of study such as physical sciences, finance/business or engineering. However, for this group, higher math confidence does predict greater likelihood of enrolling in physical science and finance related majors.

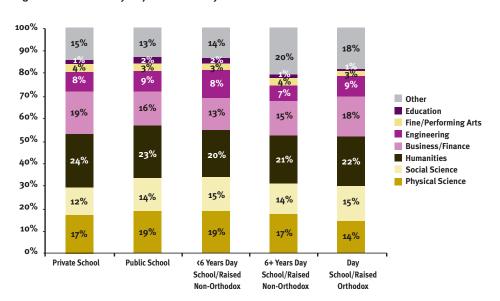


Figure 8: Distribution by Major Area of Study

Students from public, private, and day school backgrounds are also similar in their academic aspirations. There are no significant differences in the highest academic degrees that students from different pre-college backgrounds intend to pursue (Figure 9).

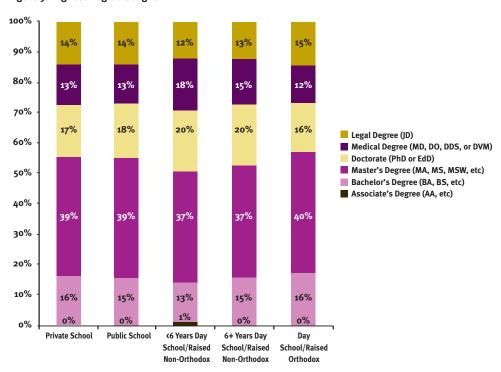


Figure 9: Highest Degree Sought

Jewish high school alumni recall educational settings characterized by a high level of academic challenge and engagement. Like Rebecca, they feel that the academic self-confidence they acquired in day school helps them successfully conduct themselves in college. As they consider the level of academic work they face in college, Jewish high school alumni from non-Orthodox backgrounds feel very positive about their preparation in language arts, humanities, and overall study skills, even indicating evaluations as positive as their peers who attended private high schools. At the same time, these Jewish high school alumni, especially those from an Orthodox background, perceive that their schools did a less satisfactory job of preparing them in the areas of math, science, and computer literacy.

The findings of this study on academic performance in college strongly suggest that students with a day school history are acquitting themselves well. Their overall confidence in their ability to master the tasks required for success in college courses as well as their GPAs indicate that they are doing as well as, or in the case of non-Orthodox raised students with extensive day school background, better than their peers from either non-Jewish independent schools or public schools. While day school students from an Orthodox background experience lower math confidence, they like other students who attended day schools, do not appear to experience any skill deficits that limit their willingness to select major fields of study that are dependent on skills related to math and science. Nor are they any more likely than other students to feel the need for tutoring or remedial work in math or science.

RESPONDING TO INDIVIDUAL NEEDS

Jon, a college junior, comes up after a focus group and asks if he can speak privately. Clearly upset, it takes him a few minutes to calm down and talk about his experiences in Jewish elementary school. He begins by saying emphatically, "I know now that I'm not stupid and I'm doing well at school." He goes on to say of his learning needs, "I had trouble learning by listening. I needed to be shown things." Jon becomes sad as he talks about how his difficulties in a Conservative day school came to a head in third grade. Faced with challenges in many of his subjects, he fell behind. Still feeling some anger, he recalls how his teacher and the administration suggested to his parents that the day school was not the best place for him. "I just didn't want to leave like that so I convinced them that I could do the work. I worked really hard but it was an uphill struggle." Finally in middle school Jon "gave up" and transferred to a charter school where "they really knew how to help me learn." Jon shrugs his shoulders and sadly says that he wishes his day school teachers could see how well he is doing now.

The most recent study to consider the educational decision-making of Jewish parents suggests that parents are motivated by their strong desire to find an educational setting that will meet the individual learning needs of their child (Wertheimer, 2005). In the present study, survey responses indicate a mixed story of support for divergent educational needs with Jewish high school alumni differing in their perceptions along denominational lines. Students who attended Jewish high schools and are from non-Orthodox backgrounds are the most positive about the encouragement and support they received from teachers, and are second only to private high school peers when it comes to their evaluations of the availability of extra help or attention to individual learning needs (Figure 10). Although at least eight-tenths of Jewish high school alumni from Orthodox backgrounds indicate that they received the support and help they needed, they are also consistently the least positive in their evaluations of their high school's response to their individual learning needs, and significantly lower than all other groups in their assessment of the availability of supplementary help.

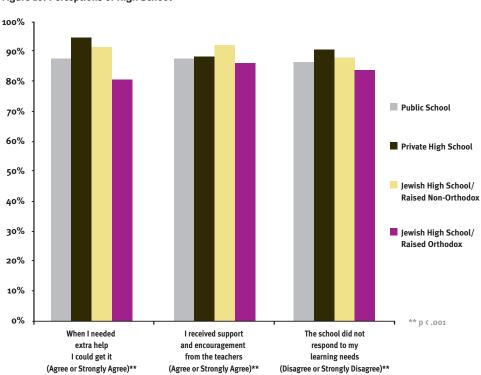


Figure 10: Perceptions of High School

Data from the focus groups indicate that former day school students almost universally express their appreciation for the close connections they were able to develop with teachers but at the same time acknowledge that students at both ends of the spectrum of educational needs had a difficult time getting the resources they needed. Academically gifted students describe being limited in their access to more advanced and specialized classes, and those with academic challenges describe unmet educational needs. The majority of students are not personally affected by this limitation; nevertheless, for some it becomes a detriment to their educational experience and for others it colors their day school experience and may mean their departure from a day school that they otherwise enjoy. "Counseling a student out" of day school, as Jon was, can feel like a failure for students and their parents and is a situation that needs to be treated with sensitivity (Miller-Jacobs & Koren, 2003).

BURSTING THE DAY SCHOOL "BUBBLE": SOCIAL LIFE ON CAMPUS

Andrea, an attractive, soft-spoken senior at an East Coast university grew up in a suburban community with a palpable Jewish presence and attended Conservative and non-denominational day schools from first through twelfth grade. She shakes her head remembering her freshman year with amusement, "I didn't know how to make small talk. It was something I had to work on. When you're with the same twenty people from age five until you are 18—you don't develop those skills because you don't need to." She goes on to talk about her transition to college and the process she affectionately refers to as "coming out of the day school bubble." "When I got here, I was overwhelmed by college. The university was such a large place and I sought out the familiar. Not only was I almost exclusively involved in the Jewish community as a freshman, but many of my friends were still from my day school. As I have become more comfortable here, I've gotten to know a lot of other people and now many of my friends are not Jewish. But they're open and interested in learning about my religion, culture, and tradition. At the beginning, I was looking for the familiar and that became a trap, but it wasn't impossible to break out of."

Non-Orthodox parents often question whether children educated in day schools are able to interact with peers from diverse backgrounds, to break out of the "social bubble" that Andrea describes (Wertheimer, 2005). Indeed, schools serve as central institutions in the lives of children and adolescents forming the social milieu in which they hone their interpersonal skills and attitudes (Bronfenbrenner, 1979). This section of the report considers how undergraduates recall the social climate of their day schools and then examines how they are faring in the larger and more diverse world of college.

SOCIAL CLIMATE IN HIGH SCHOOL

The sense of community or belonging that students experience in the school setting has been shown to contribute to greater social and coping skills, academic self-confidence, altruistic or pro-social behavior, and academic performance (Pretty, et. al.,1996; Royal & Rossi, 1996). When students are asked to reflect on the social climate of the high schools they attended, Jewish high school alumni describe a greater sense of belonging in their schools and feel more strongly that their peers enjoyed being together than do respondents who attended either private or public high schools (Figure 11).¹⁷ Jewish high school alumni with an Orthodox background are, in fact, the most positive in describing the sense of community experienced in their schools.

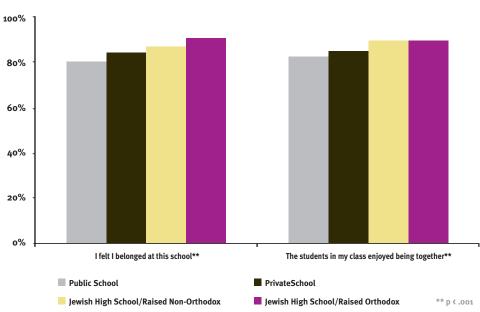


Figure 11: Perceptions of High School Social Climate

INVOLVEMENT IN CAMPUS LIFE

Like other undergraduates, students who attended day schools participate in all aspects of undergraduate life (Figures 12 and 13). Non-Orthodox raised students with six or more years of day school attendance are second only to public school graduates in terms of their level of involvement in community service and sports. Although former day school students who were raised Orthodox are significantly less likely to become involved in either fraternities and sororities or performing art groups on campus, they along with other day school students (regardless of the number of years of attendance or denominational background) are significantly more likely to become involved in political action groups and in Jewish campus life. Involvement in Jewish campus life will be explored in more depth later in the report. Former day school students are also well represented in the ranks of student leaders with just over a third (36%) assuming leadership positions, similar to the proportions obtained for private and public school alumni (40% and 39% respectively).

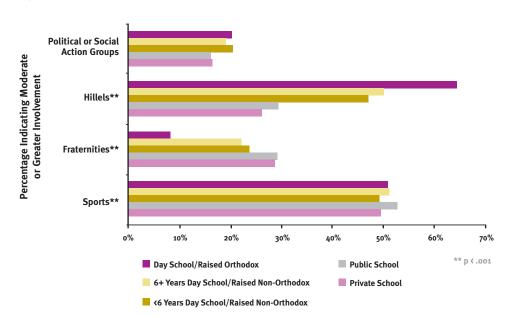


Figure 12: Involvement in Extra-Curricular Activities

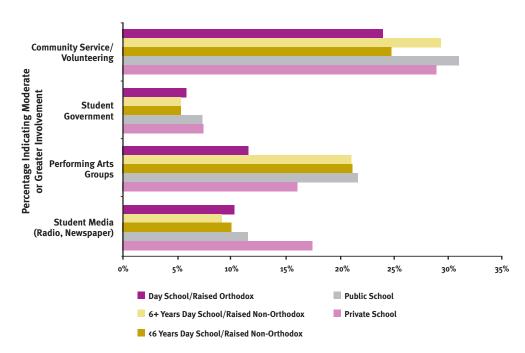


Figure 13: Involvement in Extra-Curricular Activities

SOCIAL CONNECTIONS IN COLLEGE

For many of those who attended day schools, pre-college social networks continue to provide a source of connection even after they enter college. Over a third (36%) of those who attended six or more years of day school indicate that they continue to feel a strong sense of connection to other students on campus who attended day schools. Those who graduated from Jewish high schools are significantly more likely to continue to have at least some friends from their high school (71%), as compared with those who graduated from public (44%) or private (48%) high schools. However, even as they maintain strong connections to their day school friends, Jewish high school alumni have also expanded their social networks beyond their day school peers. Only one-tenth (11%) of Jewish high school alumni indicate that most of their friends continue to be those they met in high school. This is larger than the 4% of private and public high school alumni who indicate that most of their friends carry over from high school, but it still indicates that the college social networks of Jewish high school alumni are overwhelmingly comprised of new friendships.

Like their private and public school peers, undergraduates with a day school history find friends in their dorms, in classes and through the clubs and organizations in which they participate with their residence being the primary source of social connections (Figure 14).

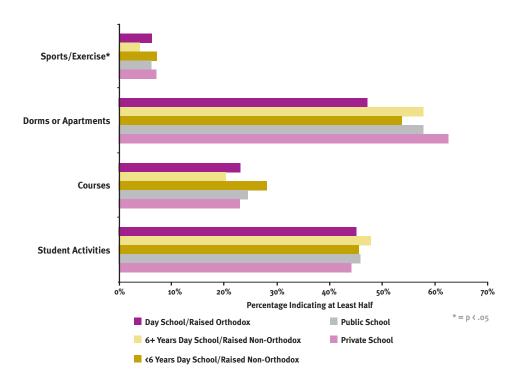


Figure 14: Source of Friendship Networks

Perhaps the most striking feature of the college social networks of those who attended day schools is the density of their connections with Jewish peers. Undergraduates who attended day schools are significantly more likely to feel strongly connected to the other Jewish students on their campus (60%) as compared with those who attended private schools (37%) or public schools (40%). Almost half (46%) of non-Orthodox students who attended six or more years of day school and almost two-thirds (65%) of day school students from an Orthodox background describe their peer networks as predominantly Jewish. This is compared with one-quarter (26%) of those who attended private school and just under one-third (30%) of those who attended public school who describe their friendship networks as mostly composed of Jewish friends. While students with a day school history and raised in Orthodox homes are the most likely to limit their dating to Jewish peers, those who attended day schools for more than six years from non-Orthodox backgrounds are also significantly less likely to date non-Jews as compared with their private and public school peers (Figure 15).

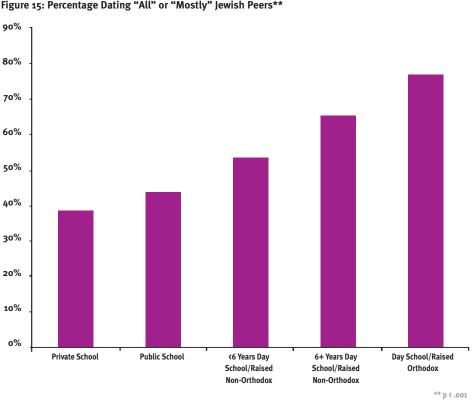


Figure 15: Percentage Dating "All" or "Mostly" Jewish Peers**

The data from the present study suggest that the "social bubble" of day school is not a sealed social network but is more akin to a safe foundation from which day school students venture forth to meet new friends. Even as they maintain strongly Jewish social networks, undergraduates with a day school history are also immersing themselves in all aspects of campus life and making friends through these activities. Even among Orthodox students who have attended day schools, and might be expected to have the most insular social networks, the vast majority (92%) indicate that at least some of their friends are non-Jewish.

USE AND ABUSE OF ALCOHOL

Integration into the wider social world of undergraduate life is an important developmental milestone. Unfortunately, the social pressures present on college campuses coupled with diminished parental oversight can have negative outcomes, and for some this translates into heavy use of alcohol. The present study demonstrates that day school students are able to move into the larger social world of college and to do so while avoiding the risky behaviors that often go hand-in-hand with an active campus social life.

Wechsler, Dowdall, Davenport, and Rimm (1995) define binge drinking as having five drinks for men and four drinks for women, and the rates of students engaging in this excessive use of alcohol (over half of men and about one-third of women) have remained steady over the last decade (Wechsler & Isaac, 1992; Wechsler, Lee, Kuo, & Lee, 2000). Problematic drinking serves as a gateway to other risky behaviors including the increased likelihood of driving while intoxicated or with a driver who is drunk (Wechsler & Isaac, 1992), participation in unsafe sex (Meilman, 1993), and exposure to unwanted sexual advances (Wechsler, Moeykens, Davenport, Castillo, & Hansen, 1995).

In the present study a history of attendance at a day school appears to be a "protective" factor limiting binge drinking. Analysis of the primary college sample, which allows comparisons for students from different educational backgrounds who are now exposed to the same campus climates and norms related to drinking, reveals that the strongest predictors of binge drinking are participation in Greek life and gender (females are less likely to binge drink). However, when these factors are statistically accounted for, the data reveal that former day school students from Orthodox backgrounds are the least likely to engage in heavy drinking. Non-Orthodox students who went to day school for six or more years are significantly less likely to binge drink than those who went to public schools and demonstrated a level of binge drinking similar to their private school peers. Non-Orthodox students with less than six years of day school experience do not show significantly different rates of binge drinking as compared with public school alumni.

Previous research with undergraduates on American college campuses drew the unequivocal conclusion that "peer social networks are the fabric of campus life" (Sales & Saxe, 2006). Like "urban tribes" (Watters, 2003), friendship groups provide a sense of family-like support and become the foundation for life on campus. The current data suggest that undergraduates with a day school history have successfully negotiated the social transition from the small and socially intimate world of day schools to the larger and more pluralistic environment of college campuses. Bursting out of the "social bubble" of day school, they have demonstrated their ability to venture beyond their day school connections and weave social networks based in all aspects of campus life. At the same time, former day school students have shown themselves to be more resistant than their public school peers to social pressures for the type of heavy drinking that leads to other risky situations and behaviors.

REMAINING INVOLVED IN JEWISH LIFE

Miriam, a sophomore at a southern college, practically bursts out of her seat in her enthusiasm to talk about one of her favorite memories of her Conservative day school: "We were in Israel and one day our group was going through the tunnel under the wall in Jerusalem. There were thirty of us in there it was dark, we were feeling the wall and holding hands all the time singing. We sang songs from our day school choir, a Lubavitch niggun, and so on—it was the most beautiful experience." Now that she is attending a secular college, Miriam has gained some perspective on how secure she feels in her Jewish identity. Comparing herself to friends who did not attend a day school, she is proud and somewhat amazed at how much she learned in day school about Judaism and Jewish text almost "without realizing it happened." Looking back she says, "It was nothing then but I have something now. I think of all the progress I made learning tefillot and everything...

I gained a body of knowledge." She sums up her day school experience by declaring, "I was happy to be Jewish there," and from her current involvement in Jewish arts on campus, it is clear that she is still happy to be Jewish at college.

Research on the outcomes of day schooling has repeatedly shown that attending a day school strengthens Jewish identity, connections, and behaviors (Cohen, 1995; Schiff & Schneider, 1994a; Schiff & Schneider, 1994b). Although many undergraduates remain untouched by Jewish life during their college years and may feel distant from their Jewish roots, the former day school attendees in the present study, especially those from Orthodox backgrounds, stand out from their public and private school peers in the importance that they attribute to being Jewish at this point in their lives (Figure 16). Perhaps just as noteworthy is that day schooling appears to significantly raise the salience of being Jewish for non-Orthodox students with either more or less than six years of day school attendance.

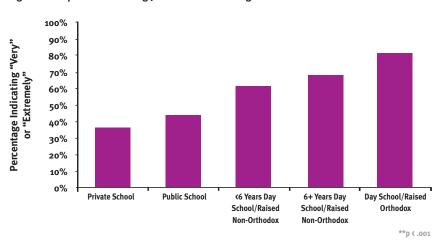


Figure 16: Importance of Being Jewish While in College**

Whether the focus is involvement in formal Jewish learning, observance of holidays, programs on the Holocaust, Israel and Jewish culture, opportunities to do community service sponsored by a Jewish organization, or informal celebrations of Jewish holidays with friends, undergraduates who have attended day schools Orthodox and non-Orthodox, and regardless of the number of years of attendance, are more likely to participate as compared with those who did not attend a day school (Figure 17). The data also indicate that Orthodox students who attended day schools are the most likely to participate in Jewish programs related to text study, socializing, community service, and holiday celebrations both formal and informal.

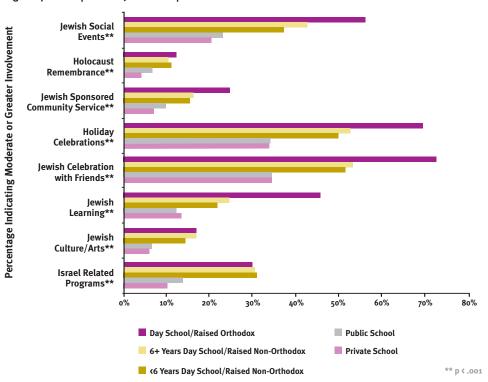


Figure 17: Participation in Jewish Campus Activities

To discern overall involvement in Jewish campus programming, responses to seven questions were combined to form a Jewish Campus Involvement Scale.¹⁹ Scores on this scale reveal that attendance at a Jewish day school, even among those raised non-Orthodox, has a significant impact on participation in Jewish activities and organizations on campus (Figure 18). The fact that day school attendance is such a strong predictor of Jewish campus involvement among the non-Orthodox is particularly impressive given the substantial Jewish backgrounds of the overall sample including those who never attended a day school. For example, the vast majority (91%) come from households where all of their parental figures are Jewish, including any stepparents. In addition, nine-tenths indicate that they had a bar or bat mitzvah, and a clear majority participated in Jewish youth groups (62%) or attended summer camps with Jewish content (71%).

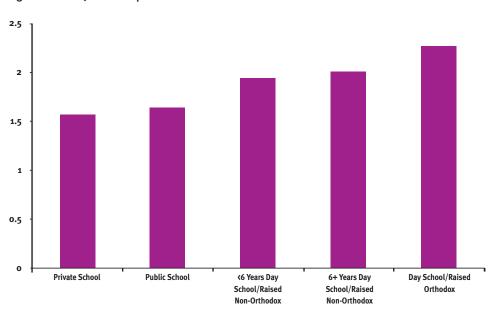


Figure 18: Mean Jewish Campus Involvement Score

Students who attended day schools also report significantly more frequent participation in Jewish religious services while on campus (Figure 19). It is clear that former day school attendees raised in Orthodox homes have the most consistent pattern of attendance at religious services, but the impact of day schooling on ritual observance can also be seen among those raised in non-Orthodox homes and even among those who experienced less than six years of day school.

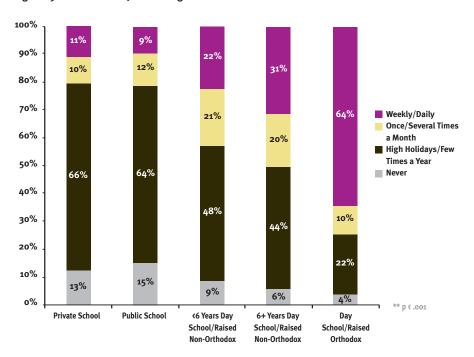


Figure 19: Attendance at Jewish Religious Services**

CONNECTION TO ISRAEL

Most (61%) of the undergraduates responding to the survey have been to Israel. Travel to Israel is almost universal for those raised Orthodox (91%) and very high among those non-Orthodox students who went to day school (73% for those who went less than six years, and 89% for those who went more than six years). While the proportion of private (47%) and public school alumni (46%) that have been to Israel is substantially lower, it is still true that almost half of the students in these groups have also traveled to Israel.

Previous research has shown that "the majority of Jewish college students feel ill-informed and relatively distant from Israel" (Sales & Saxe, 2006). In the present study the strongest predictor of self-perceived knowledge of Israeli history, culture, social problems, and current conflicts is the experience of having actually traveled to Israel. However, the data also indicate that for Orthodox and non-Orthodox students alike, a history of day school attendance is a significant predictor of knowledge and understanding of Israel. Undergraduates who have attended day schools are confident in their knowledge of Israel.

ENROLLMENT IN JEWISH STUDIES COURSES

Jewish studies classes have become an important component of Jewish life on many college campuses. Jewish studies courses are often attractive to students because they fulfill requirements for majors in other departments such as history or literature, but also because they serve a more personal desire to connect with and learn about Jewish heritage. Even with the burgeoning popularity of Jewish studies courses among all Jewish students, the present data reveal a distinct effect for having attended a day school. Over one-half of those who attended day school for any length of time, regardless of their denominational upbringing, have taken at least one Jewish studies course. By contrast, only around one-third of either private or public school peers have taken a Jewish studies course (Figure 20).

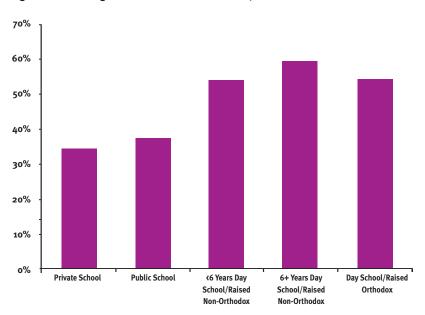


Figure 20: Percentage Who Have Taken at Least One Jewish Studies Course**

Whether the focus is on the salience of their Jewish identity, Jewish ritual observance, participation in Jewish campus life, or exploration of Jewish history and culture in academic courses, undergraduates with a history of day school attendance stand out. In terms of most aspects of Jewish campus life and ritual observance, former day school attendees from Orthodox homes are far and away the most involved. But perhaps even more striking is the demonstrated power of day schools to build strong Jewish identities and connections among students who come from non-Orthodox backgrounds. Although it is not possible, using the present data, to separate the influence of attitudes and behaviors of families who select day schools from the impact of day schools themselves, the strong Jewish identities and connections of former day school students, especially among those from non-Orthodox backgrounds, is striking.

The findings above strongly suggest that Miriam, the student whose story began this section, is not alone in continuing to "be happy to be Jewish."

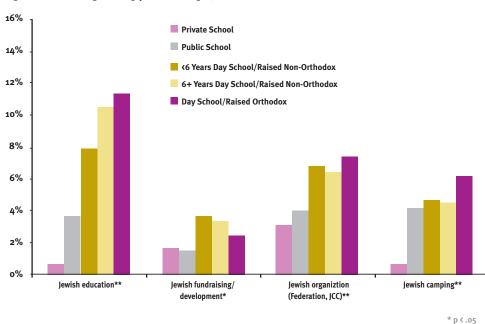
THE LEGACY OF A "VALUES-ADDED" EDUCATION

Sam, a sophomore at a small liberal arts college, went to a public school until ninth grade and then enrolled in a pluralistic Jewish high school. He has just finished talking about his involvement in campus leadership. He pauses thoughtfully and declares, "I gained leadership skills in day school, but what I really learned is an understanding that my life and religion are not separate." Sam goes on to describe the combined sense of empowerment and commitment to both the Jewish community and the larger community that he developed in his Jewish high school: "I felt like a leader in my day school, I could start things, I had a voice." While his career plans are still undecided, what is clear is that Sam will continue to carry his sense of communal responsibility with him into his adult life.

Community service and social justice work have become more salient, central, and valued avenues for engaging young adults. Jewish communal leaders remind us that service is a central theme of Jewish tradition (Greenberg, 2001), and that it has the potential to be a powerful strategy to strengthen individual Jewish identity and the larger Jewish community (Steinhardt, 2001). In their marketing materials, day schools promote the idea that the value of a day school education lies in the fact that students learn in a context imbued with Jewish ethics, and non-Orthodox day schools often emphasize their focus on community service and Jewish social responsibility. To explore the impact of Jewish "value-added" education the survey asked students a series of questions about how important it is to them to influence social values, help those in need, volunteer their time to social change efforts, and find careers that allow them to be of service to the larger community.²⁰ Individual items were combined to form a scale of Social Responsibility.21 When the impact of gender is statistically accounted for (female students as compared with their male peers, indicate significantly more sense of responsibility for addressing social problems), responses to this scale indicate that non-Orthodox students who attended day school for at least six years are by far the most likely to express their intention to become involved in community volunteerism and advocacy, closely followed by peers who attended day school for less than six years.²² While Orthodox students who attended day schools score higher on social responsibility as compared with public and private school alumni, they do not show the same strength of commitment to civic engagement demonstrated by their non-Orthodox peers who attended day schools.

A civic orientation, such as that demonstrated by students from day schools has important personal and communal benefits. Social responsibility in late adolescence is a key predictor of continued volunteer engagement beyond college and into young adulthood (Oesterle, Johnson, & Mortimer, 2004).

In addition to their greater sense of responsibility towards addressing the needs of the larger society, students with day school experience also feel a greater commitment to the Jewish community, as reflected in their intent to pursue Jewish communal careers. When asked about the extent to which they have considered careers working at a JCC or Jewish federation, as a Jewish educator, or in the field of Jewish camping, students from a day school background, especially those raised Orthodox, were more likely than private or public school peers to say that they have given strong consideration to these vocations (Figure 21). Perhaps most striking is the apparent influence of day school education on the career aspirations of students from non-Orthodox backgrounds even among those with only limited day school experience.



** p < .001

Figure 21: Percentage Strongly Considering a Jewish Communal Career

SUMMARY AND RECOMMENDATIONS

For parents, the decision to send their children to a day school is a substantial financial investment and a profound decision about the child's future. It is obviously a major commitment to engaging their children in Jewish life. In the face of this decision, parents understandably want to know whether attendance at a day school will, along with engaging them in Jewish life, prepare their children to succeed in the academic arena of higher education, and to function in a pluralistic society. They also want to know that these are schools where their children will thrive emotionally and academically and where their individual learning styles and needs will be addressed.

Looking at the present study for answers reveals not one but three responses to these parental concerns. The first story in the data is one of similarity; in many ways college-age day school alumni look indistinguishable from their peers. Like students who attended public and private schools, those who went to day schools gain entrance to a wide range of universities-including the nation's most select schools. Overall academic performance as measured by self-reported GPA is not different for day school alumni than it is for their peers from public or private schools. Day school students from Orthodox backgrounds and those with less than six years of day school have levels of self-confidence in their academic abilities that are similar to their private and public school peers. In addition, all groups of day school students pursue major concentrations in similar percentages as their peers. They seek higher degrees in similar percentages as well. In other words, they attain academic success in college and feel secure in their ability to do so. Day school alumni also show no greater likelihood of running into social network problems in college than their peers from public or private schools. Like their peers, they join organizations, make friends, assume campus leadership roles and become integrated into the social and extra-curricular life of college.

Although students who attended day schools have much in common with their private and public school peers, similarity is not the only story in the data. The present study also describes a tale of day school students doing better than their peers on several important dimensions. Non-Orthodox students with extensive day school experience have the highest levels of academic confidence. Regardless of what facet of Jewish campus life is considered, day school students stand out in their strong engagement with Judaism. They participate in Jewish activities, worship services, and Jewish studies courses in much higher percentages than their peers from public and private school backgrounds. They self-report greater knowledge of Israel, and they stay connected to Judaism and other Jews on campus. As expected, many of these effects are strongest for Orthodox students but are also reflected in the attitudes and behavior of day school students from non-Orthodox backgrounds.

Day schools, especially those that attract students from non-Orthodox backgrounds, succeed at imparting an orientation of civic and social responsibility to their students. Former day school students express a stronger sense of responsibility towards addressing the needs of the larger society by influencing social values, helping those in need, volunteering their time to social change efforts, and finding careers that allow them to be of service to the larger community as compared with their public and private school peers.

Day school attendance of six or more years also appears to prepare students to resist the social pressures found on college campuses to engage in dangerous behaviors such as binge drinking. Whether this results from Jewish values inculcated by their day schools, lessons in resisting peer-pressure, or something else, this study, by using a comparison group of Jewish students from public and private education, indicates that it is more than a matter of family characteristics.

And there is a third less positive story in the present study. The current data suggest that the academic concerns of parents are not without some support. Particularly among alumni from Orthodox backgrounds, Jewish high schools are perceived to be less effective in the preparation they provide in the areas of math, science, and computer literacy. As they approach college coursework, these Orthodox raised day school alumni report the lowest levels of confidence in their ability to master content in math courses. Even though these perceptions do not limit the ability of students to enroll in math-related fields of study, these curriculum areas may need increased attention in Jewish high schools.

Day schools have also not been able to provide the same level of resources as private schools when it comes to meeting individual learning needs. This research shows that students from private high schools rate their education more highly in its ability to respond to individual learning needs than do the alumni of Jewish high schools. At both ends of the spectrum of ability, day schools appear to be less able to serve the needs of diverse learners, both those who are academically gifted and those who need additional or specialized educational supports.

There is much to celebrate in the successes of day school students, both in terms of the ways they are similar to and the ways they do better than their public and private school peers. Nevertheless, this study suggests that day schools may need to do more to address parental and student concerns that are supported by the current data. The finding that day school alumni, compared to other Jewish students, perceive themselves as less well prepared in math, science, and computer literacy suggests an area ripe for improvement. Day schools may need to strengthen math and science education, probably by engaging more sophisticated teachers and investing in curriculum and facility development. This is clearly important given that many day school alumni go on to major in math-intensive fields such as business, social sciences, and the hard sciences. Parents need to know that their children will receive education in quantitative skills and mathematical thinking second to none.

Second, day schools need to attend to the individual learning needs of all their students, including those who may need greater challenge and enrichment as well as those who may require extra educational supports. Neither parents nor students should feel that their educational needs are unmet.

Along with drawing attention to these areas for change, this report reveals areas of success and presents a substantial opportunity to communicate that success to a wider audience of parents. This report presents the strengths day school alumni bring with them into college. Although the present findings suggest that day schools can do more to improve math and science learning and to address the needs of diverse learners, the report also validates that day schools provide top-notch preparation for a broad range of colleges and universities, including those that are the most selective. Parents who consider day school for their children want to know that they are not shortchanging their children or restricting their options for higher education. With very little discernible difference in academic performance or social networking and a world of difference in Jewish living, undergraduates with a history of day school are evidence of the value of the day school choice. Perhaps most important, given the communal agenda of increasing day school enrollment among the non-Orthodox, the present study provides clear evidence that day schools are successful in launching students from these backgrounds into trajectories of secular academic success and Jewish communal engagement.

NOTES

- ¹ Does not include those enrolled in Jewish affiliated but segregated special education schools.
- ² Although the National Jewish Population Survey 2000-01 estimated that nearly 29% of Jewish children were enrolled in day schools, Saxe et al. (2007) indicate that this finding is an error and that it is likely that day schools enroll less than 15% of the total number of Jewish children.
- ³ See Methodological Appendix available from http://www.brandeis.edu/cmjs for details.
- ⁴ All of the day schools from which the "over-sample" is drawn consider themselves to be preparatory for academic trajectories leading to a college education.
- ⁵ Day school contact lists were only used if schools indicated that they contained at least 75% of the eligible college-age alumni.
- ⁶ Individuals represented on both day school and college lists were treated as part of the primary college sample. In addition, day school alumni currently attending institutions of higher education with explicitly Jewish religious mandates were excluded from further analysis.
- ⁷ Each column totals 100% of students indicating that particular denominational identity.
- ⁸ Throughout the remainder of the report the category of "Public School" is comprised of all three forms of publicly-funded schools including charter and magnet schools.
- ⁹ Throughout the remainder of the report the category of "Private School" is comprised of both secular and non-Jewish but religiously affiliated private schools.
- ¹⁰The very small group of Orthodox students who did not attend day schools is removed from further analysis.
- ¹¹All names are fictional and some personal details have been changed to protect the identity of students.
- ¹²The lines on top of the bars on Figure 6 and on following figures indicate confidence intervals. Confidence Intervals describe the likelihood of finding the same result if the survey were repeated, with different random samples. A confidence interval of .05 indicates that were this to be done, the true value would fall within the confidence interval 95% of the time. Non-overlapping confidence intervals indicate results that are significantly different at least at the .05 level.
- ¹³Items were derived from several scales of academic self-efficacy that have been extensively used with college undergraduates (Owen & Froman 1988; Solberg, O'Brien, Villareal, Kenner, & Davis, 1993).

- ¹⁴Cronbach's Alpha=.92.
- ¹⁵Results of OLS regression of composite scale measure, GPA, and gender.
- ¹⁶Results of OLS regression of one-item scale of confidence in ability to master most content in a math course on type of school graduated from (public school as suppressed category), GPA, and gender.
- ¹⁷Items were derived from a scale that has been extensively used to measure high school social climate (Samdal, Wold, & Torsheim, 1998).
- ¹⁸Results of OLS regression on binge drinking among those who drink on type of school graduated from (public school as suppressed category), gender, and participation in fraternities or sororities.
- ¹⁹Cronbach's alpha=.86.
- ²⁰Items were derived from several scales of civic and social responsibility that have been extensively used with college undergraduates (HERI, 2005; Parker-Gwin & Mabry, 1998).
- ²¹Cronbach's alpha=.88.
- ²²Results of an OLS regression on social responsibility scale controlling for gender and school type (private school suppressed category).

REFERENCES

American Jewish Committee (AJC) (1999). *AJC policy statement on Jewish education*. New York: American Jewish Committee.

Bandura, A. (1997). Self -efficacy: the exercise of control. New York: Freeman Press.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design.* Cambridge, MA: Harvard University Press.

Chemers, M.M., Hu, L., & Garcia, B.F. (2001). Academic self-efficacy and first-year college student performance and adjustment. *Journal of Educational Psychology*, 93, 53-64.

Chertok, F. & Saxe, L. (2004). *The Florence Melton parent education program: Evaluating an innovative approach to adult Jewish education for parents of preschoolers.* Waltham, MA: Brandeis University, Maurice and Marilyn Cohen Center for Modern Jewish Studies.

Cohen, S.M. (1995). The impact of varieties of Jewish education upon Jewish identity: An intergenerational perspective. *Contemporary Jewry*, *16*, 68-96.

Cohen, S.M. & Kotler-Berkowitz, L. (2004). The impact of childhood Jewish education on adults' Jewish identity: Schooling, Israel travel, camping and youth groups. New York: United Jewish Communities.

Eccles, J.S., Wigfield, A., Flanagan, C.C., Millier, C., Reuman, D.A., & Yee, D. (1989). Self-concepts, domain values, and self-esteem: Relations and changes at early adolescence. *Journal of Personality*, *57*, 283-310.

Elias, S.M. & Loomis, R.J. (2000). Using an academic self-efficacy scale to address university major persistence. *Journal of College Student Development*, 41, 450-454.

Greenberg, Y. (2001). Personal service: A central Jewish norm for our time. Contact, 4, 3-4.

HERI (2005). *CIRP Freshman Survey 2005*. Los Angeles, CA: University of California, Los Angeles, Higher Education Research Institute.

Kadushin, C., Phillips, B., & Saxe, L. (2005). National Jewish population survey 2000-01: A guide for the perplexed. *Contemporary Jewry*, 25, 1-32.

Lieberman Research Worldwide (2004). *Understanding the needs of Jewish parents of greater Boston to more effectively market day schools.* Los Angeles, CA: Lieberman Research Worldwide.

Meilman, P.W. (1993). Alcohol induces sexual behavior on campus. *Journal of American College Health*, 42, 27-31.

Miller-Jacobs, S. & Koren, A. (2003). Special learning needs in day schools: Parent and community responses. Boston: Bureau of Jewish Education of Greater Boston.

Oesterle, S., Johnson, M.K., & Mortimer, J.T. (2004). Volunteerism during the transitions to adulthood: A life course perspective. *Social Forces*, 82, 1123-1149.

Owen, S.V., & and Froman, R.D. (1988). *Development of a college academic self-efficacy scale.* (Report No. TM 012263). East Lansing, MI: National Center for Research on Teacher Learning.

Parker-Gwin, R., & Mabry, J. B. (1998). Service learning as pedagogy and civic education: Comparing outcomes for three models. *Teaching Sociology*, *26*, 276-291.

PEJE (2006). 2005 PEJE college matriculation report. Boston, MA: Partnership for Excellence in Jewish Education.

Pew Research Center (2004). *Polls Face Growing Resistance, But Still Representative*. Retrieved 4 May, 2007, from http://people-press.org/reports/display.php3?ReportID=211.

Porter, S.R. & Umbach, P.D. (2006). Student survey response rates across institutions: Why do they vary? *Research in Higher Education*, 47, 229-247.

Pretty, G. M. H., Conroy, C., Dugay, J., Fowler, K., & Williams, D. (1996). Sense of community and its relevance to adolescents of all ages. Journal of Community Psychology, 24, 365-379.

Royal, M.A., & Rossi, R.J. (1996). Individual-level correlates of sense of community: findings from workplace and school. *Journal of Community Psychology*, 24, 395-416.

Samdal, O., Wold, B., & Torscheim, T. (1998). Rationale for school: The relationship between students' perception of school and their reported health and quality of life. In C.Currie (Ed.), *Health behavior in school-aged children. Research protocol* (pp. 51-59). Scotland: University of Edinburg.

Sales, A. L. & Saxe, L. (2006). Particularism in the university: Realities and opportunities for *Jewish life on campus*. New York: AVI CHAI Foundation.

Sax, L. J., Gilmartin, S. K., & Bryant, A. N., (2003). Assessing response rates and non-response bias in web and paper surveys. *Research in Higher Education*, 44(4), 409-432.

Saxe, L., Kelner, S., Rosen, M.I., & Kadushin, C. (2001). *Integrating new families into Jewish day schools: The experience of AVI CHAI voucher recipients.* Waltham, MA: Brandeis University, Maurice and Marilyn Cohen Center for Modern Jewish Studies.

Saxe, L., Tighe, E., Phillips, B., & Kadushin, C. (2007). *Reconsidering the size and characteristics of the American Jewish population*. Waltham, MA: Brandeis University, Steinhardt Social Research Institute at the Maurice and Marilyn Cohen Center for Modern Jewish Studies.

Schick, M. (2000). Jewish day schools. In D. Ravitch & J.P. Viteritti (Eds.), *Lessons from New York: City schools* (pp. 269-290). Baltimore, MD: Johns Hopkins University Press.

Schick, M. (2005). A census of Jewish day schools in the United States 2003-2003. New York: AVI CHAI Foundation.

Schiff, A.I. & Schneider, M. (1994a) *The Jewishness quotient of Jewish day school graduates:* Studying the effect of Jewish education on adult Jewish behavior. New York: David J. Azrieli Graduate Institute of Jewish Education and Administration, Yeshiva University, Research Report 1.

Schiff, A.I. & Schneider, M. (1994b). Far reaching effects of extensive Jewish day school attendance: The impact of Jewish education on Jewish behavior and attitudes. New York: David J. Azrieli Graduate Institute of Jewish Education and Administration, Yeshiva University, Research Report 2.

Solberg, V.S., O'Brien, K., Villareal, P., Kenner, R., & Davis, A. (1993). Self-efficacy and Hispanic college students: Validation of the College Self-Efficacy Instrument. *Hispanic Journal of Behavioral Science*, 15, 80-95.

Steinhardt, M.H. (2001). Service as strategy to strengthen the Jewish community. Contact, 4, 7.

Tavani, C.M. & Losh, S.C. (2003). Motivation, self-confidence, and expectations as predictors of the academic performances among our high school students. *Child Study Journal*, 33, 141-151.

United Jewish Communities (2003). *National Jewish Population Survey*. Storrs, CT: North American Jewish Data Bank. Retrieved from http://www.jewishdatabank.org/NJPS2000.asp.

US News and World Report (2007a): America's Best Colleges 2007: Liberal Arts Colleges: Top Schools (n.d.). Retrieved March 2007 from http://www.usnews.com/usnews/edu/college/rankings/brief/t1libartco_brief.php.

US News and World Report (2007b). America's Best Colleges 2007: National Universities: Top Schools (n.d.). Retrieved March 2007 from http://www.usnews.com/usnews/edu/college/rankings/brief/t1natudoc_brief.php.

Warkentin, R. & Griffin, B. (1994). The relationship between college students' study activities, content knowledge structure, academic self-efficacy and classroom achievement. Paper presented at the annual conference of the American Educational Research Association, New Orleans, LA.

Watters, E. (2003). *Urban tribes: A generation redefines friendship, family, and commitment.* New York: Bloomsbury.

Wechsler, H., Dowdall, G.W., Davenport, A., & Rimm, E.B. (1995). A gender-specific measure of binge drinking among college students. *American Journal of Public Health*, 85, 982-985.

Wechsler, H., & Isaac, N., (1992). 'Binge' drinkers at Massachusetts colleges: Prevalence, drinking style, time trends, and associated problems. *JAMA*, 267, 2929-2931.

Wechsler, H., Lee, J.E., Kuo, M. & Lee, H. (2000). College binge drinking in the 1990's: A continuing problem. *Journal of American College Health*, 48, 199-210.

Wechsler, H., Moeykens, B., Davenport, A., Castillo, S. & Hansen, J. (1995). The adverse impact of heavy episodic drinkers on other college students. *Journal of Studies in Alcohol*, 56, 628-634.

Wertheimer, J. (2005). Linking the silos: How to accelerate the momentum in Jewish education today. New York: AVI CHAI Foundation.

Wood, R.E. & Locke, E.A. (1987). The relation of self-efficacy and grade goals to academic performance. *Educational and Psychological Measurement*, 47, 1013-1024.

ADELSON FAMILY CHARITABLE FOUNDATION Las Vegas, NV

THE BEKER FOUNDATION

Riverdale, NY

THE ANDREA AND CHARLES BRONFMAN PHILANTHROPIES

New York, NY

EDGAR M. BRONFMAN

New York, NY

THE GOTTESMAN FUND

New York, NY

PAULA AND JERRY GOTTESMAN

Morristown, NJ

HAROLD GRINSPOON FOUNDATION

Longmeadow, MA

THE JESSELSON FAMILY

New York, NY

JIM JOSEPH FOUNDATION

San Francisco, CA

ROBIN AND BRAD KLATT

Livingston, NJ

FRAN AND BOBBY LENT

Hillsborough, CA

THE MARCUS FOUNDATION

Atlanta, GA

CHARLES Z"L AND LYNN SCHUSTERMAN

Tulsa, OK

SHEILA SCHWARTZ AND FAMILY

Phoenix, AZ

THE DAVID AND FELA SHAPELL FAMILY FOUNDATION

Los Angeles, CA

MICHAEL H. STEINHARDT/ JEWISH LIFE NETWORK

New York, NY

JEFFREY AND DEBORAH SWARTZ

Newton, MA

UJA-FEDERATION OF NEW YORK

New York, NY

HARRY & JEANETTE WEINBERG FOUNDATION

Baltimore, MD

LESLIE H. AND ABIGAIL S. WEXNER

Columbus, OH

The Maurice and Marilyn Cohen Center for Modern Jewish Studies at Brandeis University is a multi-disciplinary research institute dedicated to the study of American

University is a multi-disciplinary research institute dedicated to the study of Americar Jewry and the development of religious and cultural identity.

The Partnership for Excellence in Jewish Education (PEJE) is a collaborative of visionary Jewish philanthropists who seek to create a vibrant and sustainable Jewish future through strengthening the Jewish day school movement in North America.

"The Impact of Day School: A Comparative Analysis of Jewish College Students" was generously funded by PEJE and a matching grant from the Alan B. Slifka Foundation, along with generous contributions from the Arie and Ida Crown Memorial, Alisa and Dan Doctoroff, the Jewish Community Foundation of Los Angeles, Naomi and Mark Ramer, Pamela and George Rohr, and an anonymous donor.