Estimating the Jewish Student Population of a College Campus

Harriet Hartman and Ira M. Sheskin

Providing Jewish services is usually accomplished within Jewish organizations. Gaynor (2011), however, makes a cogent argument that concentrating on "Jewishly exclusive spaces" misses an opportunity to reach Jews where they are, embedded in broader organizations. His focus is on education, as is ours, but the idea need not be confined to this arena of social action. As the boundaries between Jews and non-Jews become blurred in myriad ways (cf. Alba, 2006) in contemporary society, developing methods for disseminating services to Jews within broader organizations is becoming increasingly important. Hillel is an organization that has long done so, embedding itself on college campuses of the broader population and seeking to provide services to all Jewish students in that population. However, determining the types of services to provide and for how many students is often challenging, because many Jewish students blend in with the broader population and do not self-identify in any visible manner. This article discusses alternative methods for estimating the Jewish student population to better tailor services to their needs.

A simple inquiry to the senior author from one university's Advancement Director presented a challenge: Did we have an estimate of how many Jewish students attend Rowan University? A donor was interested in establishing a Hillel Jewish Student Center at this university, but wanted to be certain that enough Jewish students attended to warrant such an investment. Because we expect that many campuses may be faced with a similar challenge, given the perceived desirability of Jewish students on campus (Klugerman, 2010; Redden, 2008) and the subsequent impetus to improve campus services for Jewish students, we decided to summarize and review many of the strategies available for assessing the number of Jewish students on any particular campus. We hope that the discussion will be beneficial to others who are challenged to estimate other Jewish subpopulations whose identification may otherwise remain hidden.

Before embarking on a discussion of the various suggested methodologies, note that one of the difficulties of estimating the size of a Jewish student population is defining whom to count as a Jew. Although Judaism is a religion and many Jews identify religiously as Jews, Jews may also identify ethnically as Jews without identifying with the religion. Therefore surveys that seek to identify Jewish

Harriet Hartman, Ph.D. (Sociology, Hebrew University) is Professor of Sociology at Rowan University, editor of the book series "Studies of Jews in Society," and a recipient of the North American Jewish Data Bank's Berman Summer Fellowship in 2010 and 2012, and the 2011 Jacquet Research Award. She was president of the Association for the Social Scientific Study of Jewry from 2005–12. Her most recent book, with Moshe Hartman, is Gender and American Jews: Patterns in Work, Education, and Family in Contemporary Life.

Ira M. Sheskin, PhD. is a Professor of Geography and the Director of the Jewish Demography Project of the Sue and Leonard Miller Center for Contemporary Judaic Studies at the University of Miami. He has completed 42 major Jewish demographic studies for Jewish Federations throughout the country. He is an Editor of the American Jewish Year Book and author of Comparisons of Jewish Communities: A Compendium of Tables and Bar Charts available at http://www.jewishdatabank.org.

 1 The authors were inspired by a lively discussion on this topic on the listserv of the Association for the Social Scientific Study of Jewry that took place May–July, 2010.

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identification from answers to a question on religious preference may underestimate the number of Jews in a population (Kosmin et al., 2001; Kotler-Berkowitz et al., 2004; Tighe et al., 2010). For example, Kosmin et al. (2001) found that, of all adults who could be classified as Jewish either by religion or culture, only about half (53%) self-identified as Jewish when asked about their religion.

Social scientists studying the Jewish community have asked a variety of questions: "Are you Jewish?" "What is your religious preference"? "How do you define yourself ethnically?" "Do you consider yourself Jewish in any way?" "Is your mother Jewish?" and "Is your father Jewish?" Research has shown (e.g., Klaff, 2006; Mott & Patel, 2008) that the manner in which the question is asked affects the count.

What definition of Jewishness is most appropriate for the purposes of establishing a Hillel? Many involved in Hillel or other Jewish programming efforts on college campuses recommend a broadly inclusive definition that includes anyone who self-identifies as a Jew (Kosmin, 2010; Segal, 2010; Sternberg, 2010a), even though some Jewish subpopulations might not accept such an inclusive definition. The argument is that, because Jewish students on any given campus are heterogeneous, as wide a tent as possible should be used to encompass them all, especially on campuses where Jewish identity is sometimes hidden or where Jewish students are a very small minority.

This article reviews and discusses the strengths and weaknesses of seven strategies for estimating the number of Jewish students on a given campus:

- 1. using university-administered surveys
- 2. using a specially designed telephone survey
- 3. using a specially designed Internet survey
- 4. using a snowball sample
- **5.** surveying faculty informants
- **6.** collecting information about the Jewish population in the geographic areas from which most students derive
- 7. counting the number of students with distinctive Jewish names (DJNs)

Finally, we assess the value (or lack thereof) of such a population estimate, particularly when the purpose of the estimate is to provide input to the decision concerning the establishment of a Hillel.

ESTIMATION STRATEGIES

Strategy Number 1: Using University-Administered Surveys

The first strategy uses surveys of students administered by the university that query religious preference. The Cooperative Institutional Research Program (CIRP) longitudinal freshmen survey, administered by UCLA's Higher Education Research Institute (HERI) (http://www.heri.ucla.edu/herisurveys.php), is the most established and most popular of these surveys. CIRP collects religious preference and parents' religion from first-year students at the beginning and end of their freshman year and from seniors at graduation. Campuses may choose to participate in any or all of these surveys (for a fee). Of course, not all students will cooperate with these surveys, but they usually provide a reasonable estimate of the number of Jewish students.

Some universities administer their own surveys. At the University of Miami, for example, students complete an optional religious preference form when they

enroll. One drawback is the optional nature of the survey. Based on years of querying students active in the University of Miami Hillel whether they completed the religious preference form, University of Miami Hillel leaders estimate that no more than 50% of Jewish students do so (Sheskin, 2010).

It should be noted that using *freshmen* surveys to estimate the number of Jewish students, however, requires some assumptions regarding Jewish student retention compared with other students. Jewish students disproportionately aspire to attend graduate and professional school, are more likely to be residential students than commuter students, and are more likely to come from highly educated and economically advantaged households (Sax, 2002). These factors almost certainly imply that Jewish students exhibit higher retention and graduation rates than do other students. In fact, this is a primary motivator for universities to be interested in recruiting Jewish students (Redden. 2008). Because Jewish students typically complete college (more than 70% of Jews under age 45 have an undergraduate degree) (Hartman & Hartman, 2009, p. 16), they are likely to form a higher percentage of the sophomore, junior, and senior classes than of the freshmen class. Thus, freshmen surveys may underestimate the total number of Jewish students on campus, unless adjustments for retention are made.

Note as well that if the university is planning to survey all students (or all freshmen or all seniors), the possibility exists that the designers of that survey may agree to add a "rider" question or two to their survey. For example, at the University of Miami, all graduating students are required to complete the "Graduating Student Survey." A question or two on religion/ethnicity could easily be added to such a survey and would probably achieve a very high response rate. This would allow an estimate of the religious and/or ethnic composition of graduating seniors, which could be extrapolated to the rest of the student population. This "rider" question strategy can apply to written surveys, telephone surveys, or Internet surveys alike.

Strategy Number 2: Using a Specially Designed Telephone Survey

The second strategy to assess the number of Jewish students on a campus is to conduct a telephone survey asking whether students are Jewish. Although telephone surveys sometimes suffer from low response rates (Keeter et al., 2006), response rates may be expected to be somewhat higher among college-educated populations (Johnson n.d.). This strategy might work on a relatively small campus, but with more than 9,500 students at Rowan University, a random sample of about 375 students would be necessary to estimate the number of students within plus or minus 5% (at the 95% confidence level). This would obviously be time consuming and expensive. One could perform a random-digit dialing (RDD) survey of the exchange codes for the dormitories, but this would not yield an estimate for commuter students. Even if the registrar agreed to release telephone numbers for commuter students (and privacy rulings may obviate this), not all students will have registered with the university the telephone number they actually answer. They may have listed their parent's home telephone number, but not their cell phone number. Further, the widespread use of caller ID may reduce the number of responses by enabling students to identify that it is a stranger calling. Yet another problem is that some new university dormitories do not have land-lines. Finally there is the possibility that Jewish students might be more or less likely than other students to respond to a telephone survey.

As an example of such a survey, at the University of Connecticut in the 1970s, Dashefsky (2010) enlisted students to conduct a survey of undergraduates to determine the religious composition of the student body. The University of Connecticut's Bureau of Institutional Research provided a 5% random sample of undergraduates. With Dashefsky's guidance, the students developed a questionnaire and estimated that there were 1,450 Jewish undergraduates (about 13% of the student body). This was an educational exercise for the student interviewers and produced useful information. Of course, conducting such a survey today presents its own challenges, as mentioned above, particularly with respect to cell phones and caller ID as well as new privacy rules, which might mean that the university may not provide phone numbers to a researcher. If feasible, however, a large enough telephone survey may provide a reasonable estimate.

Strategy Number 3: Using a Specially Designed Internet Survey

The third strategy can be used if a university is willing to provide e-mail addresses for students or is willing to permit access to the student Listserv. Internet surveys may generate more responses than a telephone survey (30–60%, according to Johnson n.d.), but this higher response rate comes at a price. With a telephone survey, once a student is reached, the cooperation rate is likely to be quite high. Internet surveys, although sometimes achieving responses from a large number of persons, produce a self-selected sample, and it is hard to argue that this sample is a random sample of the student population, thereby precluding inference from the sample to the population. Although all types of surveys suffer from nonresponse bias due to the fact that not all potential respondents cooperate, survey methods with no human contact (Internet, mail) are much more likely to suffer nonresponse bias than methods involving human contact (personal interview survey, telephone survey). It is much easier to ignore something in your mail or your e-mail than when someone visits you personally or contacts you via telephone.

Three major advantages can be cited for an Internet survey over a telephone survey. First, the cost of an Internet survey is considerably lower than the cost of a telephone survey or even a mail survey. Although professional time is still needed to design and program the questionnaire and to analyze the results, Internet surveys have no interviewer costs, no mailing costs, no cost to reproduce a questionnaire, and no data input costs. Second, an Internet survey can be designed, executed, and analyzed within a relatively short period of time. Third, although the results do not permit inference to the entire student population, certainly the survey will produce an estimate of the *minimum* number of Jewish students on campus. Suppose 9,500 e-mails with links to the survey are sent and 4,000 students respond (42%). Suppose that 10% (400) of the students are Jewish. Although one might argue that we cannot infer that the 10% can be applied to the 9,500 to produce an estimate of 950 Jewish students, there is no doubt that there are at least 400 Jewish students at the university and in all likelihood many more.

Contributing as well to the inability to infer to the population is the possibility that Jewish students might be more or less likely than other students to respond to an Internet survey.

Strategy Number 4: Using a Snowball Sample

The fourth strategy is the use of a snowball sample. Whether an initial contact is made by telephone, Internet, or in person with active Jewish students, students who self-identify as Jewish may be willing to identify others as Jewish, creating a snowball sample (Israel, 2010) that would result in a statement that, at a minimum, __ number of Jewish students attend the university. This procedure would also produce some names and addresses useful to a Hillel mailing list in the future. It may also be possible to start the snowball with the membership lists of clubs that are known to have many Jewish members (such as the College Democrats²) or with class lists of Jewish Studies courses that could be assumed to attract a disproportionate number of Jews. Unless it is a small campus, such snowball samples are unlikely to generate a good estimate of the total number of Jewish students on campus (see discussion and criticism of respondent-based sampling in Goel & Salganik, 2010; Heckathorn, 2002; and Salganik & Heckathorn, 2004); they will, however, provide a base on which to plan programming.

Strategy Number 5: Surveying Faculty Informants

A fifth strategy is to survey (known) Jewish professors for estimates of the number of Jewish students in their classes. This may yield very biased estimates depending on whether opportunities arise in their classes for students to make their identity known. For example, when the first author teaches a Sociology of Religion course, such occasions clearly occur. When she teaches Comparative Education, she relates her Israeli experience to the class, which often elicits a response from Jewish students. When the second author teaches Jewish Geography and students make PowerPoint presentations, almost every student reveals whether they are Jewish. Colleagues teaching Women in Judaism or World Religions invariably learn the religions of many of their students. Any Jewish faculty member canceling classes on Jewish holidays will also likely learn the religion of their students. But not all professors do so, and their subject matter may not be as conducive to students revealing their identity. Further, many students see religion as a private or family matter, separating it from their academic experience, especially if Jewish students have not had a presence on a campus heretofore. All faculty have probably had the experience of thinking a student was Jewish who was not, or vice versa. Nevertheless, faulty as they may be, faculty estimates may be better than no information at all.

Faculty estimates may be improved by weighting them according to the probability of Jewish students enrolling in their classes, given information on the majors selected by Jewish students. According to Sax's American Jewish Freshmen survey (2002), the most popular majors among Jewish freshmen are business, social science, history/political science (prelaw), biology (premed), and humanities. In 2000–1, the most common occupations of Jewish men also included engineering, which should probably be added to the list of popular majors of Jewish students (Hartman & Hartman, 2009). As Jewish occupational aspirations change (Chiswick. 2007; Hartman & Hartman, 2009), this list can be adjusted.

²Thanks to Larry Sternberg (2010a) for inspiring this strategy.

Further, because Jews have higher proportions in premed and prelaw majors, it is important to identify such at any particular university (A. Glicksman, 2010). Complicating this methodology, of course, is the fact that many courses are taken by nonmajors.

Strategy Number 6: Collecting Information About the Jewish Population in the Geographic Areas From Which Most Students Derive

The sixth strategy is to examine estimates of the proportion of Jews in the general population of the catchment area of a particular university. For example, for the area from which Rowan University draws most of its student body, *Current Jewish Population Report 2011-Number 3* (Sheskin & Dashefsky, 2011) estimates that 5.6% of New Jersey's population is Jewish, as is 2.3% and 1.7% of the two neighboring states, Pennsylvania and Delaware. This report lists the Jewish population of about 900 different geographic areas, facilitating analysis for smaller geographic units.

However, several problems exist with this approach. First, Jews are more highly represented among the educated population, and the more highly educated population sends a higher proportion of their children to college. More than half of American Jews aged 25 and over have completed a college degree, compared with less than 30% of Americans in general (Hartman & Hartman, 2009). As Kadushin and Tighe (2008) remind us, 72% of non-Orthodox Jews and 50% of Orthodox Jews under age 30 have attended or are attending college, compared with about one-third of all Americans (NCES 2008). Rowan University draws about one-third of its students from first-generation college students, which may indicate a lower number of Jewish students.

Second, the majority of Jewish college students attend college away from home (Kadushin & Tighe, 2008, p. 2), so they may or may not be attending university in their "region of origin."

Third, the Jews in a region may congregate at a few chosen universities, so no expectation exists that, if a given university's catchment area is X percent Jewish, then X percent of students at each university in that area are Jewish. The 5,000 Jewish students at Rutgers University in northern New Jersey is the third highest number among public universities in the nation according to *Reform Judaism Online* (Steiner, 2008). The University of Pennsylvania, just a half-hour's drive from Rowan University, has an estimated 2,800 Jewish students, the seventh highest in the nation. New York City and College Park, Maryland, all within two hours, have six private and two public universities on the "top 60" list of Jewish student populations. These competitors might well reduce the number of Jewish students at other universities in the area. Yet, this list of the 60 top universities in terms of number of Jewish students is based on estimates from Hillel, which may be inflated (Kadushin & Tighe, 2008).

To hone the estimate of the number of Jewish students in an area who enroll in a particular university, it might be possible for the local Jewish Federations (perhaps in conjunction with Hillel) to ask synagogues in the area to forward information about where high school seniors plan to attend college. This could

³Thanks to Randal Schnoor for bringing this list to our attention (Schnoor, 2010).

provide some idea of the proportion of Jewish students going to any particular college as well as names and contact information.⁴

Strategy Number 7: Counting the Number of Students With Distinctive Jewish Names

The final strategy, and the one that may be the most controversial, involves counting the number of students with Distinctive Jewish Names (DJNs) and adjusting by an "expansion factor" to reach a ballpark estimate. Seasoned researchers, including the 2007 and 2010 Marshall Sklare Award⁵ recipients, have advocated for this strategy (Barry Chiswick, Steven M. Cohen, Ira M. Sheskin, Joshua Comenetz, and others). The first author of this article, but not the second, was already a skeptic, because all university professors have had embarrassing episodes when assuming that a particular student was Jewish (from his or her name and other "clues") and that student was not. We now summarize some of the arguments supporting and detracting from the use of DJNs.

Using DJNs to estimate a Jewish population has a long history (Kosmin & Waterman, 1989). Recently, Chiswick (2009), in his 2007 Sklare Memorial Lecture, used DJNs to study the "rise and fall of the American Jewish Ph.D." As he relates,

Himmelfarb et al. (1983) [Himmelfarb, Loar & Mott. 1983] attribute the DJN technique to Samuel C. Kohs in 1942 [Kohs & Blumenthal, 1942] and report the results of several studies that the list of 35 names (the names used here except for Schwartz) are held by 11–15 percent of Jews, with about 90 percent of individuals with these surnames being Jewish. If these proportions still hold, and if receipt of the Ph.D. among Jews is independent of their surname, it suggests that the number of Jews receiving the Ph.D. is seven to nine times greater than the number of DJN Ph.Ds. Himmelfarb et al. (1983) compare the socio-economic and demographic characteristics of those on the DJN list with other Jews in the 1971 National Jewish Population Survey and conclude that the differences "were quite small." The DJNs differ by only a little from the other Jews in terms of ritual observance and Jewish identification. Jews identified from organizational membership lists (e.g., synagogue memberships, [Jewish] Federation lists, etc.) differ more from Jews not on these lists than DJNs differ from other Jews (Chiswick, 2009, p. 71).

The main objections to the DJN strategy include (1) its imprecision; (2) Jews changing their names, especially as they assimilate; and (3) intermarriage. Chiswick continues his discussion:

A more recent study of the pros and cons of the use of the 36 DJNs is by Sheskin (1998a). In this study, a person is identified as Jewish if the person's surname is on the DJN list. This, of course, results in two types of errors. One error is identifying as Jewish individuals

⁵The Marshall Sklare Award is given annually by the Association for the Social Scientific Study of Jewry to a senior scholar who has made a significant scholarly contribution to the social scientific study of Jewry (see www.assj.org for a list of recipients).

⁴Although suggested by the Hillel director at Brandeis University, Brandeis Hillel does not employ this method, since their catchment area is more national than that of Rowan University. However, they do obtain an estimate of the number of students who intend to attend Brandeis from the local Jewish day schools (Sternberg, 2010b). Although this estimate would probably only provide a very partial list of Jewish students intending to come to the university, it can serve as a springboard for engaging incoming students in Hillel programming.

with a surname on the list who are not Jewish, whether or not the person may have had a Jewish ancestor. An example would be the former Senator from Maine and Secretary of Defense, William Cohen. The second error is missing Jews who do not have a DJN. An example would be the 2007 Sklare Award recipient [Barry Chiswick]. Expanding the DJN list of names reduces the second error (missing Jews), but increases the first error (incorrectly identifying non-Jews as Jewish).

Other problems with the DJN technique include name changes due to marriage. The check for DJNs among middle names is intended to identify Jewish women whose original surname is a DJN and is used as a middle name, but whose current surname is not on the list. In this instance marriage is a two-edged sword. A former colleague, Cohen, changed her name to O'Neill upon marriage before completing her PhD, and would not be identified as Jewish, while non-Jewish women adopting a DJN husband's surname would be so identified. Moreover, the DJN list focuses on Ashkenazic names, and hence Sephardic and Israeli names would not be identified, although most American Jews are of Ashkenazic origin (Chiswick, 2009, pp. 122-123).

Note that to some extent name changing to DJNs is probably balanced by name changing from DJNs. Many of these objections to using DJNs have been discussed in Kosmin and Waterman (1989) and in Phillips (2007).

In his dissertation, Phillips (2007) examined the 2005 Boston Jewish Community Study to determine how well DJNs predicted the Jewish population. He found that they represented about 12% of the Jewish population and that 92% of those with DJNs were Jewish. He also studied "ethnic names," finding that they represented 27% of the Jewish population in Boston and that 70% of those with ethnic Jewish names were Jewish. His conclusion was that DJNs were helpful as a supplementary frame for most surveys of Jews (Phillips, 2010).

Phillips' analysis shows that, although DJNs cannot necessarily predict whether a given individual is Jewish based solely on name, the method predicts rather well the incidence of Jews in a large sample of persons.

The usefulness of DJNs to predict the Jewish population also varies both temporally and spatially. In the Midwest, due to the large German-origin population, there are more non-Jews with DJNs than in other areas of the country. In New York, the name "Cohen" is found among non-Jewish African Americans. Russian Jews will be undercounted by DJNs, too, because of Russified spelling (e.g., Rosenboym, Finkelshteyn).

And because the DJN list is mostly Ashkenazic names, it will fail to identify the proper number of Jews in areas with large non-Ashkenazic Jewish populations. Sheskin has provided a list of common Sephardic Jewish names to supplement the list of common DJNs (see Appendix) (Sheskin, 1998b). In his Twin Cities Jewish community study, he added common Jewish Russian first names (RJNs) to his sample (see Appendix). About 50% of the households called using RJNs were Jewish households (Sheskin, 2004, pp. 2–5).

As others have mentioned, intermarried Jewish women will be undercounted by DJNs, as will their children (although the extent to which name changing has actually occurred has been underdetected by researchers) (McGinity, 2009, pp. 12–13). Fermaglich (2008), in her work on American Jews and name changing from 1930 to 1960, is one of a handful of researchers studying the phenomena. She shows that "through the middle of the 1950s, Jewish names

were represented disproportionately among names being changed legally in New York City" (Fermaglich, 2008, p.1). "Ultimately, name changing was a strategy that permitted Jewish families to attain and strengthen their position in the American middle class, but that position came at psychological cost and at the cost of disapproval from other Jews" (Fermaglich, 2008, p. 2). Fermaglich also notes a small but notable minority of Jews returning to older ethnic names to address communal disapproval (Fermaglich, 2008, p. 10).6

To gauge "local field conditions" at a particular university, a number of suggestions are offered:

- 1. Obtain estimates of the DJN "expansion factor" for the part of the country in which any particular university is located by obtaining lists of members from several synagogues or the local Jewish Community Center or Jewish Federation to gauge the proportion of Jews who hold a DJN (Cohen 2010). In the absence of an ability to do this, assume that between 8 to 12% of Jews have a DJN, leading to an expansion factor between 8.2 and 12.5, values that has been validated in previous research. Note that this is only relevant if a very large percentage of the student body derives from the local area.
- 2. If a scientific random-digit dial (RDD) demographic study has been conducted in the area, count the number of DJNs in the phone book of the population study area and develop an expansion factor between the DJN count and the RDD estimate of households. Sheskin and Dashefsky (2008) used a similar technique to estimate the number of Jews in counties surrounding San Antonio, when no population study had been completed in these particular counties.

(Note, however, that these first two suggestions are subject to the same qualifications discussed in Strategy #6. That is, there is no reason to expect that a particular university population reflects the local Jewish population.)

3. Obtain an estimate of the number of students with a DJN at a neighboring campus (most universities have a student directory online) that has a Hillel. In Florida, statewide Hillel funds were allocated by counting DJNs at each university serviced by the Florida Hillel Council. Universities with higher DJN counts almost certainly have greater numbers of Jewish students. Imagine a situation where a campus in a nearby section of the state has a university-administrated survey that shows about 1,000 Jewish students. If their student telephone directory

⁷Many thanks to Steven M. Cohen and Mordecai Walfish for providing references to articles posted online at the Berman Jewish Policy Archive (www.bjpa.org).

TABLE 1.

Relative advantages of alternate methods of determining number of jews in a given subpopulation (1=best ranking)

Method	Accuracy	Cost	Speed	Intrusiveness
Secondary analysis of existing survey	1	1	3	1
Specially designed telephone survey	1	7	4	4
Specially designed Internet survey	2	2	2	3
Snowball sample	2	6	4	4
Informants	5	4	2	2
Estimates from neighboring Jewish population	5	5	4	2
Distinctive Jewish Names	4	3	1	1

⁶Thanks to Keren McGinity (2010) for bringing this research to our attention.

has 100 students with a DJN and the telephone directory for the university in question has 200 such students, a good ballpark estimate for a nearby campus would be about 2,000 Jewish students (Sheskin, 2010).

4. Validation of the DJN estimate: Contact the DJN students and inquire as to whether they are Jewish (and do they know anyone else who is) or check them out on Facebook (Cohen 2010).

Publicly available DJN lists include Cohen's (1987) list of 109 DJNs and Sheskin's (1998a) list of 36 names. Both lists are reproduced in the Appendix. as are Sheskin's (1998b) list of Distinctive Sephardic Jewish names (DSNs) and Sheskin's (2004) list of Russian Jewish first names (RJNs).

Sheskin has a proprietary list of 375 DJNs (plus 30 Distinctive Jewish "endings," such as "berg" and "owitz"), which can be searched in a computerized phone book, that he uses to identify potential DJN households to be interviewed, but he cannot use these to estimate the number of Jews (Sheskin, 2010). Although the list of 375 DJNs is useful when trying to identify all potential Jewish students, we do not know the expansion factor between this longer list and the actual number of Jewish students.

Ranking of the Strategies

Table 1 ranks each of these alternate methods on four criteria: accuracy, cost, the speed with which the objective can be achieved, and intrusiveness for the subject. Rank 1 is the highest recommendation. On some attributes, methods are tied and receive the same ranking. The rankings are based on the subjective judgment of both authors.

Table 1 shows that no method is perfect and that several have advantages in some areas but not in all areas. When available, an existing survey that has asked the necessary information is preferable (for example, if there has been a membership survey of a broader organization or a survey of first-year students for other purposes that also queries religion and/or ethnic identification). For some purposes, counting DJNs is the quickest and easiest source of an estimate (providing that a list of the organization's members exists). A specially designed telephone survey might bring more accurate results, but it is costly and may be time consuming. Organizations need to weigh the purpose of their estimate, the resources available, how quickly an estimate is needed, and whether intrusiveness is a consideration.

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HOW IMPORTANT IS AN ACCURATE POPULATION ESTIMATE?

Regardless of which strategy is used, the estimate of the Jewish student population is likely to be imprecise. The larger question may be whether it is necessary to develop a Jewish population estimate to justify the establishment of a Jewish student organization.

As Segal (2010) suggested, the actual count of the total number of Jewish students is not as important as whether a reasonable number of students attends any particular planned event. A Friday night Sabbath dinner will attract some, speakers will attract others, films still others, and holiday celebrations still others. For those with specific political interests, Israel Peace Week offers an opportunity for participation. Even with competition from other college programs for

Jewish students, such as from Chabad or Koach, Hillel events will attract Jewish students.

Since no strategy provides an accurate count, the question arises as to the importance of knowing that count for certain. Are there a minimum number of students needed to ensure a successful Hillel? Is the Jewish student population the important number, or is it the population of participants? How many is "enough"? National Hillel does not think a minimum number exists, and it is supporting campuses with small Jewish populations, as long as someone—a faculty member, a member of the local Jewish community, or a student—exists to take the initiative and apply to be a "small and mighty" Hillel supported through the Soref initiative (www.smallandmighty.org). Some experienced Listserv members suggest that the best measure of success for a Jewish student organization is whether participation grows and overlaps from event to event, whether events are publicized (e.g., in the university newspaper), and whether participants want to form a lasting organization (Segal, 2010). Rather than "if you build it, they will come," the philosophy may be "if they come, build it."

For networking purposes, Sternberg (2010a; 2010b) suggests contacting any Jewish fraternities or sororities with Jewish "roots" or affiliations to cosponsor a low-threshold social program early in the semester. Networking to Jewish institutions in the area may also involve the community and the local Jewish Federation(s) for multiple purposes, such as bringing interesting speakers to campus or offering students opportunities to participate in community activities with the local Jewish population. Friedman (2010) suggests that it is more important to know that there is a minimum number of students on campus (perhaps 50) who might be interested in Hillel activities than having a more accurate estimate of all Jewish students.

It has been suggested that the rate of participation in Jewish events may vary inversely with the size of the Jewish student body and with the proportion of students at a university who are Jewish (A. Glicksman, 2010). Charmé (2010), however, qualified this expectation by suggesting that students who attend university close to home or commute from home, as is the case at his Rutgers-Camden campus, seem to have less need for Jewish campus affiliation than students who attend university far from home. Only one-third of Rowan University students live on campus, although upper-classmen often live in off-campus apartments away from home. Many, however, live within two hours of home. Thus, estimates of the total Jewish population may misrepresent the number of students who might be interested in on-campus programs for Jewish students.

DISCUSSION

Despite the argument that an estimate of the number of students is not needed, the "if you build it, they will come" concept was not an acceptable argument to the donor, who wanted an estimate before donating.

Thus, at Rowan University, the challenge was to develop an estimate of the number of Jewish students to convince potential funders of the value of developing a Jewish student organization. In this article, we have reviewed seven strategies for developing such an estimate, each imperfect in its own way. We believe that university-administered surveys and telephone surveys have the greatest

likelihood of obtaining a reasonable estimate, but these methods are generally labor intensive and expensive. Snowball sampling, surveying faculty informants, and collecting information about the Jewish population from which most students derive are unlikely to yield sound estimates. Counting the number of students with DJNs seemed to be the best way of developing a "ballpark" estimate at relatively little cost. The overwhelming majority of Listserv participants agreed that the DJN methodology was the most likely to produce a reasonable estimate given the time and budget constraints.

It was thus decided to use the DJN method to estimate the size of the Jewish student body at Rowan University. The first author and the Advancement Director at Rowan University, independently and using somewhat different DJN lists, each counted 146 students with a DJN among the student population. Using an estimate of 12% of Jews with a DJN, we divided 146 by 0.12 (an expansion factor of 8.3) to estimate about 1,200 Jewish students (corresponding to about 12.5% of the student population). Faculty informants (including the first author) had estimated that 5–10% of the student body was Jewish from personal experience. Thus, to be on the safe side and as to not overstate the case to the donor, the estimate was (somewhat subjectively) adjusted downward to about 1,000 Jewish students.

The first author also counted the DJNs at a neighboring state university in the region, but one with a vibrant Jewish studies program (offering a minor in Jewish studies) and an active Jewish Student Union/Hillel. The count was 152—not much different than 146. We were thus able to say to the donor that another area university, with a similar number of DJN students, was able to support a Jewish student organization. Thus, even if the expansion factor of 8.3 is not correct, a campus with 146 DJN students can support a Jewish student organization.

At the present time, a survey of students has been circulated, which asks for religious identification. We hope the response will be adequate enough to help verify (or refute) our original estimate.

The estimates based on the DJN methodology were enough to convince the potential donor to provide funding to help establish a Hillel program, providing there would be an active advisory board comprised of faculty, staff, students, and donors, to which all readily agreed. An additional amount was made available as matching funds (matching what Hillel could raise on its own), thus taking a cautious approach as to whether the investment was worthwhile.

One advantage of obtaining funding before recruiting participants is that a staff member, even if only part-time, may be hired to ensure more professional programming and recruitment efforts. The Reconstructionist Rabbinical College, located not too far from Rowan University, has an internship program, for example, through which rabbinical students may lend their expertise to a college campus (G. Glicksman, 2010). Other institutions in the vicinity of other universities may well do the same.

Some have noted that Hillel is not the only large organization with which Jewish student organizations can affiliate. Whereas Hillel serves more than 500 U.S. college campuses and an estimated 400,000 students, Chabad serves 119 campuses (Nathan-Kazis, 2010) and an estimated 150,000 students. Koach, the College Outreach Project of the Conservative movement, works closely with other Jewish student organizations and Hillel. Does this pluralism diminish

the opportunities for any particular organization to be strong, or does it revitalize the student Jewish community? Sounds like a good topic for a future research project!

REFERENCES

Alba, R. (2006). On the sociological significance of the American Jewish experience: Boundary blurring, assimilation, and pluralism. *Sociology of Religion* 67(4), 347–358.

Charme, S. (2010, June 8). Re: estimating Jewish student population. Posting to ASSJ Listserv.

Chiswick, B. (2007). The occupational attainment of American Jewry, 1990 to 2000. *Contemporary Jewry*, 27, 80–111.

Chiswick, B. (2009). The rise and fall of the American Jewish Ph.D. Contemporary Jewry, 29, 67–84.

Cohen, S. M. (1987). A case study of an abbreviated demographic survey: The New Haven Jewish Population "Mini-Study" of 1987. New York: Council of Jewish Federations Research Department. Retrieved from http://www.bjpa.org/Publications/details.cfm?PublicationID=325, February 20, 2011.

Cohen. S. M. (2010, June 8–9). Re: estimating Jewish student population and Re: DJNs, coverage and Jewish students. Postings to ASSJ Listserv.

Dashefsky, A. (2010, June 9). Re: Student sample. Posting to ASSJ Listserv.

Fermaglich, K. (2008). The name Greenberger is a foreign sounding name. Presented at the Annual Meeting of the Association for Jewish Studies.

Friedman, P. (8 June 2010). Re: Estimating Jewish student population—and Civil War Jewish soldiers. Posting to ASSJ Listserv.

Gaynor, A. (2011). Beyond the melting pot: Finding a voice for Jewish identity in multicultural American schools. *Journal of Jewish Communal Service*, 86(1/2), 174–183.

Glicksman, A. (2010, June 8). Re: estimating Jewish student population. Posting to ASSJ Listserv.

Glicksman, G. (2010, June 10). Hillel.... Posting to ASSJ Listserv.

Goel, S., & Salganik, M. (2010). Assessing respondent-driven sampling. *Proceedings of the National Academy of Sciences of the United States of America*, 107(15), 6743–6747.

Hartman, H., & Hartman, M. (2009). Gender and American Jews: Patterns in work, education, and family in contemporary life. Lebanon, NH: Brandeis University Press/University Press of New England.

Heckathorn, **D.** (2002). Respondent-driven sampling II: Deriving valid population estimates from chain-referral samples of hidden populations. *Social Problems*, 49(1), 11–35.

Himmelfarb, H. S., Loar, R. M., & Mott, S. H. (1983). Sampling by ethnic surnames: The case of American Jews. *Public Opinion Quarterly*, 47, 247–260.

Israel, S. (2010, June 7). Re: estimating Jewish student population. Posting to ASSJ Listserv.

Johnson, David. (n.d). *Addressing the growing problem of survey nonresponse.* Pennsylvania State University Survey Research Center. PowerPoint presentation. Retrieved from http://www.sri.psu.edu/nonresponse1.ppt, August 10, 2010.

Kadushin, C., & Tighe, E. (2008). How hard is it to be a Jew on college campuses? *Contemporary Jewry*, 28(1), 1–20.

Keeter, S., Kennedy, C., Dimock, M., Best, J., & Craighill, P. (2006). Gauging the impact of growing nonresponse on estimates from a national RDD telephone survey. *Public Opinion Quarterly*, 70(5), 759–779. Retrieved from http://poq.oxfordjournals.org/cgi/content/full/70/5/759, February 20, 2011.

Klaff, V. (2006). Defining American Jewry from religious and ethnic perspectives: The transition to greater heterogeneity. *Sociology of Religion*, 67, 415–438. Retrieved from http://www.bjpa.org/Publications/details.cfm?PublicationID=2956, February 20, 2011.

Klugerman, Y. (October 13, 2010). Colleges trying to attract more jewish students. Retrieved from http://www.braintrack.com/college-and-work-news/articles/colleges-trying-to-attract-more-jewish-students-10101301, February 18, 2011.

Kohs, S. C., & Blumenthal, W. (1942). Survey of Recreational and Cultural Needs of the Jewish Community, National Jewish Welfare Board. Unpublished report.

Kosmin, B. (8 June 2010). Re: Estimating Jewish student population. Posting to ASSJ Listserv.

Kosmin, B., & Waterman, S. (1989). The use and misuse of distinctive Jewish names in research on Jewish populations, *Papers in Jewish Demography 1985*. Jerusalem: Hebrew University.

Retrieved from http://www.bjpa.org/Publications/details.cfm?PublicationID=2741, February 20, 2011.

Kosmin, B. A., Mayer, E., & Keysar, A. (2001). American Religious Identification Survey. New York: Graduate Center of the City University of New York.

Kotler-Berkowitz, L., Cohen, S. M., Ament, J., Klaff, V., Mott, F. & Peckerman-Neuman, D. (2004). The National Jewish Population Survey 2000–01: Strength, challenge and diversity in the American Jewish population. New York: United Jewish Communities.

McGinity, K. (2009). Still Jewish: A history of women and intermarriage in America. New York: New York University Press.

McGinity, K. (2010, June 8–9). Re: estimating Jewish student population and Re: DJNs, coverage, and Jewish students. Postings to ASSJ Listserv.

Mott, F., & Patel, D. (2008). The implications of potential boundaries and definitions for understanding American Jewry: Can one size fit all? *Contemporary Jewry*, 28, 21–57.

Nathan-Kazis, J. (2010, April 2). Chabad houses proliferating on campuses. *The Jewish Daily Forward*. Retrieved from http://www.chabad.edu/news/article_cdo/aid/1174883/jewish/Chabad-Houses- Proliferating-on-Campuses.htm, February 20, 2011.

(NCES) National Center for Education Statistics. (2008). Digest of Education Statistics. Retrieved from http://nces.ed.gov/programs/digest/d08/tables/dt08_001.asp, February 20, 2011.

Phillips, Ben (2007). Numbering the Jews: Evaluating and improving surveys of American Jews. PhD Dissertation, Brandeis University. Retrieved from http://bir.brandeis.edu/handle/10192/23010, February 20, 2011.

Phillips, Bruce. (2010, June 9). Re: DJNS, coverage, and Jewish students. Posting to ASSJ Listserv.

Redden, E. (29 October 2008). Why more colleges want Jewish students. *Inside Higher Ed.* Retrieved from http://www.insidehighered.com/news/2008/29/jewish, February 18, 2011.

Salganik, M., & Heckathorn, D. (2004). Sampling and estimation in hidden populations using respondent-driven sampling. Sociological Methodology, 34(1), 193–239.

Sax, L. (2002). America's Jewish freshman: Current characteristics and recent trends among students entering college. Los Angeles: UCLA Higher Education Research nstitute.

Schnoor, R. (2010, June 7). Re: estimating Jewish student population. Posting to ASSJ Listserv.

Segal, E. (2010, June 8). Re: estimating Jewish student population. Posting to ASSJ Listserv.

Sheskin, I. M. (1998a). A methodology for examining the changing size and spatial distribution of a Jewish population: A Miami case study. *Shofar: An Interdisciplinary Journal of Jewish Studies*, 17(11), 97–116.

Sheskin, I. M. (1998b). The Jewish Community Study of Monmouth County Main Report. Deal, NJ: Jewish Federation of Greater Monmouth County. Retrieved from http://www.jewishdatabank.org, February 20, 2011.

Sheskin, I. M. (2004). *The Jewish Community Study of the Twin Cities Main Report*. Minneapolis and St. Paul: Minneapolis Jewish Federation and United Jewish Fund and Council of St. Paul. Retrieved from http://www.jewishdatabank.org, February 20, 2011.

Sheskin, I. M. (2010, June 8–9). Re: estimating Jewish student population and Re: DJNs, coverage, and Jewish students. Postings to ASSJ Listserv.

Sheskin, I. M., & Dashefsky, A. (2008). Jewish population of the United States, 2008. In D. Singer & L. Grossman (Eds.), *American Jewish year book* 2008, Vol. 108 (pp. 151–222) New York: American Jewish Committee. Retrieved from http://www.jewishdatabank.org, www.ajc.org and www.bjpa.org, February 20, 2011.

Sheskin, I. M., & Dashefsky, A. (2011). Jewish population of the United States, 2011. *Current Jewish Population Reports, Report 2010-Number 3*. Storrs, CT: Mandell L. Berman North American Jewish Data Bank. Retrieved from http://www.jewishdatabank.org, March 20, 2012.

Steiner, D. (Fall, 2008). The new insider's guide to college life admissions: The top 60 schools Jews choose and the top 20 by percentage of Jews. *Reform Judaism Online*. Retrieved from http://reformjudaismmag.org/Articles/index.cfm?id=1375, February 20, 2011.

Sternberg, L. (2010a, June 8). Re: estimating Jewish student population. Posting to ASSJ Listserv.

Sternberg, L. (2010b, July 8). Re: Jewish students paper. E-mail to first author.

Tighe, Elizabeth, David Livert, Melissa Barnett, and Leonard Saxe. (2010). Cross-survey analysis to estimate low-incidence religious groups. *Sociological Methods and Research*, 39(1), 56–82.

APPENDIX: LISTS OF DISTINCTIVE JEWISH NAMES (DJNS)

Steven Cohen's List of 109 DJNs From 1987 New Haven study:

Abramovitz, Abrams, Abramson, Adler, Altman, Bercovitz, Berkowitz, Berman*, Bernstein, Birnbaum, Blumberg, Blumenthal, Brodsky, Brody, Cahn, Caplan*, Cohen*, Cohn, Eisenberg, Epstein*, Fein, Feinberg, Feingold, Feinstein, Feldman*, Fink, Finkelstein, Freedman*, Friedman*, Ginsberg, Ginsburg, Gold, Goldberg*, Goldfarb, Goldman*, Goldstein*, Gottlieb, Greenbaum, Greenberg*, Gross*, Grossman*, Halperin, Halpern, Halprin, Horowitz, Horwitz, Hurwitz, Hyman, Jacobs*, Jaffe*, Kahn*, Kaplan*, Katz*, Katzman, Kaufman, Klein, Kohn*, Lefkowitz, Levi, Levin*, Levine*, Levinson*, Levitt, Levy*, Lieberman*, Margolin, Margolis, Markowitz, Moscowitz, Rabinowitz, Rappaport, Rosen*, Rosenbaum, Rosenberg*, Rosenblatt, Rosenbloom, Rosenblum, Rosenfeld, Rosenstein, Rosenthal*, Rothman, Rothschild, Rothstein, Ruben, Rubenstein, Rubin*, Schneider, Schulman, Schwartz*, Segal, Shapiro*, Shulman, Siegel*, Silverman*, Silverstein, Solomon, Stein, Steinberg, Stern*, Straus, Strauss, Weinberg, Weiner, Weinstein*, Weintraub, Weiss*, Zeitlin, and Zuckerman

Note: These names were among the most common found on a list of more than 100,000 contributors to the United Jewish Appeal in New York. In New Haven, of 7,090 known Jewish households, 1287 (or 18%) possessed these names (Cohen 1987).

Ira Sheskin's List of 36 DJNs used in his local Jewish community studies:

The names denoted with an asterisk in the Cohen list are used by Sheskin in his local Jewish community studies, plus the name "Goodman": 8% to 12% of Jews have one of these names (Sheskin 1998a).

Ira Sheskin's List of Distinctive Sephardic Jewish names:

The DSNs [Distinctive Sephardic Names] used in a 1997 study of Monmouth County, NJ, are Ades, Adjmi, Anteby, Ashear, Ashkenazi, Betesh, Beyda, Beydah, Braha, Dweck, Dwek, Gammal, Gemal, Mizrahi, Musry, Safdieh, Saka, Serouya, Seruya, Shamah, Sutton, and Tawil (Sheskin 1998b).

Ira Sheskin's List of Russian Jewish first names:

The RJNs (Russian Jewish Names) used in a 2004 study of the Twin Cities are Aleksandr, Basya, Faina, Galina, Inna, Irina, Leonid, Ludmila, Mikhail, Natalia, Natalya, Polina, Svetlana, Vladimir, Yelena, and Yuri (Sheskin 2004).