# Actual, Intended, and Appropriate Family Size Among Jews in Israel

Sergio DellaPergola

Received: 17 February 2009/Accepted: 9 March 2009/Published online: 7 May 2009 © Springer Science + Business Media B.V. 2009

Abstract Israel's population reflects a unique combination of large-scale immigration and comparatively high fertility. Demographic trends impact on Israel's regional and global relations. With a current measure of 3.9 children for Muslims and 2.8 for Jews in 2007, Israel's fertility stands much above European, American, and some Mid-Eastern countries. This article examines fertility patterns and attitudes among Jews (79% of Israel's total population) based on a 2005 national survey of women and men at reproductive ages, married or in stable unions. Different demographic, socioeconomic and cultural contexts affect Jewish fertility levels in Israel. The impact of countries of origin and socioeconomic differences greatly diminished over time. Cultural factors, primarily religiosity, continue to be important determinants of a relatively high and stable quest for children. We compare actual, intended, and appropriate (according to the self-perception of respondents) family sizes. Diffuse gaps exist between ideal perceptions (focusing on 3-4 children) and actual performances (2-3 children). Significant gaps also exist between intended and appropriate family size, in both directions-the intended being either higher or lower than the perceived appropriate. Analysis of these discrepancies may provide important clues on the determinants of fertility norms and decisions, and on future family policies.

**Keywords** Israel · Jewish population · Fertility · Actual, intended, appropriate family size · Religion · Policies

S. DellaPergola (🖂)

The Avraham Harman Institute of Contemporary Jewry, The Hebrew University of Jerusalem, Jerusalem, Israel e-mail: sergioa@huji.ac.il

S. DellaPergola The Jewish People Policy Planning Institute, Jerusalem, Israel

## Introduction

Fertility levels and birth rates are among the great regulators of population growth and composition, hence of societal scale and complexity. In recent years, while fertility stabilized at below replacement levels in developed countries, the debate intensified around the implications of such low fertility and the appropriateness of interventions aimed at enhancing the birth rate (Gauthier, 2002; Demeny, 2005).

Israel's demographic trends look quite different. Population growth and composition reflect a unique combination of relatively high levels of immigration and fertility—above the levels experienced in most countries in Europe, in America, and in some Middle Eastern societies (Bachi, 1977; DellaPergola, 2003a). While social and demographic policy interventions are often mentioned in public and academic discourse as tools that might affect population trends, different views have been expressed over time regarding the desirability, feasibility and contents of such policies (Israel, 1966; Friedlander, 1974; Friedlander and Golscheider, 1979; Bachi, 1980; DellaPergola and Cohen, 1992; Kupinsky, 1992a; Okun, 2000; Jewish People Policy Planning Institute, 2005; Schellekens 2006). The rationale for such debates reflects unique fertility-related perceptions and constraints, such as the balance between Jewish and Palestinian populations in a situation of unsolved political and military conflict (DellaPergola, 2003b); or the role of Israel's Jewish population in the context of Jewish communities worldwide. Israeli concerns in relation to fertility trends are also consonant with debates in other societies, such as the relationship between population growth and settlement, on the one hand, and security and economic development, on the other hand; maintaining a balanced age composition-largely determined by fertility levels in the long run-as against progressive ageing; or checking internal socioeconomic gaps which, among other causes, stem from differential fertility.

In this paper we focus on fertility patterns among married Jewish women and men in Israel. Jews constitute 79% of Israel's total population (including 4% of non Jewish members in Jewish households, mostly from the Former Soviet Union— FSU). Studies are available about the fertility of Israel's whole population, including Jews and Arabs (Peritz 1992), and about Jews globally (DellaPergola, 1983). The focus here on Israel's Jews aims at investigating a case study that, in spite of its uniqueness, lends itself to international comparisons with other developed societies with a high degree of fertility control. We suggest an analytic framework as a background to a mostly descriptive analysis. A technically more complex look at fertility and its policy implications in Israel will be developed elsewhere.

## Main Determinants of Fertility Levels and Differentials

A large quantity of scientific literature has addressed fertility levels and variations in Israel, and their relations to cultural and socioeconomic determinants. The main subjects were Israel's Jewish population (Friedlander and Goldscheider, 1978; Friedlander et al., 1980; Goldscheider and Friedlander, 1986; Schmelz, 1986, 1989;

DellaPergola, 1988; Friedlander and Feldmann, 1993; Ziegler, 1995; Anson and Meir, 1996; Okun, 1997; Okun, 2000; Nahmias, 2004; Schellekens 2006); Israel's Arabs (Friedlander, Eisenbach and Goldscheider, 1979; Hill, 1983; Eisenbach, 1986; Schellekens and Eisenbach, 2002); Israel's population on the whole (Bachi, 1977; Peritz 1992; Fargues, 2000; Friedlander, 2002); and the extended territory including Israel and the Palestinian Authority (Abu Libdeh et al., 1993; Palestinian Central Bureau of Statistics, 1997; DellaPergola, 2003b; Harvard University Program on Humanitarian Policy and Conflict Research 2006).

While the chain of causal relations in fertility levels is sufficiently known and does not need to be reviewed here (see, e.g., Pritchett, 1994; van de Kaa, 1996), recent fertility trends in Israel and the rationale for future changes call for further evaluation. In this respect, important questions concern the correspondence between fertility norms and ideals, their actual translation into practice, and the predictive value of declared fertility intentions.

In broad terms, fertility determinants can be organized in a multi-tier sequence, but only some of these will be considered in the present study. First, *proximate determinants* (Boongarts, 1978) are the bio-demographic causal factors of the beginning of a pregnancy and its completion through a live birth. In the contemporary Israeli context, we assume these determinants are in turn dependent on other socially, culturally and politically determined variables, and are hence subsumed by them. Second, interventions to enhance or depress the effects of proximate determinants actually reflect *household-level* or *micro-socioeconomic* strategies. These synthesize the value-oriented desirability of children in general and of a child of specific parity in particular, the cost-related feasibility of childrening and childrearing, and household availability of relevant means, resources and tools (Spengler, 1966).

However, the dilemmas and negotiations of individual households inherent in the potential conflicts between identity and sentiment, on the one hand, and economic rationality, on the other hand, are better evaluated in their *community context*—the third explanatory level. Perceptions broadly shared with one's close environment tend to influence individual family growth behaviors. The role of community influences is especially important in a sociocultural environment as diverse as Israel's. In this respect five groups of factors call for special attention:

 Traditional culture and organization, or a group's religious and social norms concerning fertility as well as community frameworks and institutions established for implementing those norms, is a natural source of inter-group differences. Traditional Judaism, Islam and Christianity, each in their own distinctive ways, carry an explicit pro-natal stance. In traditional Judaism, more explicitly than in other religious frameworks, the principle goes together with definite prescriptions affecting each of the proximate fertility variables (Feldman, 1968; DellaPergola, 1988). Traditional Judaism also gives high priority to children's prolonged religious education; but community investments to the same effect may reduce the cost to individual families. Community mechanisms of communication, social control and sanction explain why the more religious individuals generally conform more strictly to each religious group's declared fertility precepts (Schmelz, 1989; Berman 1997; Berman, 1998).

- 2. Minority/majority status reflects in the first place past situations of actual legal discrimination or, more relevant to the contemporary experience, community-based subjective perceptions of dependence/dominance relative to the majority of society or other minorities within it. Such perceptions may psychologically affect group propensities to expand or reduce (Goldscheider, 1967; Rallu et al., 1997). Minorities may feel pressured to concentrate on the better quality of fewer children to overcome the odds of possible discrimination. Minorities may also consciously try to maximize their natural increase as a mechanism to expand their share of the total population. In Israel, the latter may be the case for communities that feel their lifestyle endangered, such as the Haredim (Friedman, 1991), or whose advocacy for political goals requires the support of larger numbers, for example in the context of the Israeli-Palestinian conflict (Steinberg, 1989).
- 3. Social class stratification, namely occupational status and specialization, implies significant differences in perceived economic interests, access to resources, and intergenerational wealth flow. Shared perceptions of the role of children as potential providers or dependents tend to generate widely different strategies of family growth (Caldwell, 1981; Lesthaeghe and Wilson, 1986). Other things being equal, social mobility of individuals within a subpopulation or of a whole subpopulation relative to the rest of society may translate into significantly different fertility strategies and change. Inter-group and intragroup variations in fertility levels may thus reflect the respective different socioeconomic stratifications and underlying family formation strategies, as expressed, e.g., in the *characteristics hypothesis* when comparing fertility of Jews versus other groups (Goldscheider, 1967; DellaPergola, 1983).
- 4. *Knowledge*, obtained through formal education or other channels, affects fertility especially via community level awareness of fertility control opportunities and understanding of their mode of operation (Coale 1975). In this respect, it would be mistaken to equate religious traditionalism with lack of information. Traditionalism in contemporary societies tends to shift from repudiation of modernity to selectively choosing from modernity those elements compatible with, or even supportive of, traditional goals (Hammel, 1990).
- 5. *Biological constraints*, such as inherited diseases and other health-related factors, often tied to strict community homogamy, differentially affected fertility in the past and may residually affect contemporary more open and heterogamic societies (Bonné-Tamir and Adam, 1992). This may result in different frequencies of stillbirths, neonatal mortality and malformations—hence different chances to deliver a live-birth among Jews, Muslims and others (Zlotogora et al., 2003).

*National or collective policy interventions* provide a fourth explanatory level. Israel's social policies do reflect some general concern with family formation and growth. While there has been an emphasis on Jewish fertility in public discourse, actual policies tend to operate regardless of the citizens' religion or ethnicity. When in the early 1990s, at the initiative of Jewish Haredi parliamentarians (from the Hebrew *hared* = fearful [of God]), augmented child allowances were introduced for births of fifth and higher order, over 40% of the beneficiaries were Arab children. Means for birth control, while not openly encouraged, are easily available to all, including through health insurance. Abortion is strictly regulated by law but is legally feasible through public health facilities (and also performed underground). The impact of Israel's alleged pro-active fertility stance tends to be widespread but its actual impact is mostly felt by specific subpopulations.

- 1. Direct governmental provisions such as transfer payments (allowances to children below 18) pertain to all relevant households, and have been a frequently manipulated factor in economic policies (Schellekens 2006). The Israeli Social Security system offers moderately favourable provisions to working women after maternity, including a single payment for immediate post-birth care and 12 weeks of paid absence. Comparatively widespread childcare and educational facilities are facilitating or rather non-preventing factors in family growth in Israel, contingent upon availability and cost (Demographic Center, Ministry of Labour and Social Affairs 1992). The high cost of housing is a main constraint perceived by families wishing to increase their number of children (Ziegler, 1995; Lewin Epstein et al. 2000).
- 2. Indirect governmental provisions are especially significant at the community level. Collective exemption from otherwise universal, three-year compulsory military service applies in Israel to the majority of the Haredi Jewish population (Shilhav, 1991) as well as to Muslim and Christian Arabs, though not to the Druze community and only partly to the Bedouin community. Military exemption facilitates lower ages at marriage and a longer exposure to childbearing chances. Moreover, transfer payments at the community level—in particular public financing of community-specific educational networks or housing projects—may significantly reduce the given community's cost of children.
- 3. Non-governmental provisions of a similar nature may derive from the intervention of groups and agencies from Diasporas abroad, e.g. Jewish or Palestinian, or from other private sources of cultural, economic and political support locally. The main effect on fertility of relevant educational programs, family services and subsidies provided operates through raising value awareness (The American Jewish Committee, The W. Petushek National Jewish Family Center 1992), or through reducing the stress of childbearing or the cost of child-raising (as exemplified by the Efrat organization: Rosenblum, 2004).

A fifth explanatory level reflects the broader context of continual political, socioeconomic, cultural and technological change, subsumed under the general definition of *modernization*, and its enhanced *global effects* on local populations through diffuse media and communication networks. Broad transformations of macro-economic patterns, standards of living, contents and boundaries of community identities and individual *mentalités* may significantly affect demographic patterns (Inglehart, 1997; Lesthaeghe and Moors, 1995). International evidence

points to the predominantly lowering effects of modernization on fertility levels. However, technological advances are of special interest inasmuch as a previous generation of scientific research greatly enhanced fertility control, whereas more recent advances have focused on overcoming fecundity impairments. Fertility treatment in Israel is highly diffuse, probably more than in other developed countries, as is evident among other things from an unusually high share of twins among all births. While in the United States, the overall prevalence of twins is approximately 12 per 1000 births, in Israel in 2005, 47 per 1000 deliveries were of multiple births (Zach et al., 2007; Israel CBS, 2008).

Given such a complex and multi-level package of explanatory determinants of fertility, its overall effects in the Israeli multicultural context are expectedly mixed. The stable nature of fertility levels in the past rests on solid ground because of (a) the high resilience of the sociocultural components related to higher fertility, (b) the possibly contradictory effects of fertility determinants between different subpopulations, and (c) compensatory trends within each subpopulations, namely Haredi or secular Jews, or for that matter Arabs in Israel, the respective fertility differences instead resulting from variable combinations and intensities of the same several factors that lead to higher or lower fertility levels. In this context, it is also reasonable to expect future fertility changes to occur at a relatively slow pace in Israel. Information about family size ideals and expectations and about time-related strategies to attain those goals can provide important clues to ongoing and future fertility trends.

# Sources of Data

Fertility levels in Israel have been documented in some detail thanks to the existence of different and complementary data sources. National population censuses periodically provided retrospective data on the number of children born and family size attained. A national system of vital statistical records provides detailed information on current childbirth patterns (Israel, Central Bureau of Statistics, annual). Occasionally, independent surveys on family formation patterns and attitudes added insights by addressing a vastly larger array of variables (Goldscheider and Friedlander, 1986; Peritz 1992; Ziegler, 1995).

Our analysis relies on a national survey of attitudes and behaviors concerning family size that was undertaken in Israel at the end of 2004 and in January 2005 on a representative sample of Jewish women and men, all married or in stable unions and at reproductive ages. The survey was made possible thanks to the support of the Jewish Agency for Israel (JAFI)—an Israel-based organization mainly concerned with welfare and public advocacy among Jewish communities worldwide and among the Jewish constituency within Israel's society. The survey was part of JAFI's Demographic Initiative—a research program aimed at a study of Jewish populations and communities globally. The survey included a representative national sample of about 1000 women aged 25 to 45 and 500 men aged 25 to 50, all married or in stable unions (Machon Dahaf 2005). Singles and single parent

households were not included. In 2007 the latter accounted for 15% of all onefamily households of all ages with children at home (Israel, Central Bureau of Statistics, annual, 2008, table 5.3). The sample was stratified to reflect the actual population composition as estimated by Israel's Central Bureau of Statistics with regard to several basic variables: age, geographical region, type of locality, and population sector: immigrants from the FSU, residents in Haredi neighborhoods, and others. Women and men were separately interviewed by telephone based on nearly identical questionnaires. Recent immigrants from the FSU were interviewed in Russian. Reflecting the great interest of the public regarding the topic investigated, response rates among the target population actually reached were estimated at about 95%. Although independently drawn, the male and female samples provided highly consistent answers inasmuch as characteristics of respondents and reported characteristics of the respective spouses could be matched—for example on measures of labor force characteristics or religiosity.

The survey covered demographic, socioeconomic and Jewish identity background variables. The inclusion of male respondents provided innovative insights on gender preferences facing family size and growth. Several questions investigated norms about personal socioeconomic fulfillment and aspirations, gender roles, the family, in addition to intended, most appropriate, and ideal eventual family size. In those cases when the answer to these questions was "as pleases Providence" and similar, a number of children was coded equivalent to the average for the selfdefined Haredi group in the given question. Finally, several questions concerned the desirability and feasibility of policies in the realm of family and reproduction.

## **Fertility Trends in Israel**

#### Fertility Levels

Fertility levels in Israel have been quite high and steady, and indeed uniquely high in comparison to most other developed countries. Jews had a Total Fertility Rate (TFR) of 3.4 children in 1965–69, 2.8 in 1985–89, and the same in 2007. The Muslims' TFR was 9.2 in 1965–69, 4.7 in 1985–89, the same in 1995–99, but it declined to 3.9 in 2007. While at today's low mortality levels Israel's fertility levels continue to generate substantial rates of population growth, a process of convergence across and within major religious and ethnic groups has brought about significant reductions in pre-existing fertility gaps.

Figure 1 outlines the evolution of the TFR in a number of Western countries and in Israel over the last 50 years. Patterns of convergence and divergence teach interesting lessons on the interplay of cultural and socioecomic factors, population policies and fertility performances. Fertility levels generally declined in most Western countries between the mid 1960s and the late 1970s. Among the examples shown in Fig. 1, Ireland—the more intensely Roman Catholic society—had the higher initial fertility levels, while the United States experienced the longer period of postwar fertility recovery. Italy and France had comparatively similar and lower fertility levels followed by quite significant differences in the levels eventually



Fig. 1 Total fertility rates, selected countries, 1950–2005. Source: United Nations (2007), Israel CBS, annual

achieved. These differences possibly reflect the very different social investments in family support in the two countries. The common trait to these countries is that all of them attained sub-replacement fertility levels at the latest during the early 1990s.

During the 1950s, fertility among Israel's total population, including Jews and Arabs, was higher than among the other countries examined here. The TFR evolved quite similarly to Ireland's during the 1960s and 1970s, but subsequently followed a more conservative path stabilizing at slightly below 3, as against less than 2 in Ireland. Other countries that in the 1960s had TFRs comparable to Israel's, such as the US, France and Italy, had significantly lower fertility levels in the 2000s. A remarkable case of stability—probably unique in a global comparative perspective—is provided by Israel-born Jewish women who constitute the emerging second and higher order generation in a country of significantly heterogeneous immigration. That particular TFR remained virtually unchanged for 50 years at 2.5–3 children, in spite of tremendous cultural and socioeconomic transformations in Israeli society under the impact of repeated wars, other security problems, millions of new immigrants, speedy technological advances, and sharp business cycles in a general context of rapidly rising standards of living.

It is notable that since the 1990s, propensities to marry gradually diminished in Israel while age at marriage increased. Rates of divorce slowly increased, too, creating an ever-growing pool of unmarried in a society in which births outside marriage still constitute a tiny fraction of all births (about 3% in 2005). Hence, a

stable TFR—also affected by the unmarried—masks an actual increase in the total fertility of married couples.

## Fertility Differentials

A further central feature of fertility in Israel concerns the amount of consolidation across subpopulations displaying different socio-demographic characteristics. In a society deeply affected by immigration, significant convergence of fertility patterns occurred between Jewish women immigrated from Asia and Africa, and from Europe and America. Figure 2 displays the changing fertility gaps between women born in different continents.

Jewish women who migrated to Israel from Asia and Africa, experienced an initial fertility rise during the early 1950s up to an average family size of about 6 children, and underwent rapid modernization thereafter. Complete family size declined to 3–4 among women born during the 1940s or later. Most Jewish women of European origin had already undergone a transition to lower fertility levels, around 2 children, before migrating to Israel. Such geography-related fertility gaps between immigrant women were highly significant during the late 1940s and early 1950s—above 3 children—but steadily diminished over time and had nearly disappeared by the 1980s. While modernization of immigrants from less developed countries translated into smaller family sizes, immigrants from low-fertility countries actually increased their fertility through their absorption in Israeli society. The fertility gap widened again under the impact of large-scale immigration from



Fig. 2 Total fertility gaps, by continents of origin, Jewish women, Israel, 1949–2005. Source: Israel CBS, annual

the former Soviet Union (FSU) and from Ethiopia during the early 1990s, but again diminished in recent years (Nahmias, 2004).

In Israel, not inconsistently with the ideological caption of *fusion of the Diasporas*, over time fertility of the immigrants tended to become intermediate between the original levels displayed by different groups before immigration. Jewish women born in Israel—often the outcome of a growing number of intermarriages of immigrants from different continents (Okun, 2004)—themselves attained family sizes consistently intermediate between those of immigrants of the main origins. Among second- and further-generation Israel-born women, classified by continent of birth of the respective fathers, the differential had virtually disappeared already by the 1960s. These patterns convey a fundamental sense of convergence in both family norms and behaviors, namely the gradual disappearance of the so-called sub-ethnic factor (in Hebrew *Hagorem ha'adati*) as far as fertility is concerned.

The relationship of fertility to socioeconomic status is demonstrated in Fig. 3 in terms of Jewish women's education attainment and labor force participation. Selected time series are juxtaposed, controlling for age, of fertility rates at prime reproduction ages and women's socioeconomic characteristics. Looking at the covariation over time of separate variables that would supposedly be interacting, the education–work–fertility relation appears to be weak if it exists at all. A sharp surge occurred in the percentage of women aged 25–34 holding post-secondary education (13 or more years of schooling) from less than 10% in the 1950s to more than 60% in 2005. Women's labor force participation sharply diminished at age 14–17,



Fig. 3 Fertility rates, educational attainment and labor force participation at selected ages, Jewish women, Israel, 1955–2005. *Source*: Israel CBS, annual

consistently with extended years of schooling; while it significantly increased in the 18–34 age group from 30% in the 1950s to 70% in 2005.

As against these changes, one might expect a significant decline in fertility schedules. Age-specific fertility rates indeed markedly diminished among Jewish women below 20 and at age 20–24, and also, though less sharply, at age 25–29 and above age 45. On the other hand, fertility rates increased significantly at age 30–34, and to some extent at age 35–39, and remained flat at age 40–44. From an earlier pattern where fertility rates peaked at 20–24 followed by 25–29, in the early 1960s reproduction shifted to a peak at age 25–29 closely followed by 30–34. By 2005, 30–34 became the prime age for reproduction among Jewish women. Total fertility remained stable through a significant re-arraying of the timing of births.

These different shifts hint at significant accommodation of reproduction levels and schedules to changing patterns of training, entering the labor market, being actually employed, and moving up the occupational ladder, without however the overall TFR outcome being affected. Prima facie, a combination of rapid and diffused modernization expressed by more complex social and economic roles for women was not incompatible with comparatively conservative and stable fertility behaviors.

As against the diminishing relevance of geographical origin, educational attainment and labor force participation as co-variates of fertility levels, patterns of religiosity continue to be prominently associated with family size in Israel. Table 1 reports average numbers of current and intended children among Jewish married women and men based on a measure of self-assessed religiosity. We constructed a scale of religiosity based on the joint processing of answers provided to two questions, each rated on a four category scale: (a) *How do you assess the intensity of your Jewish religiosity*? (b) *How intensely do you observe Jewish traditional practices*? (Levy et al., 2002). The resulting cross-classification was

Religiosity self-assessment <sup>b</sup>	Current child	ren	Intended children	lren
	Women	Men	Women	Men
Total	2.54	2.45	4.11	3.74
Religious end	4.69	4.24	8.76	8.77
Religious	3.78	$(3.05)^{\rm c}$	7.08	6.94
Religious orientation	3.21	3.74	5.37	5.04
Intermediate	2.77	2.94	3.99	4.23
Secular orientation	2.27	2.36	3.53	3.64
Secular	1.98	2.05	3.07	3.04
Secular end	1.72	2.00	2.82	2.66

Table 1 Fertility measures by self-assessed religiosity, Jewish couples<sup>a</sup>—Israel, 2005

<sup>a</sup> Married or in stable unions

 $^{\rm b}$  Cross-classification of normative and behavioral self assessments (reduction of 4  $\times$  4 table)

<sup>c</sup> Less than 20 cases

Source: Survey of attitudes and behaviors concerning family size among Israel's Jewish population, 2005

reorganized into a seven-ladder scale covering the continuum between a most religious and a most secular end.

Attained family size consistently grows in direct relation to the amount of selfassessed religiosity. Among women the number of children already born in 2005 to currently married couples at reproductive ages gradually grew from 1.7 at the secular end of the distribution, to 4.7 at the religious end. Among men, the attained number of children was comparatively lower than among women at the religious end (4.2), and higher at all other levels of religiosity, down to 2 at the lowest religiosity level. The gap between average children born within the highest and the lowest religiosity categories is 2.7 times higher among Jewish women, and 2.1 as many among Jewish men.

Regarding norms about intended family size (see below) the range of variation in 2005 was between 8.8 children at the most religious end and 2.8 at the most secular end among Jewish women, and between 8.8 and 2.7, respectively, among Jewish men. The sub-set of most religious Jewish women who self-defined as Haredi expressed a preference for 9.8 children. Although, as we shall see, intended and actually attained children need not necessarily coincide, the indication is of a powerful differentiation of family norms related to religiosity.

As already noted, average measures mask significant internal variation. The very high ideal and actual family sizes at the more religious end of the population— which constitutes 9% of respondent women and 5% of respondent men—may look quite unique from an international perspective. Family norms at the population's self-defined secular end—13% of women and 17% of men—are less unique but perhaps more surprising. The latter group might be thought to be drastically less family oriented. In reality their preference for 2.7–2.8 children appears unusually high in comparison to the prevailing norms in other developed societies—namely in countries like Italy or Spain that, at least until the recent past, were strongly influenced by Catholic religious values and whose current total fertility is closer to one than to two children. The normative background of family behaviors in Israel, therefore, needs to be understood beyond the impact of mere religiosity and requires appraisal of a broader complex of social norms.

## Family Size Preferences

#### Continuity and Change

We first address actual family sizes among married Jews at reproductive ages based on the 2005 Israel fertility survey. As noted, respondents included women and men aged 25 and above, up to 45 and 50, respectively. A relatively intense pace of childbearing appears from Table 2, showing nearly 80% of current couples with two children or more. Childlessness appears among a mere 6–7% of respondents, and a single child among 15% of the sample.

The age-related pace of family growth is illustrated in Table 3. Married women below 35 in 2005 approached an average of 2.5 children, and factoring in the unmarried, the average was 2.05, exactly at generation replacement level. Above

<b>Table 2</b> Children born toJewish couples <sup>a</sup> —Israel, 2005	Children born	Women	Men	Ratio W/M
	Total (n)	1002	494	
	Total (%)	100.0	100.0	1.00
	0	6.4	7.5	0.85
	1	15.9	14.8	1.07
<sup>a</sup> Married or in stable unions Source: Survey of attitudes and behaviors concerning family	2	33.9	36.8	0.92
	3	24.0	24.3	0.99
	4	9.4	8.7	1.08
size among Israel's Jewish population, 2005	5+	10.4	7.9	1.32

Table 3 Average children born to Jewish couples<sup>a</sup>, by age—Israel, 2005

Age	Currently marrie	d	All marital statuses <sup>b</sup>		
	Women	Men	Women	Men	
Total	2.54	2.44	2.09	1.80	
25–29	1.74	1.25	1.07	0.51	
30–34	2.44	1.71	2.05	1.27	
35–39	2.98	2.61	2.69	2.28	
40-49	3.67	2.92	3.43	2.71	

<sup>a</sup> Married or in stable unions

<sup>b</sup> Computed factoring-in age-specific percentages on non-currently married (Israel, CBS, annual)

Source: Survey of attitudes and behaviors concerning family size among Israel's Jewish population, 2005

age 40, married women had 3.7 children and married men had 2.9; while for persons of all marital statuses together the averages were 3.4 and 2.7 respectively. These gender differences are explained by the broader spread of age at parenthood among men.

Continuity and change in family norms among Jews in Israel can be assessed through a comparison between family size preferences in 2005 with two previous surveys undertaken in 1974–75 (Goldscheider and Friedlander, 1986) and in 1988 (Kupinsky, 1992b; Ziegler, 1995) (see Table 4). It should be recalled that over that 30 years period Israeli society underwent significant transformation. It absorbed very sizeable immigration that generated a total Jewish population increase of 26% between 1974 and 1988, 43% between 1988 and 2005, and an overall 80% between 1974 and 2005. Most of the immigrants throughout the 1990s came from countries with relatively low fertility levels, especially the FSU, with the exception of Ethiopian immigrants. Israel's standard of living went up dramatically reflecting rapid economic transformation that involved a deep reshaping of the production system. Hi-tech branches moved to the core of production and exports—a far cry from the oranges and polished diamonds of a previous generation. Between 1980 and 2000 Israel's Index of Human Development (HDI)—a composite countrywide measure of health standards, educational attainment and real income—improved by

Number of children	1974– 75ª	1988 <sup>b</sup>	2005 <sup>c</sup>	
	Total	Total	Total	Without Haredim
Currently born		2.5	2.5	2.3
Personally intended	3.8	3.5	4.1	3.5
Most appropriate for an Israeli family of social status same as respondent's		3.4	4.0	3.8
Ideal for an Israeli family	4.3	3.7	4.1	3.6

Table 4 Family size preferences of married Jewish women-Israel, 1974-2005

 $^{\rm a}$  Source: Goldscheider and Friedlander, (1986). Based on 3000 urban Jewish women in their first marriage and below the age of 55

<sup>b</sup> Source: Kupinsky (1992b). Based on 1500 married women aged 20-39

<sup>c</sup> Source: Survey of attitudes and behaviors concerning family size among Israel's Jewish population, 2005. Based on 1004 Jewish women, 25–40, and 494 Jewish men, 25–50, currently married or in stable relations

over 10%. That is the highest rate of growth among developed countries (United Nations Development Programme 2006; DellaPergola, Rebhun and Tolts, 2005).

Culturally, too, Israel underwent significant changes reflecting the growing impact of contacts with Western countries, but also the visible impact of FSU new immigrants that could be expected to introduce a large secular element within the total societal pool. Israeli society also underwent repeated periods of security stress relating to the continuing conflict with the Palestinians. The three initial years of the decade of the 2000s were particularly painful, as they were accompanied by an unusually high number of civilian and military casualties. These security issues, their negative impact on incoming tourism and the additional general downturn in the global high-tech market caused a severe economic recession. Our 2005 fertility survey happened to be positioned at a time of economic recovery following that recession.

In spite of these sweeping changes, when we compare measures of actual, expected and ideal fertility we find quite similar totals in 1988 and in 2005. Referring first to the whole Jewish sample including all religiosity sectors, the average children currently born to married couples at reproductive ages remained unchanged at 2.5. Given the age composition of the sample, this is only a partial estimate of a final family size that will tend to grow within each cohort.

In addition to the data on actual and still incomplete family sizes, three attitudinal measures reported on the total numbers of children: (a) personally intended, (b) most appropriate for an Israeli family of social status like the respondent's, and (c) ideal for a generic Israeli family. Norms about desired and ideal family size among married adults appeared to be comparatively high and uniquely resilient in Israel. In 1974–75 married women expressed an average family norm of 3.5 children, and an ideal family size norm of 4.3. In 1988, married women indicated a personally intended family size of 3.5, which had grown to 4.1 in 2005. The average most

appropriate for a family of the same socioeconomic status as theirs increased from 3.4 in 1988, to 4.0 in 2005. The ideal number of children for a generic Israeli family increased too from 3.7 in 1988 to 4.1 in 2005. Comparing the findings over such an extended period of time provides a quasi-longitudinal follow-up relative to the earlier data. Indeed married women aged 40–45 in 2005 had 3.7 children—exactly what women in 1988, with their then incomplete families of 2.5 on the average, had indicated as their ideal target. While these are cross-sectional data exposed to changing perceptions and opportunities about family growth, one gains the impression that these predictions are not only stable but also quite accurate.

There is a high degree of correspondence between intentions expressed by respondents regarding the number of children that (a) they do expect to bear over the next three years or over a longer span of years, (b) they deem appropriate for a family of their own socioeconomic status, and (c) in for an Israeli family in general. On each of these different measures between 1988 and 2005 there was an increase, by 17%, 18%, and 11%, respectively, or 0.4 to 0.6 children—from about 3.5 to slightly over 4. The average number of personally intended children (4.1) stood minimally above the average appropriate for an Israeli family of social status like the respondent's (4.0).

If we focus on the mainstream Jewish population excluding the more intensely religious sector—the *Haredim*—the average most appropriate for a family of the same social standing as the respondent's was 3.8 in 2005; and it still was around 3 among the most secular. Personally intended children (3.5) stood somewhat below most appropriate children for a family of similar social status (3.8), and close to the ideal for a generic Israeli family (3.6). At least on the face of the attitudes expressed, Israeli adults do not manifest any deviation from the uniquely stable fertility patterns of the last few tens of years.

Over time, diffuse and stable gaps can be observed between ideal perceptions of final family size (between 3 and 4 children) and actual performance (between 2 and 3 children). In other words, actual fertility levels among the Jewish population in Israel appear as a composite of a normative perception that is fairly high for a developed country, and a certain amount of constraint that tends to lower the family size actually attained.

These fairly high family preferences are particularly intriguing in view of the fact that since the second half of the 20<sup>th</sup> century, fertility among the main world Jewish communities was consistently low, generally lower than among the majority of non-Jewish population, and mostly below the replacement level of at least two children (DellaPergola, 1980; Ritterband, 1992; DellaPergola, 1999). Large-scale migration to Israel seemingly affected Jewish fertility in two ways. One probably reflects the collective transition of Jews from the minority status typical of Diaspora Jewish communities to being the majority of Israel's population. A second more specific change ostensibly concerns the different norms and behaviors of the same individuals when they have the opportunity to act under different skies. One large-scale example is immigrants from the FSU who actually do have more children in Israel than they would have had, had they lived elsewhere (Tolts, 1997).

#### Preferred Number of Children: Intended and Appropriate

Couples surveyed in 2005 included women and men at ages compatible with further family growth. As noted, expectations about the respondents' future fertility did not change much over the 17 years that elapsed between 1988 and 2005. The actual performances—as measured both through the TFR and the cumulated performance of incomplete families—did not change much either. Overall, the answers provided to different overlapping questions about family norms and ideals were fairly consistent. Table 5 compares the distribution of intended final numbers of children with the number of children deemed to be the most appropriate by respondents for a household of the same socioeconomic status.

The most frequent intended final parity is 3, with 39–40%, followed by 4 and 5 or more among women (24% and 21%, respectively) and an equal preference for 2 and 4 among men (20.5% each). With regard to the most appropriate parity, 3 is again the modal choice (37% of women and 40% of men), followed by 2 (25% of women and 22% of men), 5 + among women (17%) and 4 among men (21%). Women would therefore like to have somewhat more children than men. The differences are neither striking nor statistically significant, but they are quite consistent across both intended and most appropriate distributions.

When matching the numbers of *intended* versus *appropriate* children, with reference to one's own family plans, 64% of women and 63% of men indicate consistent figures. The cross-classification of consistent and inconsistent preferences is presented in synthesis in Table 6. The more intriguing aspect of these distributions concerns those persons that provide inconsistent answers about their intended and most appropriate number of children. Most cases of inconsistently reported preferences refer to a difference of plus or minus one child (26% of women and 28% of men), as against a minority whose inconsistent preferences vary by plus or minus 2 or more children (9% of both genders). Inconsistently expressed parity preferences more often involve an *intended number of children higher than considered most appropriate* (I > A, 28% of women and 22% of men), than an

Gender	Children	Children						
	0	1	2	3	4	5+		
Intended								
Women	0.1	0.6	14.8	39.8	23.7	21.0	100.0	975
Men	_	1.9	20.5	39.4	20.5	17.7	100.0	481
Ratio W/M	-	0.32	0.72	1.01	1.16	1.19	1.00	
Appropriate								
Women	0.4	3.4	25.1	37.4	16.4	17.3	100.0	975
Men	0.4	2.8	21.8	40.3	21.1	13.6	100.0	481
Ratio W/M	1.00	1.21	1.15	0.93	0.78	1.27	1.00	

Table 5 Intended and appropriate number of children, by gender<sup>a</sup>—Israel 2005

<sup>a</sup> Married or in stable unions

Source: Survey of attitudes and behaviors concerning family size among Israel's Jewish population, 2005

<b>Table 6</b> Distributions ofintended and appropriatenumber of children, by gender,Jewish couples <sup>a</sup> —Israel 2005	Intended vs. Appropriate	Women	Men	Ratio W/M				
	Total	100.0	100.0	1.00				
	I = A	64.4	63.1	1.02				
	$I \neq A$ , total	35.5	36.9	0.96				
	$I \neq A$ , diff. $\pm 1$	26.3	28.1	0.94				
	$I \neq A$ , diff. > $\pm 1$	9.3	8.8	1.06				
	I < A, total	7.3	15.4	0.47				
	I < A, diff. 1	6.5	13.1	0.50				
	I < A, diff. > 1	0.8	2.3	0.35				
	I > A, total	28.3	21.5	1.32				
	I > A, diff. 1	19.8	15.0	1.32				
	I > A, diff. > 1	8.5	6.5	1.31				
	I < A, total	7.3	15.4	0.47				
	I < A, A = 0-3	2.9	7.1	0.41				
<sup>a</sup> Married or in stable unions	I < A, A = 4-5+	4.4	8.3	0.53				
Source: Survey of attitudes and behaviors concerning family size among Israel's Jewish population 2005	I > A, total	28.3	21.5	1.32				
	I > A, I = 0-3	12.2	7.8	1.56				
	I > A, I = 4-5+	16.1	13.7	1.18				

intended parity lower than deemed appropriate (I < A, 7% of women and 15% of men). The most frequent case of inconsistency results in indicating an *intended* number of children higher by one than the number considered most appropriate (20% of women and 15% of men). When the gap between intended and appropriate parity is greater than one, the likelihood is again greater that the intended exceeds the appropriate and not the other way around.

Among women the most frequently reported parity preference inconsistency is intending to have 3 children but believing the most appropriate family size would be 2 (9.4% of all women), followed by intended 4—appropriate 3 (7.9%); intended 4—appropriate 2 (3%); and intended 3—appropriate 4 (2.9%). Among men the patterns are somewhat different with the more frequent inconsistent combinations reported being intended 2—appropriate 3 (5.8%); followed by intended 3—appropriate 2 (5.5%); intended 4—appropriate 3 (5.5%); and intended 3—appropriate 2 (5.5%); intended 4—appropriate 3 (5.5%); and intended 3—appropriate 4 (4.9%). Overall, the reported parity preference inconsistencies more often than not involve relatively higher parities of four children and above. When the intended parity was higher than the most appropriate, 16.1% of women and 13.7% of men reported an intended parity of 4 or more, versus 12.2% and 7.8%, respectively, who reported an intended parity of 0–3. When the intended parity was lower than the most appropriate, 4.4% of women and 8.3% of men reported a most appropriate parity of 4 and over, versus 2.9% and 7.1%, respectively, who reported an appropriate parity of 0–3.

Table 7 provides a somewhat simplified synopsis of the preceding data. Because of the relatively few cases below parity 2 regarding both intended and most appropriate family size, we merged the 0, 1, and 2 categories. In the following we

Gender and age	Number of intended vs. appropriate children							Ν
	Same				Different			
	0-2 <sup>d</sup>	3 <sup>d</sup>	4 <sup>d</sup>	5+ <sup>d</sup>	$I < A^e$	$I > A^{\rm f}$		
Women, 25-45	12	25	11	16	8	28	100	975
Men, 25-50	14	26	11	11	15	22	100	481
Ratio W/M	0.86	0.96	1.00	1.45	0.53	1.27	1.00	

Table 7Synthesis of intended<sup>a</sup> vs. appropriate<sup>b</sup> number of children, by gender, Jewish couples<sup>c</sup>—Israel,2005

<sup>a</sup> Sum of total number of children born so far plus total additional children expected

<sup>b</sup> Number of children most appropriate for family with standard of living same as respondent's

<sup>c</sup> Married or in stable unions

<sup>d</sup> Same number of children intended and appropriate

<sup>e</sup> Number of children appropriate 3, 4, or 5, and fewer children intended

<sup>f</sup> Number of children appropriate 2, 3, or 4, and more children intended

Source: Survey of attitudes and behaviors concerning family size among Israel's Jewish population, 2005

shall consider those who gave any combination of these lower parities as having consistently matched intended and appropriate children. Following this adjustment, among persons of either sex who consistently indicated their intentions and most appropriate preferences, the most frequent preference is for 3 children, followed by 5 or more for women, and by 2 or less for men. Among those who gave inconsistent reporting, 8% of women and 15% of men intend to have *fewer* children than they deem appropriate (I < A); and 28% of women and 22% of men intend to have *more* children than appropriate (I > A). It thus appears that the total percentage of those with inconsistent reporting (37–38%) is higher than that of each given consistently specified parity. Among women the 28% who intend to have more children than they deem appropriate represent the plurality of the whole women's expected parity distribution. Among men, a preference for 3 children constitutes the plurality of answers, with those intending to have more children than they deem appropriate being the second most frequent group. The difference between distributions by gender is not statistically significant by a simple test of variance, yet worth noticing.

How do we explain these inconsistencies? A smaller intended than appropriate family size may plausibly be related to limiting circumstances related to age and health. It may also reflect frequently observed conflicts between women's socioeconomic aspirations and their family life (Oppenheimer, 1982). When, as is more often the case among Israeli society, family size intentions are higher than one's own feelings of appropriateness, explanations are more complex, and probably also more ambivalent (see Fig. 4).

These inconsistencies can indeed be explained in two antithetic ways, depending on the ordering of the logic underlying the question. The first explanation postulates that couples first determine what would be most appropriate in their social environment, and subsequently choose to out-perform that norm. Such desire to attain family size larger than usual in a given environment implies investing a



Fig. 4 Alternative explanations of inconsistencies between perceptions of intended and appropriate total number of children—Israel, 2005

higher than average amount of family resources, presuming these are available, plausibly out of ideological commitment or other culture-related reasons. The alternative explanation postulates that families first evaluate their expected performance, and subsequently reckon that the expected performance exceeds the capabilities that would be appropriate to support the intended number of children, because of a perceived lack of necessary resources. Hence we may attribute two completely different meanings to apparently similar answers. Future analyses will help clarify which of these conflicting hypotheses—ideological commitment or economic inadequacy—works best in the case of Jewish fertility in Israel.

Parity Progression Ratios: Actual and Intended

Having already noted the predominant stability of fertility patterns in the past, some insights about trends that might emerge in the future come from observing the number of actual and intended children by current parity. Figure 5 compares actual versus expected Parity Progression Ratios (PPR) by sex. PPRs represent the transition probabilities from each parity to the next one. For example, if all parents who ever had one child have a second child, the PPR is 1; if none do, the PPR is 0. Actual PPRs are usually intermediate between these maximum and minimum values and provide a parity-wise overall configuration of the family growth process. These probabilities are usually computed regarding children *actually* born; but they can also be computed concerning *intentions* to move from a parity already attained or possibly attained in the future, to a parity of a higher order. As such the latter are not a representation of reality but they offer an indication of existing norms about preferred fertility levels and of the steps needed to achieve them. The gap outlined in Fig. 5 between the two parity progression distributions represents significantly important information about the challenge that couples face if they are to attain their declared preferences about family size. The outlined gap constitutes an efficient measure of the number of children that are potentially wanted by families but have not yet come into being, and it should be separately assessed for different subpopulations. These potential children are a target that family oriented public policies may reasonably try to address.



Fig. 5 Actual and intended parity progression ratios—Jewish couples (married or in stable unions), Israel, 2005. *Source*: Survey of attitudes and behaviors concerning family size among Israel's Jewish population, 2005

Parity transitions of, respectively, actual and intended family growth are overall quite high. The first two children are nearly universally attained among Israeli couples, as shown by actual PPRs above 90% from 0 to 1, and above 80% from 1 to 2. In the intended PPRs, the first two transitions are nearly universal (PPRs close to 1). Transitions from the  $2^{nd}$  to the  $3^{rd}$ , and from the  $3^{rd}$  to the  $4^{th}$  child have crucially shaped past fertility patterns and are likely to determine those of the future. Above 80% of women intend to move from parity 2 to 3; and more than half of those reaching parity 3 intend to move to 4. About half of those at parity 4 intend to move to 5 or higher. The stoppage of rapid decline in both actual and intended PPRs after parity 4 hints at stable or even rising PPRs at higher parities. A more detailed display of higher intended parities after the fifth would probably show a bi-modal overall distribution as is frequently found in historical populations undergoing a transition to lower fertility (DellaPergola, 2001). In other words, the overall PPR profile describes the simultaneous existence of two subpopulations—one bound to limiting family growth, the other letting fertility follow its course with moderate limiting interventions. PPRs confirm a desire for children slightly higher among women than among men, and provide an illustration of the normative mechanisms underlying the expectation of continuity in known parity patterns.

Further inspection of the relationship between parities currently achieved and the intended further parity transitions (not shown here) indicates that current parity has a very unclear and unsystematic, if any, relation with the intention to reach specific higher parities. It would be reasonable to postulate that the number of children

already attained may influence ideal perceptions of final family size. People may tend to *ex-post-facto* rationalize their ideal goals by incorporating into them what is already irreversibly known from their actual experience. Such actual births may or may not have been part of their ideal goals at an earlier stage of their lifecycles, but in any case one would normally expect higher intended PPRs among those with higher actual parities. However, this is not the case in reality: observed patterns show a relative lack of elasticity of intended PPRs when moving from lower to higher actual parities. This points to a substantially stable set of ideal perceptions of future parity transitions across the reproductive cycle. Future, whether or not final, intentions already clearly appear at lower parities—quite early in the lifecycle—and do not change substantially over the lifecycle.

These findings tend to support the view that changes in family growth patterns among Israel's Jews tend to be quite slow and conservative (Friedlander, 2002). The outlook for the foreseeable future would indicate a general tendency to preserve fertility patterns that have been observed in the recent past. One central reason is the already noted presence within the body of Israeli society of more religious sectors whose behaviors tend to be largely motivated by a strong and relatively invariant value system more than by a clear response to variable socioeconomic circumstances. This, however, does not imply that the more religious sectors are indifferent to economic incentives and constraints (Schellekens 2006).

A further significant implication is that individuals and households who prefer different eventual parities may be perceived as constituting distinct subpopulations, each of which having been motivated since the outset by specific and different sets of determinants leading to the given intended or appropriate final parity. Each of these subpopulations, by preferred parity, can thus reasonably be analyzed separately assuming that somewhat different patterns of causality motivate each subpopulation to achieve their preferred family sizes.

## Further Research and Concluding Remarks

Given the demographic predicaments of Israeli society—internal and external demography in general and fertility in particular constitute high-profile dimensions in societal change, public discourse, and policy planning. In the Israeli societal setup, namely its Jewish majority, uniquely resilient family and fertility patterns have emerged. The present analysis, largely based on a 2005 survey of married couples at reproductive ages, after suggesting a general framework and description of fertility trends among Jews in Israel, focused on levels of actual and intended family size, and on the discrepancies between the latter and family size judged most appropriate by the respondents according to their own socioeconomic characteristics. High consistency was found with earlier studies of fertility norms in the 1970s and 1980s. In this paper broad conclusions on the determinants of Jewish fertility levels and differentials were based on simple bi-variate analyses. The role of sub-ethnicity in Jewish fertility variation declined and nearly disappeared with the exception of persisting lower fertility among FSU immigrants, along with indifference of fertility levels to the very salient promotion of women's education and employment in Israel. Religiosity continued to play a leading role in fertility patterns.

Ideal perceptions of Jewish couples continue to approach an average of 4 children. The demand for children is still widespread and it broadly cuts across social classes and cultural groups—reverberating at distance the normative drive of the more religious. Some of these mechanisms foreshadow the continuation of fairly sustained fertility levels in the foreseeable future. While evidently multivariate analyses of the determinants of fertility variation are needed to provide better insights on causality, Israeli fertility patterns cannot be understood without stressing the cultural side of the interpretative framework along with appropriate framing of its socioeconomic side.

A substantial majority of families report consistent ideal, intended and most appropriate family size; but important discrepancies also emerge for a significant minority of women and men. Gaps between intended and appropriate family size may depend on very different motivations, from a sense of the inadequacy of available socioeconomic resources, to a sense of personal mission vis-à-vis societal needs. Lack of socioeconomic security—real or perceived—is probably related to a less determined stance regarding the relationship between intended and appropriate family size. Consequently, a significant number of couples report dissonant preferences for intended family sizes and the targets that would be appropriate for persons with resources like theirs. On the other hand, persons equipped with the necessary resources also sometimes report they are unable or unwilling to achieve their preferred goals.

The higher or lower probability of occurrence of the intermediate steps leading toward the eventual accomplishment of intended family size was investigated by comparing actual and prospective parity progression ratios, or transition probabilities, from a birth of given parity to one of higher parity. Some of the couples already accomplished those transitions while others are merely declaring their intention to attain them. Further comparisons to be undertaken involve the actual status of couples vis-à-vis each parity transition. Studying the effects of co-variates in these actual or prospective transitions is expected to provide valuable insights into the likelihood and causality of family growth processes.

The data discussed here bear relevance for the possible future development of a policy framework concerning family growth in Israel. Further survey data not shown here indicate that nearly four in five of the respondents would be ready to reconsider their fertility targets if the appropriate circumstances existed. A majority of the households investigated (59%) support public interventions that might encourage larger families, with others (27%) in favor of letting each couple do what they wish, and only a tiny minority (4%) supporting smaller families (DellaPergola, 2006). The same data show that translation of such intentions into practice, if at all feasible, involves interventions by the state to help develop an improved infrastructure of services and facilities aimed at enhancing the quality of childrearing, early childhood facilities, equitable conditions for working women, and access to more suitable housing. Direct money transfers and other indirect financial and tax benefits are not as central in the perceptions of a majority of the families.

Finally, viewed as a bet on the future, observed and intended fertility levels among Israeli Jews look highly consistent with recent survey data that display high levels of satisfaction and optimism among the Israeli public (Israel, CBS, annual). Looking at the future, this interpretation may generate some broader policy-oriented questions: "Will citizens accept having to pay with their taxes for more children still a central target in their aspirations? And will they actually deliver the children if all of their policy wishes come true?"

Acknowledgments A version of this paper was presented as part of a longer report at the Population Association of America, New York, March 2007. Research was undertaken in the framework of a Demographic Initiative sponsored by the Jewish Agency for Israel (JAFI) in 2004-2005. Thanks are due to Sallai Meridor, then Chairman of JAFI executive, for his encouragement. The Israeli Survey of Attitudes and Behaviors Concerning Family Size was planned and coordinated by the author with Rimona Wiesel, then Head of Research Division, Department of Immigration, JAFI, assisted by Moran Neuman. Fieldwork was undertaken by the Dahaf Institute, under the direction of Mina Tzemach. Ilana Ziegler, Director General of the Israel Family Planning Association, advised on questionnaire contents. The Jewish People Policy Planning Institute (JPPPI) in Jerusalem, its Founding President Yehezkel Dror and General Director Avinoam Bar Yosef provided support for the project. Israel Pupko ably assisted with data processing at JPPPI. This paper also reflects research at the Division of Jewish Demography and Statistics (DJDS), the A. Harman Institute of Contemporary Jewry, The Hebrew University of Jerusalem. Uzi Rebhun provided helpful advice. Research continued during a stay as Senior Fellow at the Steinhardt Social Research Institute (SSRI), the Cohen Center for Modern Jewish Studies, Brandeis University, Waltham, Mass., headed by Leonard Saxe. Jessica Gipson of the Johns Hopkins Bloomberg School of Public Health and an anonymous reviewer offered valuable critical remarks on an earlier draft. Responsibility for the contents of this report rests solely with the author.

## References

- Abu Libdeh, H., G. Ovensen, and H. Brunborg. 1993. Population characteristics and trends. In *Palestinian Society in Gaza, West Bank and Arab Jerusalem: A survey of living conditions*, ed. M. Heiberg and G. Ovensen, 35–97. Oslo.
- Anson, J., and A. Meir. 1995. Religiosity, nationalism and fertility in Israel. European Journal of Population 12 (1): 1–25.
- Bachi, R. 1977. The population of Israel. Jerusalem.
- Bachi, R. 1980. A population policy for Israel? Jewish Journal of Sociology 22 (2): 163–179.
- Berman, E. 1998. Sect, subsidy and sacrifice: An economist view of ultra-orthodox Jews". Jerusalem.
- Berman, E., and R. Klinov. 1997. Human capital investment and nonparticipation: Evidence from a sample with infinite horizons (Or: Jewish Father Stops Going to Work). The Maurice Falk Institute for Economic Research in Israel, Research paper 97.05, Jerusalem.
- Bonné-Tamir, B., and A. Adam, eds. 1992. *Genetic diversity among Jews: Disease markers at the DNA level*. New York.
- Boongarts, J. 1978. A framework for analyzing the proximate determinants of fertility. *Population and Development Review* 4 (1): 105–133.
- Caldwell, J.C. 1981. The mechanisms of population change in historical perspective. *Population Studies* 35 (1): 5–27.
- Coale, A.J. 1975. The demographic transition. In *The population debate: Dimensions and perspectives*. New York, vol. 1, 347–355.
- DellaPergola, S. 1980. Patterns of American Jewish fertility. Demography 17 (3): 261-273.
- DellaPergola, S. 1983. Contemporary Jewish fertility: An overview. In *Papers in Jewish demography* 1981, ed. U.O. Schmelz, et al., 215–238. Jerusalem: The Hebrew University.

DellaPergola, S. 1988. Some effects of religion on population trends. *Pro Mundi Vita Studies* 5: 40–48. DellaPergola, S. 1999. *World Jewry beyond 2000: The demographic prospects.* 78 pp. Oxford.

DellaPergola, S. 2001. Some fundamentals of Jewish demographic history. In Papers in Jewish demography 1997, ed. S. DellaPergola and J. Even, 11–33. Jerusalem.

- DellaPergola, S. 2003a. Demography in Israel at the dawn of the twenty-first century. In Jews in Israel: Contemporary social and cultural patterns, ed. U. Rebhun and C. Waxman, 20–44. Hanover, London: Brandeis University Press.
- DellaPergola, S. 2003b. Demographic trends in Israel and Palestine: Prospects and policy implications. *American Jewish Year Book* 103: 3–68.
- DellaPergola, S. 2006. Fertility and population policies in Israel, Paper presented at Symposium on Professor Roberto Bachi's 10th Anniversary, Jerusalem.
- DellaPergola, S., and L. Cohen, eds. 1992. World Jewish population: Trends and policies. Jerusalem.
- DellaPergola, S., U. Rebhun, and M. Tolts. 2005. Contemporary Jewish diaspora in global context: Human development correlates of population trends. *Israel Studies* 11 (1): 61–95.
- Demeny, P. 2005. Policy challenges of Europe's demographic changes: From past perspectives to future prospects. In *The new demographic regime: Population challenges and policy responses*, ed. M. Macura, A.L. MacDonald, and W. Haug, 1–9. New York and Geneva.
- Demographic Center, Ministry of Labour and Social Affairs. 1992. Population trends and policies in Israel. In World Jewish population: Trends and policies, ed. S. DellaPergola and L. Cohen, 253– 267. Jerusalem.
- Eisenbach, Z. 1986. Family planning among the Muslim population of Israel. In *Studies in the population of Israel in honor of Roberto Bachi. Scripta Hierosolymitana*, vol. 30, ed. U.O. Schmelz and G. Nathan, 1–14. Jerusalem: Magnes Press.
- Fargues, P. 2000. Protracted national conflict and fertility change: Palestinians and Israelis in the twentieth century. *Population and Development Review* 26: 441–482.
- Feldman, D.M. 1968. Birth control in Jewish Law. New York.
- Friedlander, D. 1974. Israel. In *Population policy in developed countries*, ed. B. Berelson, 42–97. New York.
- Friedlander, D. 2002. Fertility in Israel: Is the transition to replacement level in sight?" In United Nations Secretariat, Division of Economic and Social Affairs, Population Division, *Expert Group Meeting* on Completing the Fertility Transition. New York.
- Friedlander, D., Z. Eisenbach, and C. Goldscheider. 1979. Modernization patterns and fertility change: The Arab populations of Israel and the Israel-administered territories. *Population Studies* 33: 239– 254.
- Friedlander, D., Z. Eisenbach, and C. Goldscheider. 1980. Family-size limitation and birth spacing: The fertility transition of African and Asian immigrants in Israel. *Population and Development Review* 6 (4): 581–593.
- Friedlander, D., and C. Feldmann. 1993. The modern shift to below-replacement fertility: Has Israel's population joined the process? *Population Studies* 47: 295–306.
- Friedlander, D., and C. Goldscheider. 1978. Immigration, social change and cohort fertility on Israel. Population Studies 32 (2): 299–317.
- Friedlander, D., and and Golscheider. 1979. The population of Israel, New York.
- Friedman, M. 1991. *The Haredi Ultra-Orthodox Society: Sources trends and processes*. Jerusalem, The Jerusalem Institute for Israel Studies (in Hebrew).
- Gauthier, A.H. 2002. Les politiques familiales dans les pays industrialisés: y a-t-il convergence? *Population* 57 (3): 457–484.
- Goldscheider, C. 1967. Fertility of the Jews. Demography 4: 196-209.
- Goldscheider, C., and D. Friedlander. 1986. Reproductive norms in Israel. In Studies in the population of Israel in honor of Roberto Bachi, Scripta Hierosolymitana 30, ed. U.O. Schmelz and G. Nathan, 15– 35. Jerusalem.
- Hammel, E.A. 1990. A theory of culture for demography. *Population and Development Review* 16 (1): 455–481.
- Harvard University Program on Humanitarian Policy and Conflict Research. 2006. Population projections for socioeconomic development in the Gaza Strip, Working Paper 1, Cambridge, Mass.
- Hill, A.G. 1983. The Palestinian population of the Middle East. *Population and Development Review* 9: 293–316.
- Inglehart, R. 1997. *Modernization and postmodernization: Cultural, economic and political change in 43 societies.* Princeton: Princeton University Press.
- Israel. 1966. *Report of the Committee for Natality Problems*, Presented to the Prime Minister by the Natality Committee, Jerusalem (Hebrew).
- Israel Central Bureau of Statistics, annual. Statistical abstract of Israel, Jerusalem.
- Israel Central Bureau of Statistics. 2006. Social survey 2004, Jerusalem.

Jewish People Policy Planning Institute. 2005. Annual report 2005. Jerusalem.

- Kupinsky, S. 1992a. Fertility trends and policies in low fertility countries and their applicability to Israel. In ed. S. DellaPergola and L. Cohen, *World Jewish population: Trends and policies*, 276–300. Jerusalem.
- Kupinsky, S. 1992b. Results of the fertility study relevant to a population policy in Israel. In World Jewish population: Trends and policies, ed. S. DellaPergola and L. Cohen, 301–318. Jerusalem.
- Lesthaeghe, R., and G. Moors. 1995. Is there a new conservatism that will bring back the old family? Ideational trends and the stages of family formation in Germany, France, Belgium and the Netherlands, 1981–1990, Evolution or Revolution in European Population, European Population Conference—1995, vol. 1. 225–266. Milano.
- Lesthaeghe, R., and C. Wilson. 1986. Modes of production, secularization and the pace of fertility. In *The decline of fertility in Europe*. ed. A.J. Coale and S. Cotts Watkins, 261–292. Princeton.
- Levy, S., H. Levinson, and E. Katz. 2002. A portrait of Israeli Jewry: Beliefs, observances and values among Israeli Jews 2000, Jerusalem.
- Lewin Epstein, N., H. Stier, M. Braun, and B. Langfeldt. 2000. Family policy and public attitudes in Germany and Israel. *European Sociological Review* 16 (4): 385–401.
- Machon Dahaf. 2005. Attitudes and behaviors of the Jewish population in Israel on questions concerning family size (summary of research undertaken by the demographic initiative of the Jewish agency). Tel Aviv (Hebrew).
- Nahmias, P. 2004. Fertility behaviour of recent immigrants to Israel: A comparative analysis of immigrants from Ethiopia and the Former Soviet Union. *Demographic Research* 10 (4): 83–120.
- Okun, B.S. 1997. Innovation and adaptation in fertility transition; Jewish immigrants to Israel from Muslim North Africa and the Middle East. *Population Studies* 51: 315–335.
- Okun, B.S. 2000. Religiosity and contraceptive method choice: The Jewish population of Israel. *European Journal of Population* 16: 109–132.
- Okun, B.S. 2004. Insight into ethnic flux: Marriage patterns among Jews of mixed ancestry. *Demography* 41 (1): 173–187.
- Oppenheimer, V.K. 1982. Work and the family: A study in social demography. New York.
- Palestinian Central Bureau of Statistics. 1997. The Demographic Survey in the West Bank and Gaza. Ramallah.
- Peritz, E., and M. Baras, eds. 1992. Studies in the fertility of Israel. Jerusalem.
- Pritchett, L.H. 1994. Desired fertility and the impact of population policies. *Population and Development Review* 20 (1): 1–55.
- Rallu, J.L., Y. Courbage and V. Piché, eds. 1997. Old and new minorities. Paris.
- Ritterband, P. 1992. The fertility of the Jewish people: A contemporary overview. In *World Jewish population: Trends and policies*, ed. S. DellaPergola and L. Cohen, 93–105. Jerusalem.
- Rosenblum, J. 2004. Self-annihilation. Jerusalem Post International, November 19.
- Schellekens, J., and Z. Eisenbach. 2002. The predecline rise of Israeli Moslem fertility. *Economic Development and Cultural Change* 50 (3): 541–555.
- Schellekens, J., and M. Ophir. 2006. Influence of family allowances and marriage on births (in Hebrew). Jerusalem.
- Schmelz, U.O. 1986. Fertility of Jewish women in the metropolitan areas of Israel, 1972. In *Studies in the population of Israel in honor of Roberto Bachi, Scripta Hierosolymitana*, ed. U.O. Schmelz and G. Nathan, 30, 89–147. Jerusalem.
- Schmelz, U.O. 1989. Religiosity and fertility among the jews of Jerusalem. In Papers in Jewish demography 1985, 157–185. Jerusalem.
- Shilhav, Y. 1991. A "Shtetel" (Small Town) within a modern city: A geography of segregation and acceptance (in Hebrew). Jerusalem: The Jerusalem Institute for Israel Studies.
- Spengler, J.J. 1966. Values and fertility analysis. Demography 3 (1): 109-130.
- Steinberg, M. 1989. The demographic dimension of the struggle with Israel as seen by the PLO. The Jerusalem Journal of International Relations 11 (4): 27–51.
- The American Jewish Committee, The W. Petushek National Jewish Family Center. 1992. Summary of proposals submitted to the national conference on Jewish population growth, New York 1983. In *World Jewish population: Trends and policies*, ed. S. DellaPergola and L. Cohen, 323–326. Jerusalem.
- Tolts, M. 1997. The interrelationship between emigration and the socio-demographic profile of Russian Jewry. In *Russian Jews on Three Continents*, ed. N. Lewin Epstein, Y. Ro'i and P. Ritterband, 147–176. London.

United Nations Development Programme. 2006. Huan development report 2006—Beyond scarcity: Power, poverty and the global water crisis. New York.

United Nations, Population Division. 2007. World population prospects. New York.

- van de Kaa, D.J. 1996. Anchored narratives: The story and findings of half a century of research into the determinants of fertility. *Population Studies* 50 (3): 389–432.
- Zach, T., A.K. Pramanik, and S.P. Ford 2007. Multiple births. http://emedicine.medscape.com/ article/977234-overview.
- Ziegler, I. 1995. Family growth in Israel and the critical child'. Ph.D. diss., The Hebrew University, Jerusalem (unpublished).
- Zlotogora, J., Z. Haklai, N. Rotem, M. Georgi, I. Berlovitz, A. Leventhal, and Y. Amitai. 2003. Relative prevalence of malformations at birth among different religious communities in Israel. *American Journal of Medical Genetics* 122A (1): 59–62.

## Author Biography

**Sergio DellaPergola** is the Shlomo Argov Professor of Israel-Diaspora Relations at the Hebrew University's Harman Institute of Contemporary Jewry and a former Institute Chairman. He also is a Senior Fellow at the Jewish People Policy Planning Institute—an independent think tank in Jerusalem. A specialist on the demography of world Jewry, he has published extensively on data evaluation, historical demography, the family, international migration and absorption, Jewish education, and population projections in Israel and the Diaspora. In 1999 he won the Marshall Sklare Award by the Association for the Social Scientific Study of Jewry.