
When Do Spouses Support a Career? A Human Capital Analysis of Israeli Managers and Their Spouses

SHOSHANA A. GROSSBARD-SHECHTMAN*

San Diego State University

DAFNA N. IZRAELI*

SHOSHANA NEUMAN*

Bar-Ilan University

ABSTRACT: This study examines the factors that contribute to a manager's receiving spousal support for his/her career. Two theoretical approaches—human capital and cultural norms—generate hypotheses tested on a sample of 869 men and women managers in Israel. Results of linear and logit regressions, run separately by gender, with education, earnings, age, children, religiosity, and ethnic origin as independent variables, revealed that spousal support is better explained for women than for men, and that husbands help more when it is most productive to do so. Cultural norms also contribute to explaining spousal support.

INTRODUCTION

There is evidence that a person's success at work is based, in part, on benefits received from others. The transmission of human capital is more likely to take

* Direct all correspondence to: Shoshana A. Grossbard-Shechtman, Department of Economics, San Diego State University, San Diego, CA; Dafna N. Izraeli, Department of Sociology and Anthropology, Bar-Ilan University, Israel; Shoshana Neuman, Department of Economics and Business Administration, Bar-Ilan University, Israel. (*The authors are listed in alphabetical order.*)

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place in marriage than in other nonmarket associations, as there are greater incentives to share acquired abilities and for each mate to enhance the productivity of the other within the household (Benham 1974). Furthermore, the transaction costs within marriage are lower than in other settings because of physical proximity and ease of communication.

Most theorizing on the subject of spousal help has focused on the auxiliary functions provided by a wife to her husband, especially the corporate wife of the "Organization Man" (Kanter, 1974 ; Whyte, 1956). More recently, there has been growing interest in the husband's contribution to family work, including childcare and domestic labor (Coverman, 1985; Pleck, 1985). A spouse can contribute to his or her mate's effective stock of human capital in many ways. Spousal help is of an *indirect* nature if the spouse enables the person to spend more time at work, for example, by freeing the worker from chores associated with the household and other nonwork obligations or by providing encouragement and moral support needed to sustain a person at work (Moore, 1962; Mincer, 1982; Becker, 1965). Spouses can also provide *direct* assistance such as entertainment of colleagues and clients, clerical help, and access to information through personal contacts and other means. Where the expectation of direct spousal assistance is an institutionalized characteristic of the work role—as in the case of doctors, (Gerber, 1983; Lorber, 1984) diplomats and the clergy (Railings, 1984)—we have a "two-person single career" (Papanek, 1973). In such arrangements, women are generally the unpaid partners who provide support to their husbands' occupational role.

Men's greater access to spousal help is often mentioned as an explanation for the substantially higher earnings of married men in comparison to unmarried men (Grossbard-Shechtman, 1986). According to this view, marriage not only provides additional incentives for human capital accumulation but also facilitates such accumulation either through wife's help in financing (Kenny, 1983) or more direct help. An alternative explanation for the higher earnings of married men, however, argues that men who earn more are more likely to be married (Adler & Izraeli, 1988).¹

Human capital theory has also been used to explain why married women do not earn more than their unmarried counterparts. This difference between men and women with regard to the benefits of marriage seems to indicate that wives help their husbands' careers more than husbands help their wives' careers (Hochschild, 1989). Such a conclusion is also shared by observers of particular workplaces such as universities (Doenias, 1988; Hochschild, 1989). Observing the greater benefits accrued to men from marriage than to women led sociologist Jessie Bernard (1972) to distinguish between "his marriage" and "her marriage."

Most economic and sociological studies have tended to treat spousal help primarily as an independent variable with important consequences for the person. The impact of spousal help on husbands' earnings and on wives' decisions regarding labor market participation are examples (Mortimer, 1978).

Much less is known about spousal help as a dependent variable. Until recently, its determinants have hardly been explored, an exception being Coverman (1985).

This study, a joint enterprise between a sociologist and two economists, draws on theoretical contributions from both disciplines. It addresses the question: when is a worker more likely to receive spousal assistance? Spousal assistance is here defined in both general and subjective terms as what the respondent perceives to be assistance. This strategy avoids presumptions about how persons define assistance and the problem of gender asymmetries in the significance attributed to specific kinds of assistance. For example, women may view husbands' investments in childcare as spousal assistance to their careers while men may not regard identical behavior on the part of their wives in similar terms. Our purpose is to identify the factors that influence spousal help and to examine gender differences in the extent of help received. The hypotheses are tested on a sample of Israeli managers.

THEORETICAL FRAMEWORK

We analyze the determinants of spousal help within two theoretical frameworks: human capital theory and cultural norms, as summarized in Table 1. We start by using human capital theory in order to explain the presence of spousal help. Human capital is defined as any skill people have which enhances their success or productivity in performing valuable activities. There are two ways in which spousal help can contribute to a person's human capital: it can enhance (1) performance at work and (2) performance in the home.² To the extent that a spouse helps a worker's performance at work, this is considered direct help. To the extent that a spouse helps a worker's performance at home, it is considered indirect help.

The actual degree to which a spouse helps a worker's productivity at work is determined by the supply of help by the spouse and by the demand for spousal help by the worker. The more human capital the spouse possesses, the more productive spousal help can be and the greater the demand for spousal help. Also, the demand for spousal help will be greater the more opportunities there are for the spouse to help both at work and at home. For instance, if the worker and spouse have a large household, there are more opportunities for the spouse to provide indirect help that will enable the worker to devote more time to a career. Any factor that increases the supply of spousal help or that increases the demand for spousal help is likely to be associated with more actual spousal help.

Given overall gender differences in responsibilities toward work and home, we expect employed men to benefit more from spousal help than employed women to the extent that men tend to spend more hours in paid work than women. Therefore, any given spousal investment in a man's career is likely to

Table 1. Predictors of Spousal Help by Theoretical Perspective*

<i>Variable</i>	<i>Human Capital</i>	<i>Culture</i>
Worker's education	+	
Spouse's education	+	+ (women)
Relative earnings	?	-
Age (men)	-	+
Age (women)	-	-
Age squared	+	
Age of youngest child (women)	-	
Religiosity (men)		+
Religiosity (women)		-
Religiosity of family (men)		+
Religiosity of family (women)		-
Spouse of Eastern descent		+ (men)
Spouse of Western descent		+ (women)

Key: + positive influence predicted;
 - negative influence predicted;
 ? ambiguous prediction.

Note: * Where the predicted effect is gender-specific, the sex is specified in parentheses.

generate more added earnings than a similar investment by a spouse in a woman's career. However, from the perspective of work at home, a spouse is more likely to benefit a female worker than a male worker, given social norms that women be more active at home. Under such conditions, there are more ways men can help their wives in home-related tasks than vice versa, and therefore, from this perspective, female workers are more likely to demand spousal help than are male workers. Such gender asymmetry is especially likely to occur where young children are involved.

It thus appears that from a perspective of potential for direct help, male workers are likely to demand more spousal help than female workers. However, from a perspective of indirect help, female workers are likely to demand more spousal help than male workers. Combining the two perspectives does not generate clear predictions regarding gender differences in demand for spousal help. From the perspective of supply of spousal help, there are no a priori reasons to expect gender differences.

We now look at a number of factors that can influence either the supply of spousal help or the demand for spousal help. Thus, we generate testable hypotheses summarized in the first column of Table 1.

Our first hypothesis regards the worker's education. The more educated the worker, the greater his/her potential for success at work and, therefore, the more a spouse can (and, therefore, probably will) contribute to such success indirectly by freeing the worker from household tasks. The tasks of more educated managers are also likely to be more complex and to offer more opportunities for direct help by a spouse (see Grossbard-Shechtman, 1986).

Second, it can be postulated that the productivity of spousal help is likely to increase with the spouse's education. Education enhances the productivity of both direct and indirect help provided by the spouse. Analyses based on male workers in the United States (Benham 1974), Iran (Scully 1979), and Hong Kong (Wong 1986) have all shown that the more educated the wife, the more the husband earns, which can be interpreted in terms of a human capital investment by the wife in her husband's earnings potential. Also, when both spouses are educated, communication between spouses may be enhanced and, therefore, a spouse's contribution to the worker's productivity at work may increase (Grossbard-Shechtman & Neuman, 1986).

Third, relative earnings will have an impact on spousal help. The specialization hypothesis (Becker, 1965; Mincer, 1982) suggests that the more a person earns relative to his or her spouse, the more the person will specialize in the workplace and, consequently, the more the other spouse will engage in household tasks, providing indirect help toward the success of the spouse earning more. Therefore, when a person's earnings are significantly greater than those of his/her spouse, making the spouse's time less valuable than the person in question, the spouse is more likely to assist than when the person earns significantly less than his/her spouse. In the case of two spouses working outside the home, specialization implies that the worker earning more has a higher demand for total time spent by the spouse in indirect help.

At the same time, the worker earning less and specializing in the home also has a demand for spousal help. Due to such workers' large scope of activities and high productivity in the home (as in the case of most working mothers), their demand for spousal help is higher than that of workers who are not very active at home. Every hour the spouse of such working mother devotes to the home can be very productive. In sum, we do not have a clear prediction regarding the effect of relative earnings on spousal help.

The same logic also leads to the prediction that workers employed in high-ceiling occupations, that is, occupations which provide good opportunities for advancement and growth in earnings, will receive more spousal help (Mortimer, 1980). Our sample, however, as it is limited to managers, controls for the effect of occupation.

Fourth, age of the worker is predicted to affect spousal help. Careers have been conceptualized (Hall, 1976; Rosenbaum, 1984; Schein, 1979) as moving through sequential stages beginning with rapid advancement, followed by increasingly slower advancement and a mid-life plateau, and then declining into retirement. Spousal assistance is more effective and, consequently, expected to be greatest, at the beginning of a person's career when the opportunities for advancement are greatest. It would also be expected that younger spouses of workers will find it more profitable to invest as they may have a lifetime of joint benefits from these investments.

The demand for spousal help is also likely to vary with age to the extent that younger workers are more active in the home than older workers, mostly due to the presence of young children. Furthermore, the more health problems a worker has, the more a spouse can potentially help in the home providing health care. This is more likely to be the case with older workers, especially if the prevention of health problems are also viewed as an aspect of spousal investments in human capital. A combination of all these considerations related to age leads us to predict a nonlinear relationship between age and spousal help, a spouse being more likely to help at the beginning and at the end of the life cycle. This implies that the relationship between spousal help and worker's age is U-shaped and that the predicted effect of age is negative and of age squared is positive.

It also follows that the younger a worker's children, the larger the demand for spousal indirect help, and the more spousal help may be reported. This is especially likely to be the case with female workers.

An alternative theoretical perspective—a normative one—argues that spousal help is closely related to a person's beliefs and values, and that these are shaped by the culture and role models available in one's significant environment. Social norms determine both the kind and the amount of help that one spouse gives to another. The fact that societal norms generally define the woman's role as that of helpmate to her husband leads us to expect that men receive more help than do women. This is especially the case when one or both of the partners have more traditional attitudes toward gender roles in marriage. For this reason, we hypothesize that religiosity and ethnic origin—culture-rich identities—have an impact on spousal help. Among managers who are more religiously orthodox or those who originate from more religiously orthodox families, as well as among managers originating from the more traditional Moslem countries of the Middle-East and North Africa (Eastern origin) and married to spouses of Eastern origin, men will receive more, and women less, spousal help than among managers who are nonreligious or originate from Europe or America (Western origin).

Similarly, older people are likely to be more influenced by traditional stereotypes about gender roles so that, from the perspective of social norms, we expect older men to receive more and older women to receive less spousal help.

There is research evidence of a relationship between husbands's education and egalitarian division of labor in the family (Katz & Peres, 1988). More-educated husbands tend to have more egalitarian attitudes and therefore, we expect, would be more supportive of the wives' careers than less educated husbands. On the other hand, social norms generally require that women earn less than their husbands (for a review, see Hertz, 1992). When women's earnings are equal to or greater than those of their husbands, husbands may be less supportive of their careers (Hochschild, 1989) than when women comply with social norms and remain the proverbial "two steps behind" (Bernard, 1974).

The predictions derived from the different theoretical perspectives (Table 1) are here tested on data collected from a sample of married male and female Israeli managers and their spouses. Women managers in Israel differ from those in the United States and many countries of Europe in that a higher proportion are married and have children, and they constitute a small proportion of total managers: 15% compared to 37% in the United States. (For a review of the cross-cultural literature on women in management, see Adler & Izraeli [1988]; Antal & Izraeli, *in press*). Childcare services in Israel are more highly developed than in the United States but less so than in France and the Scandinavian countries. But the similarities between managers across countries, especially between the United States and Israel, are greater than the differences. In Israel, professional training is based on the American model and major texts in almost all fields are from the United States. In both countries, women managers are concentrated in the lower ranks of the hierarchy and are found more in staff than in line positions. They earn less than men and less than their husbands and have primary responsibility for childcare and domestic work.

The generalizability of the findings, however, depends less on the representativeness of the sample than on the validity of the theoretical model. It is likely that the effects of the specific variables that contribute to the extent of spousal help that a worker receives will differ somewhat across cultures. However, we expect that our results, based on an Israeli sample, will be indicative of the direction of effects of similar variables on spousal help in other cultures.

METHODOLOGY

The Sample

The data, part of a larger study of family-work relations by Izraeli, were collected from 869 Israeli managers (416 women and 453 men) employed in a variety of firms, including industrial, retailing, financial services, and public services organizations. The sample is unique in that the men and women are matched for organization, managerial level, and field of managerial specialization, allowing for a more valid gender comparison than is usually possible. Matching was accomplished by the following process: within each firm, all the women managers (defined as those responsible for the work of others and having significant discretion in carrying out their job) were identified and included in the sample. A comparable sample of male managers were added. Wherever it was not possible to match for type of job and job level or grade, a close approximation was selected. The personnel manager in each firm distributed the questionnaires, which were then returned anonymously by respondents directly to the researcher in self-addressed envelopes. The response rate was 58%. Only married managers were included in the present analysis.

Table 2. Sample Characteristics: Means and Standard Deviations

<i>Variables</i>	<i>Female Managers</i>	<i>Male Managers</i>
Age	42.489 (7.880)	43.617 (7.811)
Education (years of schooling)	15.348 (2.872)	15.024 (2.686)
Spouse's education (years of schooling)	15.018 (3.160)	13.632 (2.591)
Religious or traditional (%)	20.775	31.138
Religious/traditional background (%)	37.324	48.204
Age of youngest child	11.535 (8.811)	9.144 (7.067)
Eastern origin (%)	16.901	27.844
Spouse Eastern (%)	10.563	19.760
Relative income manager (%)	47.324 (13.676)	72.266 (15.863)
Degree of spousal help (1-5)	3.887 (0.798)	3.949 (.789)
Spouse helps (%)	69.253	65.085
• a great deal (%)	27.586	24.407
• clerical work (%)	6.780	6.034
• a great deal in clerical work (%)	1.695	.862
• in professional advice (%)	42.712	18.103
• a great deal in professional advice (%)	8.813	2.586
• with social connections (%)	26.780	36.494
• a great deal with social connections (%)	3.390	6.896
• moral support (%)	83.390	75.862
• a great deal with moral support (%)	43.390	35.919
<i>Sample size</i>	284	334

Notes: Eastern origin: A dummy variable equal to 1 if the respondent was born in Asia (except Israel) or Africa, or if the respondent was Israeli-born with a father born in Asia or Africa.

Spouse Eastern: A dummy variable equal to 1 if the spouse was born in Asia or Africa. For the spouse, there is no information regarding the father's place of birth.

Of the original sample, 90% of the men and 81.3% of the women were married, approximately 94% of each for the first time.

Table 2 documents some of the characteristics of the subsample of married managers we selected. We observe that the women were slightly younger and slightly more educated than the men. Fewer of them were religious. Only 20% of the women compared to almost 30% of the men described themselves as religiously orthodox or traditional. One-third of the women and almost half of the men came from homes where their parents were religiously orthodox or traditional. The gender gap may be explained in terms of expectations that religious and traditional families have regarding the role of women in society.

For example, religiosity in Israel is an important predictor of work attitudes (Hartman 1978). Traditional families do not encourage women to select careers such as management where it is difficult to combine work and family life.

We also observe a gender gap in ethnic origin²: 28% of the men but only 17% of the women were of Asian-African origin. The difference here, too, reflects not only the more traditional attitudes of Asian and African families but also the ethnic difference in educational achievement. Education is an especially important resource for women's access to managerial positions (Izraeli 1988).

Finally, we observe (Table 2), that women contributed significantly less to the total household income than did the men (47% compared to 72%). Data on managers' absolute income were not available. This gender gap in contribution to family income reflects both women's lower earnings (Efroni, 1988) and the fact that spouses of female managers earn more than do the spouses of male managers. In part, this is due to differences in labor force participation. For example, in our sample 55% of the men but only 5% of the women were married to a spouse who was either unemployed or who worked part time.

Table 2 also presents the means and standard deviations for spousal help. Men and women gave almost identical evaluations of spousal help. On a scale from 1 to 5, all managers ranked their spouses' help on average at 3.9: 69% of the women and 65% of the men claimed that their careers were enhanced by spousal assistance. The standard deviations were also similar. Significant gender differences, however, are noticeable in type of help received. More women than men reported receiving some or much professional advice from their spouse (43% compared to 18%) while more men than women reported being helped with social connections (36% compared to 27%). Approximately 80% of both men and women reported receiving some or a great deal of moral support. Very few respondents benefitted from direct clerical assistance from their spouses. The time spent in childcare, domestic work, and on family errands by the wives of the men was significantly greater than that spent by the husbands of the women in the sample: 3.32 (*s.d.* = 2.0), 2.86 (*s.d.* = 1.54), and 1.16 (*s.d.* = 0.80), hours per day respectively, compared to 1.59 (*s.d.* = 1.32), 0.79 (*s.d.* = 0.78), and 1.12 (*s.d.* = 0.94) hours per day respectively.

The correlations between types of assistance and perceived spousal support (Table 3) suggest both similarities and differences in variables men and women consider in their respective calculations of spousal support. The relationships between moral support, assists with social connections, professional advice, and spousal support are significant for both but somewhat stronger for men. The greatest gender difference, however, is in time spent in housework, which is associated with perceived spousal support for women but not for men. This implies that men tend not to view the daily hours that their wives invest in housework as making a contribution to their careers.

Table 3. Pearson Correlations between Dependent Variables and Types of Assistance by Sex

Variables	Female Managers		Male Managers	
	<i>r</i>	<i>p</i>	<i>r</i>	<i>p</i>
Time in childcare	.148	.02	.115	.05
Time in housework	.155	.01	.010	.87
Time on family errands	-.014	.83	-.035	.55
Moral support	.390	.00	.485	.00
Clerical work	.107	.09	.156	.01
Social connections	.149	.02	.212	.00
Professional advice	.141	.02	.223	.00

Key: *r*: correlation coefficient.
p: significance level.

The Measures

The dependent variable is a general subjective assessment of spousal help. The literature suggests that it is the perceived support that an individual receives which affects his/her behavior (Mortimer et al. 1978; Orthner & Pittman, 1986; Pittman & Orthner, 1988). Spousal help was measured by a direct question which asked the respondent: "All in all, how would you evaluate your spouse's contribution to your career?" Response possibilities were ranked from 1 to 5, where 5 (the highest level of help) was "contributed a great deal"; 4 "contributed somewhat"; 3 "didn't contribute but didn't disturb"; 2 "disturbed somewhat;" and 1 (the lowest level) "disturbed a great deal." Spousal help, the dependent variable, was treated once as a continuous variable, and ordinary least squares regressions were estimated, and once as a dichotomous variable. In the latter case, the dependent variable was equal to 1 if the spouse helped, and 0 if the spouse did not help. In the latter case, regressions were estimated by the logit method.

It is not obvious which of these two regression methods is more appropriate for our purpose of estimating the effects of the explanatory variables on spousal help. The linear regression has the advantage of utilizing all levels of possible help (1 to 5) but has also the drawback of treating help levels as a quantitative continuous variable with the assumption that the distances between various answers are equal. This assumption of identical distances affects the size of the coefficients but probably not the sign and significance, which are our main concern. This is supported by our experiments giving other weights to the five possible answers to the question of whether the respondent's spouse helps, assuming that the distance between one answer and the next is not necessarily the same (for instance, "helps a lot" = 12, "helps" = 10, "does not help and does not disturb" = 7, "disturbs" = 2 and disturbs a lot" = 0). Alternatively, we experimented with transforming the dependent variable using two alternative

types of transformation: the logarithmic one (assuming decreasing distances between the 5 values) and the quadratic one (assuming increasing distances between the five values). As in every case the results were no different in terms of sign and significance, we preferred to use the original scale.

On the other hand, while the logit regression is free of the assumptions of continuity of the dependent variable, it generates a loss of information, as we are referring to only two possibilities: helped or did not help. This lack of more detailed information could result in insignificant coefficients for some of the explanatory variables. The use of both estimation techniques contributes to the robustness of the results and the theory.

In addition, respondents were asked about specific types of spousal help, including professional advice, establishing social connections, clerical services, moral support, and time spent in childcare and in domestic work including family errands. These specific types of assistance are not included in the measure of the dependent variable but are presented to enrich our understanding of what respondents have in mind when they evaluate their spouses' contribution to their careers.

In both types of regressions, the independent variables were: age, years of own schooling and of spouse schooling, age of youngest child, the share of family income earned by the respondent, religiosity and religiosity of family of origin (a dummy variable equal to 1 if the person or the family is traditional or orthodox), ethnicity of the respondent (a dummy variable equal to 1 when the respondent was born in Asia or Africa or when the respondent was Israeli-born whose father was born in Asia or Africa), and spouse's ethnicity (a dummy variable equal to 1 when the spouse was born in Asia or Africa).

In addition, we included the square value of age, to take into account nonlinearities in the effect of age on spousal help, as well as the interaction of the respondent's education and the spouse's education, to test for possible complementarity between the effect of the worker's education and that of the spouse. Complementarity would produce a positive interaction term. Alternatively, if such interaction term were found to be negative, it might indicate that spouse's education substitutes for the worker's education (see Grossbard-Shechtman & Neuman, 1991).

In the linear regressions, each coefficient measures a marginal contribution, that is, the extent to which the dependent variable—a ranking of spousal help—responds when an explanatory variable changes by one unit. In the logistic regressions, the reported coefficients are the coefficients of an equation $\ln(p/(1-p)) = a + bx$, where p is the probability that the dichotomous variable equals 1 (Becker, 1965).³

FINDINGS

Table 4 presents the results of linear regressions where spousal help is defined as a continuous variable with a range between 1 and 5. Table 5 reports logit

Table 4. Linear Regressions of Spousal Help by Gender: Israeli Managers
 Dependent Variable: Degree of Help (1-5)

Explanatory Variables	Female Managers		Male Managers	
	b	t	b	t
Age	-0.096	1.77	-0.027	0.52
Age squared	0.001	2.08	0.0003	0.06
Own schooling	0.191	2.16	-0.082	0.84
Spouse's schooling	0.195	2.31	-0.085	0.78
Own schooling * spouse's schooling	-0.011	2.12	0.007	0.96
Age of youngest child	-0.018	2.06	0.013	1.23
Relative income of worker	0.004	1.22	0.004	1.56
Religious or traditional	0.159	1.17	0.300	2.39
Family background religious or traditional	-0.282	2.35	0.227	1.92
Eastern origin	0.361	2.28	0.142	1.15
Spouse Eastern	-0.372	2.10	-0.142	1.106
Intercept	2.480	1.38	5.649	2.85
R ²	0.0941		0.0660	
N	284		334	

Key: b: coefficient.
 t: t-statistics.

regression results. Both tables present results for male and female managers separately.⁴ The results of both types of regression are similar. The linear regression results, however, are statistically more significant. This is probably because the use of dichotomous variables in the logit regressions results in a loss of information: only two possibilities are considered, compared to five in the linear regressions. Most of the following discussion relates to the results based on the continuous variables (Table 4).

The more educated the female manager, the more she benefits from her husband's help (Table 4). Each additional year of schooling raises the degree of help by 0.2 points. This result supports the prediction derived from human capital theory (Table 1), however, only in the case of women. We had predicted an education effect for both men and women.

Another prediction derived from human capital theory is that workers married to more educated spouses would also receive more spousal help. Again, the regression (Table 4) confirms this prediction for women but not for men, the coefficient of women's spouse's schooling being positive and significant. The fact that the more educated the husband, the greater his contribution to his wife's career is also in keeping with the prediction derived from culture theory and social norms. The logistic regressions of Table 5 show the same sign for own schooling and spouse's schooling, but the coefficients are insignificant. Despite the strong correlation between husband and wife education ($r = .514$ for the female sample and $r = .524$ for the male sample), the coefficients for both the women's and their spouses' education were significant.

Table 5. Logit Regressions of Spousal Help by Gender: Israeli Managers
 Dependent Variable: Degree of Help (1-5)

Explanatory Variables	Female Managers		Male Managers	
	b	t	b	t
Age	-0.403	2.32	-0.097	0.65
Age squared	0.004	2.34	-0.001	0.96
Own schooling	0.403	1.61	-0.233	0.83
Spouse's schooling	0.409	1.72	-0.167	0.54
Own schooling * spouse's schooling	-0.022	1.49	0.015	0.74
Age of youngest child	-0.011	0.46	0.018	0.59
Relative income of worker	0.015	1.47	0.010	1.24
Religious or traditional	0.154	0.40	0.364	1.04
Family background religious or traditional	-0.676	1.99	-0.330	1.01
Eastern origin	1.402	2.79	0.201	0.57
Spouse Eastern	-1.035	2.00	-0.054	0.14
Intercept	1.841	0.35	1.474	0.26
Model X^2 (d.f.)	24.55 (11)		10.68 (11)	
N	284		334	

Notes: *b*: coefficient of the linear function of the log of the odds that a spouse helps, that is, $\ln[p_i / (1 - p_i)] = a + bx_i$, where p_i is the probability that a spouse with characteristics x_i helps, estimated using the maximum likelihood estimation routine.

t: asymptotic *t*-statistics.

When we tested whether own schooling and spouse's schooling are complements or substitutes by including the interaction of both schooling levels, we found that in the regression for female managers, such interaction term took a negative sign. This can be interpreted as indicating that for a female manager, her education and her husband's education are substitutes: the more educated one of the spouses, the smaller the contribution of the other's education to the manager's career. To calculate the net effect of both her schooling and spouse's schooling on help received by a female manager, we deducted the interaction term multiplied by the spouse's schooling from the direct effect of her schooling. Considering that both the managers and their spouses had an average of 15 years of schooling, the full effect of a year of own schooling on a female manager's spousal help is 0.026, $(0.191 - 0.011 \times 15)$. Likewise, the full effect of a year of spouse's schooling is 0.030, $(0.195 - 0.011 \times 15)$.

Confirmation of the hypotheses based on a human capital perspective is seen in the coefficients of age and age squared. Age takes on a negative coefficient in the regressions in Tables 4 and 5. However, only in the regressions for female managers (both the linear regression in Table 4 and the logit regression in Table 5) are these coefficients statistically significant. We also find that the coefficient of "age square" is positive in regressions for female managers in Tables 4 and 5, indicating that the effect of age is not linear. The amount of help a husband gives his wife decreases until she reaches 50 (48 years according to Table 4), after which it increases. This nonlinear pattern is predicted by the human capital

theory discussed above. The social norms perspective explains the negative sign of age, but not the nonlinearity we found.

The magnitude of the effects of education and age appear different for men and women. To test for the significance of the difference, we ran a pooled regression of both male and female managers and included interaction terms between gender and all the other explanatory variables. We found that the above-mentioned differences between male and female managers were statistically significant (Becker, 1981).

Human capital theory did not lead to a clear prediction regarding the effect of the worker's relative earnings on spousal help, whereas from culture theory, we derived a hypothesis that relative earnings and spousal help are negatively related. We found an insignificant coefficient for relative income in all regressions (Benham, 1974).⁵

A perspective of human capital investments in the home also led us to predict that women with younger children would receive more help from their spouses. As can be seen from Tables 4 and 5, the coefficient of age of the youngest child is negative. This confirms our prediction: the younger the child, the more the female manager benefits from her husband's help. Results from our pooled regression showed that taken in absolute value, the coefficient of "age of youngest child" had a significantly stronger effect for female managers than for male managers. Of the predictions derived from the culture theory, religiosity contributes to explaining the variation in spousal help, but only in the case of men. Men who define themselves as religiously orthodox or traditional are more likely to benefit from spousal help.

In contrast to our prediction, however, women who define themselves as religious or traditional do not receive less help from their spouses than other women. Religiosity is one of the few coefficients which is insignificant in the regression for female managers (see Table 4).

We predicted that the effect of a traditional or religious family would be similar to that of a self-evaluation as traditional or religious. To our surprise, we found that when both variables are included in a regression of spousal help, they have opposite signs. In both Tables 4 and 5 and for both male and female managers, we found that respondents who had grown up in religious or traditional families reported less spousal help. While this confirms our predictions for female workers, this result surprises us for male workers.

As predicted, women married to husbands of Eastern origin receive less spousal help than do women married to men of Western origin. Contrary to our prediction, however, the ethnic origin of the wife did not affect the amount of help reportedly received by male managers. We did not predict the higher reported level of help received by female managers of Eastern origin.

DISCUSSION

The major purpose of this study was to identify the factors that influence the amount of support or assistance for their careers that managers get from their spouses. The effect of variables derived from a human capital perspective, in addition to the effects of cultural norms, were examined separately by gender. It appears from our findings that about two-thirds of the married Israeli managers in our study acknowledged that their spouses helped promote their career. Such a finding supports explanations of the observed higher earnings of married male workers in terms of human capital theory. If a majority of the married men in our sample reported that their spouses contributed to their success at work, then it should not come as a surprise that married men earn more than unmarried men. We also found that a majority of the married women in our sample reported being helped by their spouses.

Our study suggests ways in which such help might attenuate earnings differentials between unmarried and married women. The fact that working women receive substantial help from their spouses could explain why most studies do not find that married women earn less than unmarried women. Existing patterns of specialization in the home lead us to expect that the married woman who works full time outside the home is in a disadvantageous situation: she typically has time-consuming responsibilities in the home, which she has to combine with a full-time paid job. This may be particularly difficult for a married woman working as a manager.

What our study brings out is that husbands tend to help their employed wives when it is most productive to do so. That help can be more productive either because the wife is more educated or because she spends more time at home. For instance, managers with young children receive more spousal help than managers with older children. If husbands help more when their wives find it most difficult to handle a full-time paid job in terms of possible time conflicts, the major source of income variance due to a woman's marital status is neutralized, and one expects relatively small differences in earnings between married and unmarried working women.

This fact of husbands substituting for some of their wives responsibilities also explains why the interaction of wife's and husband's education had a negative sign in our regression of spousal help received by female managers. We also found that younger women receive more help from their husbands, which can be interpreted in three ways: the husband's help may be more productive because there are more young children, his help may be more productive because she has a longer career ahead of her, or his values may be less traditional. This relationship with age was found to be curvilinear; older women may have more health problems and need for help.

A point generally overlooked in the literature on this subject is the impact of expected returns on investment. In a period of easy divorce and

opportunities for independent careers, people are less likely to invest in a spouse's career if their chances of personally benefiting from this investment are slim (see Grossbard-Shechtman, 1986). The willingness of a spouse to invest in a worker's career, therefore, depends both on the probability of divorce and on the profitability of the investment. For instance, if young age simultaneously increases the profitability of spousal investments and the probability of divorce, its net effect on spousal help may be insignificant. The longer the marriage, the more likely it is to continue, and the more a spouse has reason to invest in the worker's earnings potential which, however, may have declined with time. We assume, however, that these considerations are not important in Israel, where the divorce rate is relatively low (approximately 20%) and divorce is equally as likely during the first five years as after 20 years of marriage.

Few of the variables explaining the degree of spousal help reported by female managers also explained the degree of spousal help reported by male managers. This is not surprising, given the asymmetry in the division of labor typical of most households, including Israeli households. Working men do not have the same needs for spousal help as do working women. They do not experience time conflicts when their children are young in the same way women experience such conflicts. This may explain why none of the hypotheses derived from the perspective of investments in productivity at home are corroborated in the regressions we estimated for male managers.

We can also speculate why the hypotheses following from human capital theory from the perspective of productivity at work did not hold for men. One possible explanation is that our dependent variable, spousal help, as a subjective assessment is influenced by the respondent's willingness to acknowledge receiving such help. Possibly, for men more than for women, the variance in the dependent variable may be explained by factors that affect men's willingness to acknowledge receiving career assistance from their spouses. Furthermore, the very notion of the supportive wife who achieves vicariously through her husband and is a helpmate to him is at the heart of the relationship in a traditional marriage. Among less traditional or more modern couples, there is likely to be greater competition, and demand for equality and reciprocity.

In conclusion, this study throws new light on the relationship between marriage and success in the workplace. The fact that both men and women recognize that their success at work benefits from spousal help, suggests that the often-found correlations between earnings and marital status are not simply the result of a selection process whereby people earning more find it easier to get married or stay married. Our evidence shows that there are real transfers of time and resources behind the comparative success of married workers.

In the case of women managers, the possible benefits from spousal help are relatively easy to define. We show that spousal help is most likely to be reported where such help is most productive. We hope that this study will encourage

further explorations of the determinants of spousal help and of the link between such help and differentials in earnings between married and unmarried workers.

NOTES

1. Empirically, it is difficult to separate the explanation of earnings as a function of marital status from the explanation of marital status as a function of earnings (See Conlisk 1988).
2. The major ethnic cleavage in Israel among Jews is between those from the Moslem-dominated cultures of the Middle East and North Africa, locally known as Easterners, and those from the cultures of Europe and North and South America, locally known as Westerners. The former tend to be more religious, less educated, and generally more traditional.
3. In order to calculate the marginal contribution of an explanatory variable on p , we can use the approximation $bp(1-p)$, where b is the coefficient of the logistic regression and p the probability estimated through the regression (generally at the mean value of all the explanatory variables).
4. We are only reporting the separate regressions for male and female managers, for they are easier to read. The results of the pooled regressions are available upon request.
5. Similarly, spouse's occupational status (defined according to the Kraus scale (1978), which takes values from 1 to 10) did not have a significant effect on spousal help, neither by itself nor in interaction with schooling. However, when we ran regressions where the dependent variable was spousal help operationalized as professional advice, the husband's occupational status had a positive and significant effect on spousal help received by female managers. In contrast, the wife's occupational status did not affect the amount of professional advice a husband reported receiving.

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