

Multi-Dimensional Analysis of Jewish Identity in 22 American Jewish Communities

Harriet J. Hartman¹, Ira M. Sheskin^{2*} and Erik H. Cohen³

¹Department of Sociology and Anthropology, Rowan University, Campbell Library, 5th floor Glassboro, NJ 08028, 856-256-4500 x3787. USA.

²Department of Geography, University of Miami, 1300 Campo Sano Building, Suite 115A, Coral Gables, FL 33124, 305-284-6693, USA.

³Bar Ilan University, Ramat Gan, ISRAEL.

Accepted February 14, 2017

Data on Jewish identity in 22 American Jewish communities collected between 2000 and 2010 and compiled in the Decade 2000 Data Set is analyzed using a combination of multi-dimensional data analysis techniques. The results of Similarity Structure Analysis (SSA) and Factor Analysis (FA) enrich one another in revealing the structural relationships among the identity variables. A comprehensive analysis of all the communities together and individual analyses of the 22 communities show similarities and differences in areas such as synagogue membership, religious rituals, and relationship to Israel.

Key words: Jewish identity, Similarity Structure Analysis, Factor Analysis.

INTRODUCTION

While the multi-dimensionality of Jewish identity has been validated in many studies (as described below), the methodological challenges of determining the number and meaning of such dimensions result in a variety of approaches, the results of which often are similar but not precisely the same. There is no consensus on how to determine these dimensions, nor how to use them in subsequent analysis. In an effort to aid in evaluating what alternative multivariate analysis techniques offer, we compare two multivariate

data analysis techniques, Factor Analysis, and Similarity Structure Analysis (SSA), to show their similarities and differences. We show that the results enrich one another in revealing the structural relationships among a large number of identity variables included in the Decade 2000 Data Set, an aggregate data file of 22 Jewish American communities compiled during the decade of 2000-2010.

Studies of American Jewish identity

While much has been written about American Jewish identity (Cohen 1997; Cohen and Eisen 2000; Dashofsky and Sheskin 2012; Dash 2009; Dershowitz 1997; Grauer 2000; Hartman 2014; Hartman and

 *Corresponding Author's Contacts: Corresponding Author: Email: isheskin@miami.edu, Fax: 954-435-7070.

¹Other Author Contact: hartman@rowan.edu.

Hartman 2001; Kaplan 2005), only a few large-scale national surveys providing empirical data on the attitudes, beliefs, and behaviors of this sizeable and diverse population are extant. The Jewish Federations of North America (JFNA) sponsored three National Jewish Population Surveys (NJPSs) in 1970-1971 (Massarik and Chenkin 1973), 1990 (Kosmin et al., 1991), and 2000-2001 (Kotler-Berkowitz et al., 2003). In 2013, the Pew Research Center (2013) conducted a national survey of American Jews. Each of these studies covered a range of Jewish behaviors, attitudes, and demographic characteristics. Further, several surveys of US religious groups have included Jewish samples, such as the American Religious Identification Survey (ARIS) and the Pew US Religious Landscape Survey (Kosmin and Keysar 2009; Pew Research Center 2008). The Pew (2013) survey of Jewish Americans resulted in much debate in the Jewish press (Benor 2013a, 2013b; Cohen 2013; Della 2013; Fishman 2013; Heilman 2013; Horowitz 2013; Kelman 2013; Sasson 2013; Saxe 2013) and in the academic press (Dashefsky and Sheskin 2014), particularly regarding the perennial 'who is a Jew' question.

On the local level, Jewish federations sponsor studies in Jewish communities around the country. Over 200 such studies have been collected by the Berman Jewish Data Bank (www.jewishdatabank.org). Not all these studies are comparable, given that they used different methods, addressed different issues, and were conducted at vastly different times (some date back more than 60 years) (Hartman and Sheskin 2012).

While the Pew and similar national surveys give a broad picture of American Jews as a whole, such community surveys show local differences, which may be significant. For example, while Pew found that 10% of American Jews identify as Orthodox, this clearly does not mean that 10% of each community identifies thusly. Some areas are almost exclusively Orthodox while others have virtually no Orthodox presence. The profiles provided by these local Jewish community studies offers a different view of Jewish American life.

Decade 2000 Data Set

Twenty-two of these local studies have been compiled into a meta-data file (the Decade 2000 Data Set). All 22 studies were conducted between 2000 and 2010 and were directed by the same principal investigator, Ira Sheskin. The same basic questionnaire was used in each, with minimal variation. These data include surveys of 19,800 individuals, significantly more than

any of the national surveys. Further, this Data Set is unique in that it enables comparisons among communities. It offers a distinct type of representativeness, in that each community has a unique profile that cannot be developed from a national survey.

All 22 surveys used a combination of Random Digit Dialing (RDD) and Distinctive Jewish Names (DJN) techniques. In this way, the sample (summarized in [Table 1](#)) randomly represents over one-half million Jewish households and over a million Jewish individuals. Any adult (Jewish or not) who answered the telephone in a Jewish household and agreed to be interviewed could be a respondent. A 'Jewish household' was defined as a household containing a Jewish person. A 'Jewish person' was defined as someone self-identifying as Jewish (or identified as Jewish by the respondent).

Jewish identity

Many questions in the community surveys in the Decade 2000 Data Set cover various aspects of Jewish identity: cognitive, behavioral, and attitudinal. Jewish identity (like social identity at large) is multi-faceted and complex. Identity forms at the intersection between environmental factors and personal choice. That is, the manner in which people identify themselves and the manner in which they are identified by others reflect a combination of the opportunities available, including identities which are voluntarily chosen and those which are externally imposed. This is particularly notable in socially mobile, multi-cultural societies such as the US, where individuals may (or as some say, must) choose from a menu of identity options, while at the same time their options may be limited by demographic, ethnic, economic, and other factors (Barth 1994; Berger 1979; Charmé et al., 2008; Cohen 2010; Cohen and Eisen 2000; Herman 1988).

Jewish identity has been found to be strongly linked to place. It has repeatedly been found, in international studies of Jews, that nationality has a strong impact not only on Jews' general values, cultural preferences, behaviors, and beliefs, but also on how their Jewish identity is formulated and expressed (Ben and Sternberg 2009; Boyarin and Boyarin 1995; Charmé 2000; Cohen 2008, 2014; Cohen and Kovács 2013; Cohen and Horenczyk 1999; Gitelman et al., 2003; Liwerant 2008; Wettstein 2002). Further, Jewish identity within a given country is not homogenous, but is affected by size of the Jewish community, local

Table 1. Attributes of community studies in the Decade 2000 Data Set.

Community	Year of field work	Sample size	# of Jews	# of Jewish households	% of local population which is Jewish
Atlantic County, NJ	2004	624	20,400	10,000	5.3%
Bergen, NJ	2001	1,003	71,700	28,400	8.1%
Detroit, MI	2005	1,274	72,000	30,000	1.8%
Hartford, CT	2000	763	32,800	14,800	3.8%
Jacksonville, FL	2002	601	13,000	6,700	1.1%
Las Vegas, NV	2005	1,197	67,500	42,000	3.8%
Lehigh Valley, PA and NJ	2007	537	8,050	4,000	1.3%
Miami, FL	2004	1,808	113,300	54,000	4.7%
Middlesex County, NJ	2008	1,076	52,040	24,000	6.8%
Minneapolis, MN	2004	746	29,300	13,850	2.6%
New Haven, CT	2010	833	23,000	11,000	3.4%
Portland, OR	2007	421	8,350	4,300	1.7%
Rhode Island	2002	829	18,750	9,550	1.8%
San Antonio, TX	2007	675	9,170	4,500	0.6%
St. Paul, MN	2004	494	10,940	5,150	1.2%
Sarasota, FL	2005	616	15,500	8,800	2.6%
South Palm Beach, FL	2005	1,511	131,300	73,000	39.8%
Tidewater, VA	2001	628	10,950	5,400	1.1%
Tucson, AZ	2002	805	22,400	13,400	2.6%
Washington, DC	2003	1,201	215,600	110,000	5.1%
West Palm Beach, FL	2005	1,534	124,250	69,000	12.2%
Westport, CT	2000	624	11,140	5,000	8.5%
TOTAL	2000-2010	19,800	1,081,440	546,850	

socio-economics, level of urbanization, and myriad other socio-demographic features of the Jewish community and the social environment in which it is located (Bar-Shalom 2002; Cohen 2011a; Hartman and Sheskin 2011, 2012; Rogoff 2001; Sheskin 2005).

Additionally, multiple components of Jewish

identity exist, and there are many ways of 'being Jewish.' Individuals and communities variously emphasize ethnicity, religion, connection to Israel, anti-Semitism, and other aspects of Jewish life (Cohen 2004, 2009a; Haji et al., 2011; Hartman and Hartman 2000; Heilman 2003; Klaff 2006).

Structure of American Jewish identity

The structure of Jewish identity has been explored by applying methods such as Similarity Structure Analysis (SSA) and Factor Analysis (FA). See Methods section below. In an early study of identity of American Jews,

Zak (1973) found two factors, American identity and Jewish identity. Saroglou and Hanique (2006) used FA to analyze data on Jewish identity among adolescents, yielding two factors: Religious identity and Cultural identity. The Religious identity factor was further differentiated into factors pertaining to Classic religiousness and Emotional religiousness. Friedlander et al. (2010) verified the two-factor model of Religious identity and Cultural identity. In a study of British Jews, Miller (2003) proposes a three-factor model of Practice of religious ritual, Belief, and Ethnicity/sense of identification with other Jews. Among subpopulations by age, he finds additional factors; titled Social ethnicity, Mental ethnicity, and Behavioral ethnicity.

Hartman and Hartman (2009) used FA to analyze data from NJPS 2000-2001. They present a two-dimensional model in which one dimension represents factors of religion and ethnicity as in previous studies, and a second dimension represents the public and private realms in which aspects of religion and ethnicity may be manifest (see also Rebhun 2011a, 2011b).

In analyzing NJPS 1990 data with the SSA technique, Rebhun (2004a) found a polar structure with regions corresponding to Israel, collective boundaries and social segregation, ritual practices (regular and intermittent), community, and education. Attitudinal variables (regarding importance of living in a Jewish neighborhood, of children marrying a Jew, of talking about Israel, and emotional attachment to Israel) were more central to the structure than were the behavioral variables, which were arranged around the periphery. An SSA of NJPS 2000-01 (Della 2010) also found a polar structure, with Jewish Peoplehood in the center surrounded by areas related to rituals, learning, philanthropy and organizations, culture and politics, Israel, and family life cycle. In both studies, the structures were somewhat different when considering subpopulations of Jews, for example those who are religious and/or strongly identified with the Jewish community as compared with the unaffiliated.

METHODS

Survey data

This article analyzes data on Jewish identity from the Decade 2000 Data Set. Seventeen questions related to Jewish identity of the respondent or other members of the respondent's household are considered here.

Each of these questions was asked in all 22 local studies. These questions involved attendance at synagogue services, emotional attachment to Israel, keeping a kosher home, keeping kosher outside the home, level of familiarity with the local Jewish Federation, level of familiarity with the local Jewish Family Service, being familiar with at least one local Jewish agency, lighting Hanukkah candles, participating in a Passover Seder, lighting Friday night candles, having a mezuzah on the front door, having visited Israel, donating to the local Jewish Federation in the past year, donating to any other Jewish charity or cause in the past year, participating in or attending a program at, or sponsored by, the local Jewish Community Center, being a synagogue member, and being a member of a Jewish organization.

RESULTS

Two data analysis techniques, Similarity Structure Analysis (SSA) and Factor Analysis (FA), were used. SSA and FA have been found to verify and enrich one another. For example, SSA often requires fewer dimensions than FA to portray the structure of the data, producing an easily readable structure in two or three dimensions. At the same time, the results of an FA may provide guidance for interpretation of the SSA map. For studies combining these techniques, see: Cohen 2003; Cohen 2005, 2006; Cohen and Werczberger 2009; Guttman 1982; Maslovaty et al., 2001; Schlesinger and Guttman 1969; Schwartz 1994; Schwartz and Bilsky 1990.

Similarity Structure Analysis (SSA)

The SSA procedure enables a graphic portrayal of the underlying structure of the data (Guttman 1968; Levy 1994). SSA begins with the construction of a correlation matrix for the selected variables. A computer program (HUDAP, Amar 2005) plots the variables in a cognitive 'map' following the principle that, the higher the correlation between two variables, the closer together they will be; the lower their correlation, the farther apart (Guttman 1968). As all the correlations are considered simultaneously, the computer locates the most appropriate placement of each of variable in relation to all others.

The researcher looks for a coherent overall structure in the map consisting of contiguous regions of semantically-related variables. The results may be portrayed in multiple dimensions, but the fewer

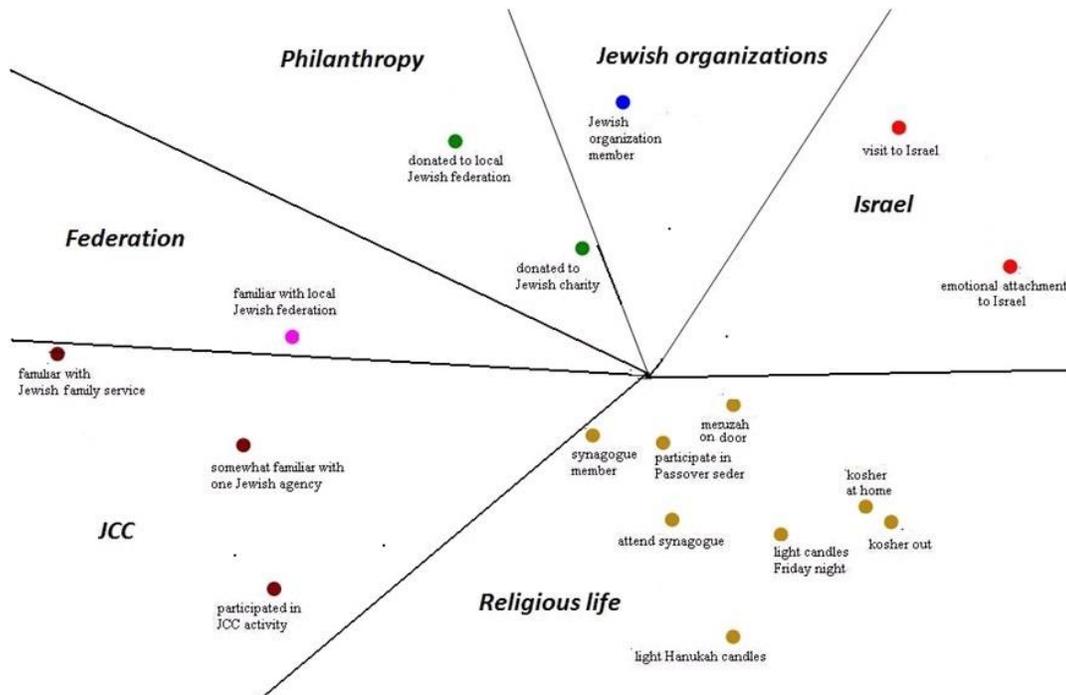


Figure 1. SSA of Jewish identity items in the 22 communities study.

dimensions necessary to portray the structure of the data the more robust and significant the result. Thus, SSA maps in two or three dimensions are considered first. In two dimensions, the structures may have three basic patterns: a radial series of sequential slices (such as a 'most' to 'least' progression), a modular center-periphery structure of concentric circles, or a polar structure of pie-shaped wedges emanating from a common center and arranged in sets of oppositions. Therefore, several structures can be found in the same SSA, each related to various facets of the research. For example, a study of symbols of Jewish identity found a polar structure of content regions (Israel, religion, culture etc.) and also a center-periphery structure of three concentric circles, from the most personally specific to the most diverse (Cohen 2011b). If the research refers to several facets, several structures could be found in the same SSA. While the interpretation of the structure and designation of regions is subjective, the placement of the variables is objective, based on the correlation matrix.

The regionalization of SSA figures is analogous to that of geographic maps, whose fixed features may be divided into regions according to political boundaries, natural features, population density, etc. For example, the populations of the cities of Detroit and Las Vegas

are of similar size and therefore would be in the same category of a map labeled according to population density, but would be in different regions of a map divided according to natural habitat type. In the same way, the same SSA map may be read in various ways according to the theoretical basis of the analysis.

Factor Analysis (FA)

Factor Analysis seeks the minimum number of factors necessary to describe the pattern of relationships between selected variables (Gorsuch 1983). The FA was conducted using the Principal Component Analysis (PCA) procedure in SPSS. Varimax rotation with Kaiser Normalization was used to maximize the variance between factors and minimize the variance within factors. In this Factor Analysis, each derived factor is orthogonal or 'perpendicular' to the others.

Similarity Structure Analysis (SSA)

Figure 1 shows a two-dimensional map resulting from a Similarity Structure Analysis of the Data Set for the 22 communities combined. Six pie-shaped regions can be recognized. These are: 1) Religious life; 2) Israel; and four related to Jewish institutions: 3)

Jewish organizations; 4) Philanthropy; 5) Jewish Federation; and 6) JCC. JCCs and Federations are local, while the category 'Jewish organizations' may refer to national, international or 'virtual' organizations.

Items placed close to the center of the structure have relatively equally strong correlations with all other variables. In contrast, variables placed at opposite peripheries of a map have weak or negative correlations with one another. For example, visiting Israel is located at the far right side of the map, far from the variable 'familiar with Jewish family service,' indicating little link exists between Israel visits and local Jewish family services. The variables 'synagogue member' and 'donated to local Jewish charity' are close to the center; joining a synagogue and supporting local charities tend to be linked with other aspects of Jewish community life.

Function of synagogues

The two variables 'member of synagogue' and 'attends synagogue' are in the Religious life region, with 'synagogue member' somewhat closer to the center of the map. Further, 'synagogue member' is close to the border with the JCC region, reflecting the dual religious and ethnic/community function of the synagogue. This finding, that synagogue membership is more closely linked to other variables pertaining to Jewish institutions, while synagogue attendance is more closely linked to the religious ritual variables, upholds studies that document the dual function of synagogues in the US as secular, cultural, and ethnic community centers, as well as places of religious worship (Gans 1994; Hecht and Faulkner 2000; Wertheimer 2003) rather than exclusively as houses of worship as suggested by Kelman (2013).

Many features of a community may affect the role of the synagogue: other Jewish institutions in the city or region; the types of activities and services synagogues offer; the cost of synagogue membership (Chiswick and Chiswick 2000); whether multiple synagogues exist for different denominational affiliations, and so on. Further, community demographics such as age and socio-economic status may impact membership rates and attendance. For example, Rebhun (2004b) found that, between 1970 and 1990, synagogue membership declined among American Jews while during the same time period occasional synagogue attendance (primarily on the high holidays) remained about the same. Synagogue membership was linked to age (older adults being more likely to be members) and to socio-economic status (those of higher status

being more likely to be members of synagogues and other Jewish institutions).

Israel

The Israel region is located opposite the Federation and JCC regions, indicating a contradistinction between local institutions and attachment to Israel. Further, the two Israel items are toward the periphery of the map; connections to Israel, apparently, are not 'central' to Jewish identity among the surveyed populations at large. 'Visit to Israel' is closer to the Jewish organizations region. Many group tours to Israel are organized or advertised through Jewish community organizations. The variable 'emotional attachment to Israel' is placed closer to the Religious life region. A number of recent studies have found that Orthodox American Jews tend to profess a closer sense of attachment to Israel, compared to those affiliated with other denominations or the unaffiliated (Hartman and Hartman 2001; Pew Research Center 2013; Sasson et al., 2010; Waxman 2007). Other factors such as the age distribution within a community, prevalence of intermarriage, and Jewish educational opportunities, particularly the availability of tour programs to Israel, also affect local attitudes to Israel (Sheskin 2009, 2010, 2012).

Religious rituals

This region contains eight variables. Of these, some are close to the center of the map ('mezuzah on door', 'participate in Passover Seder', 'synagogue member'). In contrast, 'lighting Hanukkah candles' is at the far periphery. It may be that this is affected by demographics, such as the presence of young children in the home (Abramitzky et al. 2010; Fishman 2000). The importance attributed to Hanukkah as an 'alternative' to Christmas for Jewish children in the US is affected by the social milieu in which a Jewish community is situated; it is most strongly stressed among non-Orthodox Jews with young children in areas with few other Jewish families (Abramitzky et al., 2010). Separate SSAs were conducted using the data for each of the 22 communities. In all 22 cases, the same six basic regions were recognizable in two dimensions, strengthening the result.

Factor Analysis

A Factor Analysis of data on Jewish identity from the Decade 2000 Data Set (Hartman and Sheskin 2012)

uncovered four factors of Jewish identity: 1) communal religious; 2) private religious, 3) broad ethnic, and 4) local ethnic factors. The loadings of each variable are given in [Table 2](#).

Religious identity may be distinguished from ethnic identity. Further, religious identity consists of communal and private aspects. Ethnic identity consists of a broad aspect of global Jewish Peoplehood and a local aspect. As with the SSA, the same structure of Jewish identity was found in all 22 communities. It was found that only the local ethnic aspect of Jewish identity is related to the Jewish community infrastructure (Hartman and Sheskin 2012).

SSA and FA

In [Figure 2](#), the same structure is shown, with each variable labeled according to the factor it most strongly loaded on in the Factor Analysis. Differentiation between the four factors is clear. The ability of SSA to portray multiple factors in a two-dimensional space is one of its particular advantages.

Moreover, the SSA allows for a more detailed description of sub-domains. The Broad Ethnic factor spans three SSA regions: Philanthropy, Jewish organizations, and Israel. Similarly, the Local Ethnic factor spans two SSA regions: Federation and JCC. In other words, the results of the SSA show how the factors could be divided into more precise conceptual regions. At the same time, the Factor Analysis enriches the SSA. The single region of Religious life encompasses two factors: Communal religious and Private religious. In this case, the FA results indicate that one region could be divided more precisely into two.

In the FA, lighting Hanukkah candles loaded most strongly on the Communal Religious factor, whereas lighting Friday night candles loaded on the Private Religious factor. At the same time, both rituals are usually performed at home, although it may be increasingly popular to have public Hanukkah events at a JCC or synagogue, thus transforming this into a public ritual.

DISCUSSION AND CONCLUSION

This study found a general distinction between ethnic and religious aspects of Jewish identity. The religion-ethnicity distinction has been recognized in other studies of Jewish identity using the Similarity Structure

Analysis (SSA) technique, such as a survey of alumni of a leadership training program in Israel (Cohen and Werczberger 2009) and another of educational emissaries working in Diaspora communities (Cohen 2011c). The current article further refines these two general categories, differentiating between broad ethnic (Israel, Jewish People) and local ethnic aspects, as well as between communal and private aspects of religious identity.

The two techniques of SSA and Factor Analysis (FA) verified and enriched one another. In some cases, the SSA offered a more detailed result, as in the subdivision of the Broad Ethnic factor into three categories. Donating to Jewish causes, affiliation with national or international Jewish organizations, and connection to Israel are three separate areas in which one may express a 'broad ethnic' Jewish identity. Similarly, the SSA differentiated between different settings (Jewish Federation and JCC) within the Local Ethnic factor. At the same time, the FA yielded a more detailed description of the Religious life region, showing the distinction between communal and private religious rituals.

Another contribution of the SSA is the relative location of variables within the regions. For example, both of the variables in the region of Israel-related items are located toward the periphery of the SSA map. This indicates that connections to Israel are not closely correlated with items in other regions such as religious observance or participation in the local Jewish community. In other words, among the surveyed populations, connection to Israel is not 'central' to Jewish identity. Within the Philanthropy region, donating to the Jewish Federation is toward the periphery while donating to other Jewish charities is closer to the center of the map, and thus closer to the Religious life region which lies opposite. This reflects (*inter alia*) a correlation between religious observance and philanthropy to charities, whereas the connection between Religious life and donating to the Federation is weaker. These findings shed light on the links between various aspects of Jewish identity and community participation.

The domains identified in the SSA and FA may provide useful guidelines for future studies. That the same basic structure was found among the whole population and in each of the 22 communities lends strength to its use as a guide for future studies in local communities. Broad studies of Jewish identity and community life in the US may effectively cover the field by including questionnaire items related to each of the factors and facets in the FA and SSA. Using these

Table 2. Factor loadings of Jewish identity variables.

	Community religious factor	Broad ethnic factor	Local ethnic factor	Private religious factor
Light Hanukkah candles	.828			
Participate in a Passover seder	.782			
Mezuzah on front door of home	.615			
Attend synagogue services	.523			
Synagogue member	.496			
Visit Israel		.683		
Jewish organization member		.657		
Donated to local Jewish Federation in the past year		.587		
Emotional attachment to Israel		.583		
Donated to a Jewish charity other than Jewish Federation in the past year		.572		
Familiar with the local Jewish Federation			.780	
Familiar with Jewish Family Service			.772	
Participated in or attended a program at, or sponsored by, the local JCC in the past year			.754	
Keep kosher outside the home			.489	
Keep kosher in the home				.879
Light Friday night candles				.865
Somewhat familiar with one Jewish agency				.584
% of variance explained	15.2	14.4	14.1	13.3

categories as guides may help prevent redundancies or gaps in the survey. Targeted studies may explore in depth certain relationships revealed in this analysis, such as the differences between 'broad' and 'local' ethnicity or between 'community' and 'private' religious observance.

Similarly, the links and distances shown in the SSA deserve further investigation. Why is there such distance between Israel-related items and local Jewish institutions? Why do certain types of religious ritual (such as mezuzah on the door) seem to be more closely linked to other variables of community life,

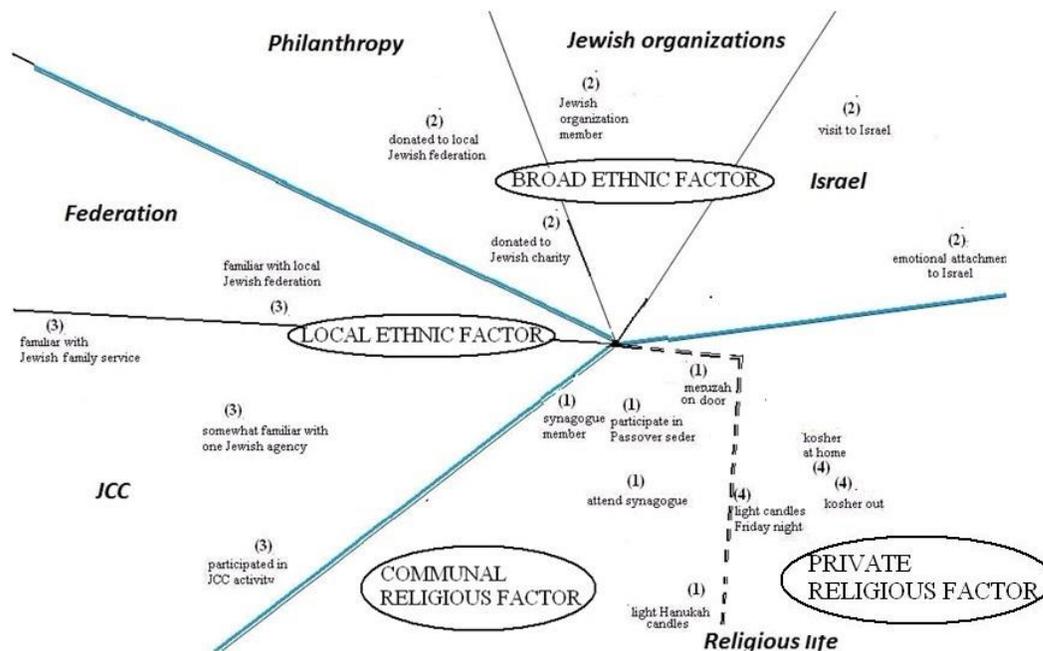


Figure 2. SSA of Jewish identity items with Factor Analysis results.

¹ In one survey (Jacksonville 2002), 27% of the surveys were completed by respondents on the Jewish Federation mailing list.

² Louis Guttman originally named this technique Smallest Space Analysis. He later changed the name to Similarity Structure Analysis (Guttman and Levy 1987; Levy 1994, 67-69). It is still sometimes referred to as Smallest Space Analysis, but in this article the revised name Similarity Structure Analysis is used. In either case, the acronym, SSA, applies.

³ For space considerations, these 22 SSA maps are not reproduced here. They are available upon request from the authors.

while others (such as lighting Hanukkah candles) are more distant?

Of course, data analysis is only as good as the data base on which the analysis is performed. Multiple studies reach slightly different conclusions about the precise dimensions of Jewish identity because different questions are included in the surveys they analyze, even when the same researcher is doing the analysis (e.g., Cohen 2009a). As Graham (2004) suggests, the variety of research approaches to Jewish identity resembles “the tower of Babel: with so many different ‘languages’ spoken, it becomes almost impossible to draw up useful comparative conclusions.” He calls for a ‘Jewish kilo’, a standardization of measures of Jewish identity. Development of our analysis, to determine how basic it is for all populations, is dependent on inclusion of a common core of questions about Jewish identity in all surveys. This is especially important for the local Jewish community studies. Community data will

continue to be collected on a regular basis, because communities need to understand their populations to be able to provide appropriate services. This ongoing need ensures a regular collection of data across a wide variety of Jewish settings. Larger, more nationally representative surveys, are more infrequent and dependent on large-scale funding whose donors may skew the questions included. This common core of ‘legacy’ questions, as Cohen (2012) puts it, should be supplemented, also on a regular basis, by indicators reflective of changing and innovative practices, attitudes and beliefs, to determine their prominence and popularity; some of these will undoubtedly make their way into ‘legacy’ questions eventually. It is only by having such a common core of questions that we can more accurately determine the geographical variations and effects of different environmental conditions on Jewish identity. Steps have been taken to try to encourage standardization in local Jewish community studies by the establishment of a Jewish Survey

Question Bank (JSQB) on the Berman Jewish Policy Archive (<http://jewishquestions.bjpa.org>).

Another limitation of the current dataset, which has a similar source, is the absence of many of the largest Jewish communities in the US, including New York, Los Angeles, Chicago, and Boston. Thus, while Decade 2000 is representative of about 16% of American Jews, it is missing the variation that might be introduced by populations living where there are the largest concentrations of Jews in a community. The main reason they have not been included is due to the differences in questions asked in their respective surveys. Community surveys are fashioned by the dominant researchers conducting the studies, in consultation with the needs of the local community. Because the surveys in the larger Jewish communities were conducted by different researchers, many of the questions were asked with a different phrasing or not included; limiting the comparability to the Sheskin surveys included in the Decade 2000 Data Set. The comparison to the more limited dataset used here may be compromised by being based on a smaller number of indicators, possibly eliminating an entire facet not covered here. The analysis will also have to be adjusted so that the larger communities do not dominate the results (since they will represent a greater proportion of US Jews than any of the smaller communities). Nonetheless, there is merit in combining whatever indicators are possible, and this remains a goal for future research.

One could also argue that the largest Jewish communities of New York, Los Angeles, and Chicago should be analyzed separately because they all have much more developed Jewish infrastructures than in the 22 communities included in Decade 2000.

Earlier studies, as noted above, distinguished between religious and cultural, or religious and ethnic identity, as does the current analysis. It allows a distinction between religious practices held mainly in the home or in private, as compared to more communal religious practice such as synagogue worship and attending Passover seders, reinforcing previous analysis of NJPS 2000-2001. The current analysis also distinguishes between broad communal and local ethnic identity, which differs from previous analyses primarily because the community studies include more indicators of involvement in the local community. However, the disparity in questions included in previous research that used factor analysis to analyze Jewish identity, makes it somewhat difficult to compare our results to previous results. Previous factor analyses which identified factors such as

‘classic religiousness’ or ‘emotional religiousness’ could not be replicated as community studies rarely probe emotionality on any level. Similarly, questions of belief or ‘mental ethnicity’ are rare in community studies. So once again, the merits of developing a common core of questions for use in community studies is evident.

Because Jews are both an ethnic group and a religious group, and because Jews as a group have existed for thousands of years under the rule of hundreds of empires and countries, the nature of Jewish identity is complex and is defined both by the individual and the structure of the community (Hartman and Sheskin 2012; Sheskin and Hartman 2015) in which the individual resides. The nature of an individual’s Jewish identity may change over time as that individual undergoes life cycle changes. This paper has used two multivariate techniques to examine the nature of Jewish identity by using the largest single Data Set ever assembled on US Jews. Within the limits of that Data Set, we have hopefully brought some additional light to a complex topic. The findings of this study suggest that such multivariate techniques (both separately and in combination) may be similarly illuminating for other studies of American Jews, such as that collected in the 2013 Pew survey. We also believe the use of multiple indicators, and the use of such multivariate techniques would be useful more broadly in the field of contemporary religion, because all religions play a multi-functional role in the lives of individuals and communities.

REFERENCES

- Abramitzky R, Einav L and Rigbi O (2010). Is Hanukkah Responsive to Christmas? *The Econ. J.*, 120(545): 612-630.
- Bar-Shalom Y (2002). From a negative point of view: Reactive Jewish identity amongst Jewish youngsters in South-western USA. *Ba Michlala*, 13: 97-108.
- Barth F (1994). Enduring and emerging issues in the analysis of ethnicity. In H. Vermeulen and C. Govers (Eds.). *The anthropology of ethnicity: Beyond ethnic groups and boundaries* (pp. 11-32). Apeldoorn, Netherlands: Het Spinhuis.
- Benor S (2013a). Increasing diversity means there is no such thing as a typical Jew. *Jewish Daily Forward*.
- Benor, S. (2013b). Pew study finds a vibrant Jewish community. *Jewish Journal*.
- Ben-Rafael E and Sternberg Y (2009).

- Transnationalism: Diasporas and the advent of a new (dis)order. Brill.
- Berger P (1979). *The heretical imperative: Contemporary possibilities of religious affirmation*. Garden City, New York: Anchor Books.
- Boyarin D and Boyarin J (1995). Diaspora and Jewish identity. In K. Appiah and H. Gates (Eds.), *Identities* (pp. 305-337). Chicago, IL: University of Chicago Press.
- Charmé S (2000). Varieties of authenticity in contemporary Jewish identity. *Jewish Soc. Stud.*, 6:133-155.
- Charmé S, Horowitz B, Hyman T and Kress J (2008). Jewish identities in action: An exploration of models, metaphors, and methods. *J. Jewish Edu.*, 74 (2): 115–143.
- Chiswick C and Chiswick B (2000). The cost of living Jewishly and Jewish continuity. *Contemp. Jewry*, 21(1): 78-90.
- Cohen A (2003). The identification of underlying dimensionality in social science: Differences between Factor Analysis and Smallest Space Analysis. In S. Levy and D. Elizur (Eds.) *Facet theory: Towards cumulative social science*, (pp. 61-71). Ljubljana, University of Ljubljana.
- Cohen EH (2004). Components and symbols of ethnic identity: A case study in informal education and identity formation in Diaspora. *Applied Psychology: An Int. Rev.*, 53(1): 87-112.
- Cohen EH (2005). Student evaluations of course and teacher: Factor analysis and SSA approaches. *Asses. Eval. High Educ.*, 30(2): 123-136.
- Cohen EH (2006). Perceptions of peace: A case study of visiting students in Israel. In Y. Iram, H. Wahrman, and Z. Gross (Eds.) *Educating toward a culture of peace* (pp. 161-190). Information Age Publishing.
- Cohen EH (2008). Symbols of Diaspora Jewish identity: An international survey and multi-dimensional analysis. *Religion*, 38(4): 293-304.
- Cohen EH (2009a). The components of ethnic identity: A cross-cultural theory and case study of Jewish student activists. In S. Wygoda and I. Sorek (Eds.), *Educational Eclectics* (pp. 15-48). Jerusalem: Mandel Foundation.
- Cohen EH (2010). Research on Jewish identity: A state of the art. *The Int. J. Jewish Educ. Res.*, 1(1): 7-48.
- Cohen EH (2011a). *The Jews of France today: Identity and values*. Brill Publishers.
- Cohen EH (2011b). *Facet Theory methods in the study of religion: A case study of symbols of Jewish identity in the US*. In Stausberg, M. and Engler, S. (eds.), *The Routledge handbook of research methods in the study of religion*. Routledge.
- Cohen EH (2011c). *The educational shaliach 1939-2009: A socio-history of a unique project in formal and informal Jewish education*. Jerusalem: Lookstein Center for Jewish Education.
- Cohen EH (2014). *Jewish youth around the world, 1990-2010: Social identity and values*. Boston: Brill Publishers.
- Cohen EH and Kovács A (2013). Values and religious identification among affiliated Jews in Eastern Europe. *Int. J. Jewish Educ. Res.*, 4: 69-102.
- Cohen EH and Werczberger R (2009). Jewish normativity: An explorative study. In D. Elizur and E. Yaniv (Eds.) *Theory construction and multivariate analysis: Applications of facet approach* (pp. 35-48). Jerusalem: FTA Publications.
- Cohen S (1997). *Religious stability and ethnic decline: Emerging patterns of Jewish identity in the United States*. Jerusalem: The Melton Center for Jewish Education in the Diaspora, Hebrew University.
- Cohen S (2012). The Demise of the 'good Jew': Marshall Sklare Award lecture. *Contemp. Jewry* 32 (1): 85-93.
- Cohen S (2013, October 7). American Jewry loses middle as Orthodox and unaffiliated grow. *Jewish Daily Forward*.
- Cohen S and Eisen A (2000). *The Jew within: Self, family, and community in America*. Indiana University Press.
- Cohen S and Horenczyk G (1999). *National variations in Jewish identity: Implications for Jewish education*. New York: State University of New York Press.
- Dashefsky A and Sheskin I (2012). *American Jewish year book 2012*. Dordrecht: Springer.
- Dashefsky A and Sheskin I (2014). *American Jewish year book 2014*. Dordrecht: Springer.
- Dash MD (2009). *American Jewish identity politics*. Ann Arbor, MI: University of Michigan Press.
- Della PS (2010). Distancing, yet one. *Contemp. Jewry*, 30(2-3): 183-190.
- Della PS (2013). Bigger population estimate means wider definition of Jewishness. *Jewish Daily Forward*.
- Dershowitz A (1997). *The vanishing American Jew*. New York: Little, Brown.
- Fishman, S. (2000). *Jewish life and American culture*. New York: SUNY Press.
- Fishman S (2013). Are young Jews actually more connected than believed? A misreading of the study's findings has implications for Jewish

- community. *Jewish Week*.
- Friedlander ML, Friedman ML, Miller MJ, Ellis MV, Friedlander LK and Mikhaylov VG (2010). Introducing a brief measure of cultural and religious identification in American Jewish identity. *J. Couns. Psychol.*, 57(3): 345.
- Gans H (1994) Symbolic ethnicity and symbolic religiosity: Towards a comparison of ethnic and religious acculturation. *Ethnic Racial Stud.*, 17: 577-592.
- Gitelman Z, Kosmin B and Kovács A (2003). *New Jewish identities: Contemporary Europe and beyond*. New York: Central European University Press.
- Gorsuch R (1983). *Factor Analysis*, Hillsdale, NJ: Erlbaum.
- Graham D (2004). *European Jewish identity at the dawn of the 21st century*. Institute for Jewish Policy Research, American Joint Distribution Committee, Hanadiv Charitable Foundation.
- Grauer T (2000). 'The changing same': Narratives of contemporary Jewish American identity. In L. Silberstein (Ed.), *Mapping Jewish identities* (pp. 37-64). New York: NYU Press.
- Guttman L (1968). A general nonmetric technique for finding the smallest co-ordinate space for a configuration of points. *Psychometrika*, 33: 469-506.
- Guttman L (1982). Facet theory, smallest space analysis and factor analysis: Addendum. *Perceptual and Motor Skills*, 54: 491-493.
- Guttman L and Levy S (1987). Similarity Structure Analysis (SSAR) of European elections. In J. Janssen, F. Marcotorchino and J.M. Proth (eds.). *Data Analysis: The Ins and Outs of Solving Real Problems*. New York, Plenum Press, pp. 193-204.
- Haji R, Lalonde RN, Durbin A and Naveh-Benjamin I (2011). A multidimensional approach to identity: Religious and cultural identity in young Jewish Canadians. *Group Processes and Intergroup Relations*, 14(1): 3-18.
- Hartman H (2014). Studies of Jewish identity and continuity in the U.S.: Competing, complementary, and comparative perspectives. *Stud. Contemp. Jewry*, 27: 74-108.
- Hartman H and Hartman M (2000). Denominational differences in the attachment to Israel of American Jews. *Rev Relig. Res.*, 41(3): 394-417.
- Hartman H and Hartman M (2001). Dimensions of Jewish identity among American Jews, In S. DellaPergola and J. Even, eds., *Papers in Jewish demography, 1997*, (pp. 239-260). Jerusalem: Avraham Harman Institute of Contemporary Jewry and The Hebrew University of Jerusalem.
- Hartman H and Hartman M (2009). *Gender and American Jews: Patterns in work, education, and family in contemporary life*. UPNE Press.
- Hartman H and Sheskin I (2011). *The influence of community context and individual characteristics on Jewish identity: A 21-community study*. Storrs, CT: North American Jewish Data Bank.
- Hartman H and Sheskin I (2012). The relationship of Jewish community contexts and Jewish identity: A 22-community study. *Contemp. Jewry*, 32(3): 237-283.
- Hecht M and Faulkner S (2000). Sometimes Jewish, sometimes not: The closeting of Jewish American identity. *Commun. Stud.*, 51(4): 372-387.
- Heilman S (2003). American Jews and community: A spectrum of possibilities. *Contemp. Jewry*, 24(1): 51-69.
- Heilman S (2013). *Pew Report on US Jews: A case of two extremes*. Ha'aretz.
- Herman S (1988). *Jewish identity: A social psychological perspective* (2nd edition). Beverly Hills: Sage Publishers.
- Horowitz B (2013). And now for some good news about the Pew survey: Population is growing and Jews aren't hiding from heritage. *The Jewish Daily Forward*.
- Kaplan D (2005). *The Cambridge companion to American Judaism*. Cambridge University Press.
- Kelman A (2013). *The hegemony of religion. Education and Jewish Studies* Stanford School of Education.
- Klaff V (2006). Defining American Jewry from religious and ethnic perspectives: The transitions to greater heterogeneity. *Soc. Relig.*, 67(4): 415-438.
- Kosmin B, Goldstein S, Waksberg J, Lerer N, Keysar A and Scheckner J. (1991). *Highlights of the 1990 national Jewish population survey*. New York: Jewish Federation.
- Kosmin B and Keysar A (2009). *American religious identification survey (ARIS 2008) summary report*. Hartford, CT: Institute for the Study of Secularism in Society and Culture.
- Kotler-Berkowitz L, Cohen S, Ament J, Klaff V, Mott F and Peckerman D (2003). *Strength, challenge and diversity in the American Jewish population*. New York: United Jewish Communities.
- Levy S (1994) *Louis Guttman on Theory and Methodology: Selected Writings*. Dartmouth: Aldershot.
- Liwerant J (2008). *Identities in an era of globalization and multiculturalism: Latin America in the Jewish*

- world. Brill.
- Maslovaty N, Marshall AE and Alkin MC (2001). Teachers' perceptions structure through Facet theory: Smallest space analysis versus factor analysis. *Educ. Psychol. Meas.*, 61: 71-84.
- Massarik F and Chenkin A (1973). United States National Jewish population study. In D. Singer and L. Grossman (Eds.), *American Jewish year book*, 73 (pp. 264–306). New York: American Jewish Committee.
- Miller S (2003). Changing patterns of Jewish identity among British Jews. In Z. Gitelman, B. Kosmin, and A. Kovács (Eds.), *New Jewish identities: Contemporary Europe and Beyond* (pp. 45-60). Central European University Press.
- Pew Research Center (2008). *US religious landscape survey*. Washington, DC: The Pew Forum on Religious and Public Life.
- Pew Research Center (2013). *A portrait of Jewish Americans*. Washington, DC: Pew Research Center.
- Rebhun U (2004a). Jewish identity in America: Structural analyses of attitudes and behaviors. *Rev. Relig. Res.*, 46(1): 43-63.
- Rebhun U (2004b). Jewish identification in contemporary America: Gans's symbolic ethnicity and religiosity theory revisited. *Soc. Compass*, 51(3): 349-366.
- Rebhun U (2011a). *The wandering Jew in America*. Academic Studies Press.
- Rebhun U (2011b). Jews and the ethnic scene: A multidimensional theory. In E. Lederhendler (Ed.), *Ethnicity and beyond: Theories and dilemmas of Jewish group demarcation*. Oxford University Press.
- Rogoff L (2001). *Homelands: Southern Jewish identity in Durham and Chapel Hill, North Carolina*. University of Alabama Press.
- Saroglou V and Hanique B (2006). Jewish identity, values, and religion in a globalized world: A study of late adolescents. *Identity* 6(3): 231-249.
- Sasson T (2013). American Jewish attachment to Israel resilient: Pew study also reveals skepticism among American Jews towards Israeli policy on settlements, negotiations. *The Scroll Tablet Magazine on the News*.
- Sasson T, Kadushin C and Saxe L (2010). Trends in American Jewish attachment to Israel: An assessment of the "distancing" hypothesis. *Contemp. Jewry*, 30(2-3): 297-319.
- Saxe L (2013). Pew findings reject bleak narrative of Jewish decline. *Jewish Daily Forward*.
- Schlesinger IM and Guttman L (1969). Smallest space analysis of intelligence and achievement tests. *Psychol. Bull.*, 71: 95-100.
- Schwartz S (1994). Are there universal aspects in the structure and contents of human values? *J. Soc. Iss.*, 50(4): 19-45.
- Schwartz S and Bilsky W (1990). Toward a theory of the universal content and structure of values: Extensions and cross-cultural replications. *J. Personal. Soc. Psychol.*, 58(5): 878-891.
- Sheskin I (2005). Comparisons between local Jewish community studies and the 2000–2001 National Jewish Population Survey. *Contemp. Jewry*, 25(1): 158-192.
- Sheskin I (2009). American Jewish demography, implications for US-Israel relations. In E. Gilboa and E. Inbar (Eds.), *US-Israel relations in a new era: Issues and challenges after 9/11*(pp. 91–107). New York: Routledge Press.
- Sheskin I (2010). A geographical approach to an analysis of the distancing hypothesis. *Contemp. Jewry*, 30(2-3): 219-226.
- Sheskin I (2012). Attachment of American Jews to Israel: Perspectives from local Jewish community studies. *Contemp. Jewry*, 32(1): 27-65.
- Sheskin I and Dashefsky A (2014). *Jewish population in the United States, 2014*. American Jewish Yearbook, 2014. Springer.
- Sheskin I and Hartman H (2015) Denominational Variations across American Jewish Communities. *J. for the Sci. Stud. Relig.*, 54(2): 205-211.
- Waxman C (2007). Israel in Orthodox identity: The American experience. In D. Ben-Moshe and Z. Segev (Eds.), *Israel, the Diaspora and Jewish Identity* (pp. 52-61). Sussex Academic Press.
- Wertheimer J (2003). *The American Synagogue: A Sanctuary Transformed*. Cambridge University Press.
- Wettstein H (2002). *Diasporas and exiles: Varieties of Jewish identity*. Berkeley, CA: University of California Press.
- Zak I (1973). Dimensions of Jewish-American identity. *Psychol. Rep.*, 33(3): 891-900.