Cover page

The role of culture in shaping employment penalties among different ethnic groups

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# Abstract

**Objective:** This study examines the concept of *employment penalties* and demonstrates how traditional-patriarchal and modern-liberal cultures shape *employment penalties* differently.

**Background:** *Ideational*, *economic* and *preference theories* explain the relationship between building a family and women’s odds of employment within the labor market.  The competition between the labor market and the marriage market among women undermines the odds of their participating in the labor market and working a full-time job in a prestigious profession. This study uses *culture theory* to explain why women in traditional-patriarchal cultures pay significantly higher employment penalties than those in modern-liberal cultures.

**Method:** A logistic and multinomial regression was applied to data from Israeli social surveys (2002-2013) to examine the differences between Arab women from traditional-patriarchal cultures and Jewish women from modern-liberal cultures in terms of *employment penalties*. The associations between various explanatory variables and the odds of employment variables were examined.

**Results**: The results show that all women pay employment penalties as a result of building or dissolving a family, but women who live in traditional-patriarchal cultures pay higher penalties than women from modern-liberal cultures. However, for all women, teaching professions are a reasonable compromise that enables them to integrate family-building and career development.

**Conclusions:** *Culture theory* best explains why women in traditional-patriarchal societies are found to pay higher *employment penalties* than women from modern-liberal cultures.However, applying conditions similar to those in teaching professions to all professions, in the period of raising young children, would exempt all women ,from both traditional and modern societies working in whole occupations, from paying employment penalties and encourage young women to integrate into prestigious occupations (such as those in STEM fields).

# Introduction

# In most industrialized societies, changes in how family and employment interface have been taking place since the 1960s, with an increase in the age of marriage and a decrease in both marriage rates and number of children (Lesthaeghe & Surkyn, 1988; Lesthaeghe, 2014). As a result, the relations between women's choices in the labor market and the institution of marriage have become the object of academic study (Cherlin, 2004, 2020; Oppenheimer, 1988). The purpose of the present study is threefold. One is to examine the employment penalties women pay when they marry, which can be related to a loss of income due to various reasons; such as a decrease in working hours, dropping out of the labor market entirely, or compromising by taking less prestigious jobs. The second is to examine whether women in traditional-patriarchal societies pay higher employment penalties than women who live in modern-liberal cultures. The third goal is to examine whether for all women, but especially those in traditional-patriarchal societies, the teaching profession represents a reasonable compromise that enables them to combine family-building and career development.

This study is based on unique data from the Social Survey of the Israeli Central Bureau of Statistics from 2002-2013 (ICBS). These data allow for an examination of the differences in *employment penalties* between Jewish women living in a liberal-modern cultures and Arab women living in traditional-patriarchal cultures, with the aim of finding strategies that allow women to combine family-building and career development. Building a family has many advantages; Goldscheider et al. (2015) argue that the institution of marriage enhances a couple's commitment to each other and the partnership, which in turn enhances the mental and physical health of the couple and their children. Additionally, Ogolsky et al. (2019) find that married couples enjoy more family support and satisfaction than unmarried couples. However, employment means joining another framework that competes with the family for physical, mental, and emotional resources (Greenhaus & Beutell, 1985). In this conflict penalties are paid on both sides of the equation.

**Scientific background**

***Employment penalties***

Building a family results in women paying *employment penalties* (such as wage loss, exit from employment, or a return to part-time jobs) and a concentration in non-prestigious occupations (Amuedo-Dorantes & Kimmel, 2005; Anderson, Binder, & Krause, 2002; Mills, Rindfuss, McDonald, & te Velde, 2011; Stier & Lewin-Epstein, 2007). There are three types of theories that explain *employment penalties*. The first are *Ideational Theories,* which focus on changes that began a few decades ago, when Western societies experienced conceptual changes in their values and cultures that lead to secular, individualistic, and post-materialism processes ([Lesthaeghe & Surkyn, 1988](#bookmark=id.17dp8vu)). Sometimes women even prefer to stay single so as not to pay the employment penalties married women pay. Evidence was observed during the first part of the gender revolution, when women entered the labor market and thus violated the family balance ([Goldscheider et al., 2015](#bookmark=id.3rdcrjn)), as well as during the demographic transition in the early 1960s, which saw marriage rates declining, the age of marriage rising, and birth rates dropping ([Courgeau & Bruijn, 1999](#bookmark=id.26in1rg)), along with increased cohabitation, more single women, and increasing rates of single motherhood ([Cherlin, 2004](#bookmark=id.lnxbz9); [Goldscheider et al., 2015](#bookmark=id.3rdcrjn); Oppenheimer, 1988).

One of the strategies that women use in order to minimize employment penalties was delaying the marriage age. for example Oppenheimer (Oppenheimer, 1988) attempts to explain the phenomenon of delayed age of marriage through *job search theory*. *Job search theory* claims that women and men postpone marriage until they finish their education and the potential financial contribution of each potential spouse becomes apparent ([Oppenheimer, 1988](#bookmark=id.35nkun2)). According to Oppenheimer, both spouses become dependent upon each other's income and both seek out a spouse with a high income. Since a partner’s future earnings cannot be determined if couples marry at an early age, they prefer to postpone marriage. Women have two reasons for postponing marriage: to wait for the couple to finish their education and make each partner’s earning potential clearer, and to maximize their own potential contributions by acquiring education and employment experience. thus we can expect that marriage at a young age, which is more suitable for childbirth, results in women paying employment penalties. This is because building a family limits the resources a woman can invest in developing her professional skills.

The second type of theories for explaining employment penalties are *economic theories* about human capital (Becker, 1985, 1992), which argue that disrupting labor market activity for the purpose of building a family constricts women in the labor market, both on the individual level (impacting women’s opportunities within the labor force) and on the societal level (women’s abilities are not fully utilized within the labor market).

Family-building increases the woman’s specialization in her traditional role as wife/mother and the man’s position as breadwinner (Becker, 1985). Women’s specialization in the household, which Becker claims is a natural specialization that is reinforced by socialization, results in women committing to the needs of the home by dropping out of the labor market. Once they are out of the labor force, women lose employment experience and human capital, resulting in a loss of wages. In his essay on the family, Becker (Becker, 1985, 1992) argues that marital life is a relationship of exchange, as both husband and wife try to maximize household income. Thus, each spouse looks for the other’s contribution to the relationship. According to this approach, women find it relatively easier to maximize their contributions through housework and childcare, while the man’s advantage lies in the labor market; therefore, women choose to use their relative advantage and contribute their time in the home. However, when women enter the labor market and become economically independent, this balance is broken and the profit from marriage-building decreases. Because she have to woke in her specialty --household duties and childcare, which relates to more economic penalties. All this may cause an increase in divorce rates (Becker, 1985).

The macroeconomic debate on divorce often focuses on the wife’s relative income (Becker, 1981; Oppenheimer, 1997). When women become economically independent, they can separate from their husbands. Moreover, the more a woman earns, the higher the odds of divorce are (Becker, Landes and Michael, 1977). The first explanation for this phenomenon posits that when both husband and wife participate in the labor market, the wife’s specialized focus on the household decreases, which triggers a decrease in the husband’s focus on the workforce. As a result, the gains from the marriage also decrease. Even working women may lose because of her invisible work at home. Moreover, a husband loses because when his wife does not participate in the labor force, he can invest in his career and increase his economic gains. This means that the household also experiences an increase in economic gains (עולה התועלת של משק הבית). Thus, we can also expect that divorce is also related to women’s losses in the labor market and forcing her to pay employment penalties.

The second explanation for why divorce rates increase along with the wife’s income focuses on the opportunities that are available to women depending on their financial status. When a woman participates in the labor market and is financially independent, she has the ability to divorce, especially when she is not satisfied with her marriage. A woman who is not financially independent will find it much harder to leave her husband, as she stands to lose much more than a woman with an independent income. The husband’s income is an important factor in a woman’s calculations. If it is higher than her own, her motivation to divorce is lower; if it is lower than her own, the opposite is true. Thus, the opportunity for a woman to request a divorce is tied to her income relative to that of her husband (Kalmijn, Loeve and Manting, 2007). In short, employed women will face losses if they decide to divorce and pay employment penalties.

This theory posits that the considerations women make about starting a family, remaining single, marrying, finding an alternative partner, or divorcing all depend on the expected gains and losses (Becker, 1992). The expectation is that marriage will punish them by removing them from the labor market, pushing them into part-time employment, reducing their range of opportunities, or directing them to work in female-oriented professions. These penalties accumulate throughout a woman’s life and result in gender segregation within the labor market, with most women draining into female-oriented professions.

The third theory used to analyze employment penalties is Hakim’s *preference theory* (Hakim 2003), which explains how segregation in the labor market comes about. Most women become aware of the nature of the labor market early in their lives and end up choosing professions that allow them to build a family. In other words, in exchange for family-friendly work, flexible hours, vacations, etc., women are willing to give up full-time or prestigious employment; when there are no other options, they may even drop out of the job market entirely. In contrast, family-building does not interfere with men’s accumulation of human capital, employment experience, and rewards; they sometimes even receive salary increases as a result of starting a family. This further widens the gender gap (Glauber, 2018).

Decisions about starting a family, dissolving a marriage, and building a career cannot be discussed without considering the cultural influences at play. In their article on fertility decisions, Pollak & Watkins (1993) argue that between the *economic* models explaining how people choose and the *sociological* theories explaining the inability to choose, there is room for *cultural* influence. They argue that individuals make decisions within a diverse range of culturally approved behaviors, suggesting that culture heavily influences behavior.

From this, it can be hypothesized that women’s choices regarding the process of building a family can be free and rational in modern societies or dictated by normative culture in traditional societies. Thus, *economic* and *self-selection* theories are not valid in traditional societies, because in traditional-patriarchal *cultures*, marriage is valued more highly than economic gains in spite of any penalties it may bring. That makes women more likely to choose the institution of marriage, and less likely to leave it.

Documentation of employment penalties can be found in Hakim’s studies (Hakim, 2002, 2003, 2006) about liberal-modern societies. Hakim developed a thesis called *preference theory* based on the *theory of selection*, arguing that women make decisions according to their preferences. She found three patterns of choice among women: career choice, family choice, and an adaptive lifestyle choice allowing the integration of family and career building. Most women choose the third pattern, while only a minority choose the career or family options. This third choice involves giving up prestige and choosing female-oriented jobs, such as teaching or seasonal/temporary work, as well as a turn to part-time jobs once women have children (Hakim, 2003). The essential thesis is that married women, who mostly regard themselves as secondary earners, choose occupations that are compatible with family work, such as seasonal jobs' temporary work or school-term time jobs (in the United States (Hakim, 2003 p357) or on a part-time basis (in the United Kingdom) (Hakim, 2003). This thesis is built on the observation that certain occupations, such as teaching and secretarial work, employ women almost exclusively, not only in Europe but across the whole world (Anker, 2000). Teaching is an ideal family-friendly occupation because it allows mothers to be at home with their children during school holidays, including the long summer holiday (Cinamon & Rich, 2005).

According to England and colleagues (England, Bearak, Budig & Hodges, 2016), even women with high qualifications and high earning capacity cannot escape employment penalties: they pay salary penalties when they decide to have children. Less is known about employment penalties in traditional societies, where *self-selection theory* is irrelevant (H’madoun, 2000) because women are not as free to make decisions as they are in more modern societies. According to Inglehart and Welzel (2005), as the level of socio-economic development increases in countries around the world, values that constrain individuals in their freedom of choice change, allowing people to take more control over their lives and develop their creative human potential. This means that *cultural theories* can be considered more appropriate in this context, as they argue that a woman can choose only from a range of behaviors affirmed by the dominant culture, and her choices are often not intended to promote her socio-economic status (Pollak & Watkins, 1993).

Culture can also be an important factor when determining a working woman’s decision to divorce. Kalmijn, Loeve and Manting (2007) argue that in a culture with traditional gender norms, a woman who earns more than her husband is considered a threat to the husband’s identity as the breadwinner, increasing the odds of divorce. On the other hand, within modern-liberal cultures where gender roles are more egalitarian, the expectation is that a woman’s economic independence is not a threat to her marriage; on the contrary, it decreases the odds of divorce. Findings show that the odds of divorce are higher among economically independent women.

Such theories cannot be used to explain the choices of women who live in traditional-patriarchal cultures. In such a culture, even economically independent women need marriage and the family as protection (Fogiel-Bijaoui 2017; Kandiyoti 1988; Barakat, 2015). In a patriarchal society, the family is a fundamentally important institution that stands at the center of a woman’s life. That means that women will be less willing to give up on having a family, even though the family also functions as a framework of control and supervision (Fogiel-Bijaoui 2016).

For several decades now, modernization processes taking place in traditional societies have encouraged women’s education and career development (Culpan & Marzotto, 1982). However, conservatism, religion, and the level of religiosity of a society reduce women’s chances of participating in the labor market. This is true both in the MENA region (Middle East and North Africa) and in Eastern and Western Europe (Fischer & Aydiner-Avsar, 2018). When women in traditional societies are exposed to modernization, they tend to embrace economic development while maintaining deep religious values as an economic safeguard (Fischer & Aydiner-Avsar, 2018). These findings reinforce the results of a study by Culpan & Marzuto (1982), who found that traditional women in Turkey embrace modernization for financial reasons but continue to attach value to the institution of marriage. Hence, the expectation is that traditional women will pay higher employment penalties for getting married.

## The case of Israel: The differences between the two populations

Israel is a good laboratory for the study of employment penalties because of its diverse population groups. At the end of 2016, the Jewish majority group constituted about 75% of the population while the Arab minority group made up about 21% (ICBS, 2016). While most Arabs are conservative and religious, most Jews are modern-liberal and secular (ICBS, 2018). Also, Israel is a useful case because teaching is considered to be an “intermediate status profession” — not prestigious, but not a minimum-wage profession either (Cinamon & Rich, 2005). Teaching is seen as a way for women to earn a supplementary salary to complement the husband’s principal salary. For historical and other reasons, most teachers in Israel are women (OECD, 2019). Until a few years ago, a full-time teaching job amounted to 24 hours a week; that number currently stands at 36 hours. For most other professions, a full-time week is 40–42 hours (Katz, 2017). In addition, teachers’ working hours align with the hours when children are at home and with their annual vacations, meaning that women can both work and care for their children’s daily needs (Cinamon & Rich, 2005). This explains why teacher salaries in Israel are low relative to other jobs requiring the same years of education, and compared to teacher salaries Western countries (OECD, 2019). For all of these reasons, teaching is considered a job for mothers in Israel.

### Arabs

Modernization has seeped into Arab society and is reflected by an increase in women’s education and an improvement in their socio-economic status (Azaiza, 2013). However, this evolution has also resulted in new dilemmas for Arab women. On the one hand, several factors strengthen the institution of marriage. One of them is the fact that, in traditional societies, being single is not acceptable. As sex outside of the marriage framework is considered immoral (Hasan, 2002) and is not allowed, cohabitation is not a viable option (Hleihel, 2009). Violation of this prohibition can result in severe sanctions and even murder (Hasan, 2002). Another factor is that culture and patriarchy play an important role in determining the age of marriage age, dictating rules on reproductive age and gender roles for households and society in general (Goldscheider, 2015). Arab women in Israel suffer from triple discrimination: they belong to a national minority (Fogiel-Bijaoui, 1999; Herzog, 2004), face a lack of job opportunities in ethnic enclaves (Khattab, 2002), and have to confront male hegemony in a patriarchal structure (Abou-Bakr, 2015; Hasan, 2002; Kandiyoti, 1988; Sa’ar, 2001).

However, the status of Arab women is changing as they benefit from increasing rates of education and employment (Meler, 2017; Sa’ar, 2001; Azaiza, 2013), a higher age of marriage, a decline in the rate of women marrying at very young ages, and an increase in the number of 25-year-old single women (Hleihel, 2009; Lewin, 2012).

### Jews

Despite the enormous societal changes brought on by increasing individualism, the institution of marriage remains popular among Jews in Israel (Fogiel-Bijaoui, 2017). Marriage among Jewish women in Israel is a unique case: women participate in the labor market at high rates, but remain conservative when it comes to marriage and fertility (Raz-Yurovich, 2014). The institution of marriage among Jews is stable, although the age of marriage is on the rise (Lavee & Katz, 2003); in 2017, it was 25.8 years (ICBS, 2018). One phenomenon that can explain the rise in marital age is cohabitation (Manor & Okun, 2016), a framework that enables Jewish women to delay the age of marriage so that they can establish their economic status. This would be in line with *economic theories* (Cherlin, 1980; Oppenheimer, 1988). Compared to Arab women, the institution of marriage does not seem to be an obstacle to the employment of Jewish women (Ekert-Jaffe & Stier, 2009; Okun & Oliver, 2007). Even ultra-Orthodox women, who live in a patriarchal culture, manage to combine marriage and employment. This is due to public policies that work to advance women’s participation in the labor market by making high-tech jobs accessible and fit for ultra-Orthodox culture (Raz & Tzruya, 2018), and to train and teach women using measures that align with ultra-Orthodox culture (Fried-Stern, 2012). Labor force surveys have revealed a significant increase in the participation of Jewish women aged 25–65 in the labor market, from about 40% in 1972 to about 60% in 1992 and almost 80% in 2011. These increases in employment rates have almost filled the gender gap, which narrowed to less than 3% in 2011 (Mandel & Birgier, 2016). Among Arab women, on the other hand, the participation rate in the labor market among those aged 25–65 was less than 5% in 1972; it increased over the years to about 15% in 1992 and about 30% in 2011. That means the employment gender gap among the Arab population remains quite large at 40% (Mandel & Birgier, 2016).

In Israeli society, two populations live side by side: the majority Jewish population with modern-liberal characteristics and the Arab minority population with mostly traditional-patriarchal characteristics (Lavee & Katz, 2003). Arab women live in a culture in which the institutions of marriage and work compete with each other (Sabbah-Karkaby & Stier, 2017), while Jewish women live in a culture where the institution of marriage is not an obstacle to career development (Okun, Oliver & Khait-Marelly, 2007). Cultural differences may be related to differences in employment penalties. Accordingly, the present study examines the differences between employment penalties paid by Jewish and Arab women. Furthermore, if teaching professions are a reasonable occupational compromise that allow women to build a family while remaining employed, this option would be more attractive in a traditional-patriarchal society where women’s functioning in the family setting is more valued than their participation in the labor market.

**Hypothesis**

In line with *economic* and *self-selection theories*, we hypothesized as follows: (1) married and divorced women will pay more employment penalties than single women. Compared to single women, married and divorced women have: a) lower odds of participating in the labor force vs. participating; b) lower odds of working in full-time vs. part-time jobs; c) lower odds of working in prestigious occupations vs. teaching professions; and d) lower odds of working in prestigious occupations vs. all the other..

In line with our review of theories on modern-liberal cultures and traditional-patriarchal cultures, we hypothesized as follows: (2) women in Arab society, characterized as a traditional-patriarchal society, pay higher employment penalties than Jewish women for entering and leaving the institution of marriage. Compared to married and divorced Jewish women, married and divorced Arab women have: a) lower odds than single women of participating in the labor market vs. not participating; b) lower odds of working in full-time vs. part-time jobs; c) lower odds of working in prestigious occupations vs. to teaching professions; and d) lower odds of working in prestigious occupations vs. all other occupations.

**Methods**

**Data sources**

This study is based on data collected in Israeli social surveys conducted from 2002–2013 by the Israeli Bureau of Statistics (ICBS). The surveys are unique and have significant advantages: the data collected on the micro-level is very detailed and provides a wide range of information on individuals, including their education and employment. The data also includes information on self-defined current religion and level of religiosity for individuals from both the Arab population (Muslim, Christian, or Druze) and the Jewish population (ultra-Orthodox, religious, traditional-religious, traditional/less-religious, or secular/non-religious). Levels of religiosity are important because they are key to understanding gender roles and family behavior in Israel (Atrash & Schellekens, 2011). The social surveys allow for a comparative investigation of different populations, and the information they provide enables an examination of the relationship between family formation and employment.

**Subjects**

This study focuses on married women aged 20–45 in three samples: women in general, Jewish women separately, and Arab women separately.

**Explanatory variables**

 The explanatory variables were divided into macro-level and micro-level variables. At the macro level, the explanatory variables were *nationality* and *religion* (Arab or Jewish group). At the micro level, the explanatory variable was *single, married or divorced* women.

**Control variables**

*Years of the survey:* an interval variable that ranges from 2002 until 2013.

*Age* includes the following categories: (1) 20–24; (2) 25–29; (3) 30–35; and (4) 40–45.

*Women’s and spouse’s education level*: The highest diploma received was recorded as one of the following categories: (1) secondary education; (2) matriculation certificate; (3) non-academic certificate; and (4) academic certificate.

*Work experience*: The reported total number of years worked in all workplaces was grouped into eight categories: (1) no experience; (2) less than one year; (3) 1–4 years; (4) 5–9 years; (5) 10–14 years; (6) 15–19 years; (7) 20–24 years; and (8) 25 years or more.

*Residence ownership*: (1) woman is the owner of the place of residence; and (2) woman does not own the place of residence.

*Number of vehicles available to the woman*: (1) none; (2) one vehicle; (3) 2 vehicles; and (4) 3 vehicles or more.

*Student status*: Respondents who were currently studying and who reported that the last school they attended was an academic institution were classified as students and coded as (1), non-students were coded as (0).

*Residence region*: (0) periphery; (1) center.

*Religiosity level among Jews*: (1) Ultra-Orthodox; (2) religious; (3) traditional/religious; (4) traditional/less-religious; (5) secular/non-religious (groups 4 and 5 were integrated in the data because they live a similar lifestyle).

*Religiosity level among Arabs*: (1) very religious; (2) religious; (3) not so religious; and (4) not religious.

**Dependent variables**

(1) *Participates in the labor force* — yes or no; (2) *position percentages*: (a) full (35 hours or more) or (b) part-time job (less than 35 hours). Among teachers, full-time is 24 hours or more, while part-time is less than 24 hours (1). To analyze these two variables, we employed a logistic regression, which enabled us in examining the factors that increase the odds of women’s participation in the laborforce and working a full-time job. Tests for differences between the coefficients for Arab and Jewish women were made by employing the Wald chi square statistic using Allison’s formula (Allison, 1999), which allowed us to distinguish the differences between the Arab and Jewish coefficients. The test was performed by using the Wald chi square statistic, and the formula results answered the question, “Is the difference between Jewish and Arab women significant?” in the coefficients of the explanatory variables (*age at first marriage*) where:

 $\frac{(b\_{m}-b\_{w})^{2}}{\left[s.e(b\_{m})\right]^{2}+\left[s.e(b\_{w})\right]^{2}}$

$b\_{m} $is the coefficient for Jewish women, $b\_{w}$ is the coefficient for Arab women, and $\left[s.e(.)\right]$ is the estimated standard error. (3) *Occupation*: includes three categories: (a) teachers and anyone involved in the teaching profession; (b) professional technological and managerial (PTM) jobs; and (c) all other jobs. To test the *occupation* variables, we employed multinomial regression to examine the factors that increase the odds of women’s participation in a PTM occupation vs. teaching and other occupations. To examine the differences between Jews and Arabs, an interaction was executed. Following is the summary of the five comparisons on which the data analysis focused: (1) Labor force participation vs. non-participation; (2) Full-time vs. part-time jobs; (3) PTM occupations vs. teaching; (4) PTM occupations vs. all others; and (5) teaching vs. all others.

**Results**

The results are organized into two subsections: descriptive statistics and multivariate for two models for family penalties.

**Descriptive results**

To examine the differences between Arab and Jewish women in economy-related activities such as participation in the workforce, full-time employment, and acquiring prestigious occupations, frequency calculations were made for each of the populations separately. The results are presented in Table 1.

**Table 1: Descriptive Statistics of the Sample of Women Aged 20–45**

|  |  |  |
| --- | --- | --- |
| Arab women% | Jewish women% |  |
| **N=3,733** | **N=16,030** | **Labor force participation** |
| 39.9 | 67.8 | Single women |
| 23.7 | 75.3 | Married women |
| 36.1 | 73.6 | Divorced women |
| **N=866** | **N=7,656** | **Full-time job** |
| 65.7 | 68.5 | Single women |
| 61 | 73.8 | Married women |
| 48.6 | 70.5 | Divorced women |
| **N=812** | **N=6,972** | **Occupation** |
|  |  | **Teaching occupation** |
| 18.4 | 7.9 | Single women |
| 37.4 | 16.8 | Married women |
| 21.1 | 9.31 | Divorced women |
|  |  | **PTM occupation** |
| 14.8 | 22.4 | Single women |
| 13.7 | 30.7 | Married women |
| 2.6 | 25.8 | Divorced women |
| Source: Israel Social Survey 2002–2013, Jewish and Arab women age 20–45 |

The data in Table 1 demonstrates employment penalties for Jewish and Arab women. As seen in the table, rates of economic activities (workforce participation, full-time employment, and working in prestigious occupations) of married Arab women are lower than those of single Arab women (except for teaching profession). We can see opposite results among Jewish women: married women have higher rates of economic activities than single women. For example, rates of married Jewish women working in prestigious occupations exceed rates of single women doing so (30.7% and 22.4%, respectively).

An opposite picture appears for Arab women; particularly noticeable is the difference between workforce participation rates of married and single women (23.7% vs. 39.9%, respectively). These trends were true for all variables of employment except the teaching profession, where the proportion of married Arab women was significantly higher than the proportion of single women (37.4%, 18.4%, respectively). As expected, married Arab women show lower rates of economic activities than their Jewish counterparts.

**Multivariate results**

To examine the differences between Arab and Jewish women in terms of employment penalties — that is, their odds in the labor market (participation in the labor market, full-time employment, and prestigious occupations) according to the family status — logistic and multinomial logit regressions were conducted. These calculations were made for the entire population (sample for the total Arab and Jewish population) and for the samples of Arab and Jewish women separately. Additionally, to examine whether the differences between Jewish and Arab women were significant, we employed Allison tests for logistic regression models and interactions in multinomial logit models.

Table 2 represents employment penalties for Arab and Jewish women and the differences between them. The table shows employment odds among the whole sample (Arab and Jewish women), with its main purpose being to show the employment odds for married and divorced women vs. single women. Two of these models are presented for each of these groups (whole sample, Jewish, and Arab): two logistic models (models 1a, 1b, 1c) that show the odds of participation in the labor market vs non-participation, and also the odds of working in full-time vs. part-time jobs (models 2a, 2b, 2c). In addition, the table’s right-hand columns show the results of the Allison tests while examining differences between Arab and Jewish women.

**Table 2: Logistic Regressions of Employment Activity by Ethnic Group (exponentiated coefficients)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | All women | Jews | Arabs | Differences between Arabs and Jews\* | Differences between Arabs and Jews\* |
|  | Logit(1) | Logit(2) | Logit(1) | Logit(2) | Logit(1) | Logit(2) | Wald Chi square for differences(1) | *p*-value(1) | Wald Chi square for differences(2) | *p*-value(2) |
| Covariates | l.f. participation vs. … | Full-Time job vs. part-time job | l.f. participation vs. … | Full-Time job vs. part-time job | l.f. participation vs. … | Full-Time job vs. part-time job |  |  |  |  |
| Marital status |  |  |  |  |  |  |  |  |  |  |
| Single | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| Married | 0.69\*\* | 0.79\*\* | 0.82\*\* | 0.99 | 0.33\*\* | 0.51\*\* | 26.880 | 0.0001 | 8.083 | 0.0045 |
| Divorce | 0.86 | 0.78\*\* | 0.89 | 0.83\* | 1.07 | 0.39\* | 0.00392 | 0.9501 | 3.613 | 0.0573 |
| Constant | 14.3 | -24.9+ | 18.5 | -46.5\*\* | -35.1 | -33.6 | 1.87027 | 0.1714 | 0.00171 | 0.967 |
| -2Log Likelihood | 18240 | 15754 | 15124 | 13274 | 2063 | 1508 |  |  |  |  |
| N | 20,233 | 13,913 | 16,030 | 11,958 | 3,733 | 1,210 |  |  |  |  |
| Source: Israel Social Survey 2002–2013, Jewish and Arab women age 20–45.Notes: + p<0.1, \*p<0.05, \*\*p<0.01; PTM= professional technological and managerial occupations; calculations in the Allison tests are based on different logistic models without the explanatory variable religiosity. |

Table 3 presents Multinomial logit models made for examining the odds of working in PTM vs. teaching (Models 3a, 3b, 3c); to work in PTM vs. other occupations (Models 4a, 4b, 4c) and in teaching vs. other occupations (Models 5a, 5b, 5c).

**Table 3: Multinomial Regressions of Employment Activity by Ethnic Group (exponentiated coefficients)**

|  |  |  |  |
| --- | --- | --- | --- |
|  | All women | Jews | Arabs |
|  | Multi(3) | Multi(4) | Multi(5) | Multi(3) | Multi(4) | Multi(5) | Multi(3) | Multi(4) | Multi(5) |
| Covariates | PTM vs. Teaching | PTM vs. all the others | Teaching vs. all the others | PTM vs. Teaching | PTM vs. all the others | Teaching vs. all the others | PTM vs. Teaching | PTM vs. all the others | Teaching vs. all the others |
| Marital status |  |  |  |  |  |  |  |  |  |
| Single | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
| Married | 0.42\*\* | 1.063 | 2.546\*\* | 0.67\*\* | 1.06 | 1.06\*\* | 0.54\* | 0.93 | 1.77\* |
| Divorce | 0.87 | 1.018 | 1.174 | 0.86 | 1.06 | 1.24 | 1.06 | 0.92 | 0.79 |
| Constant |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| N | 13,920 | 13,920 | 13,920 | 11,962 | 11,962 | 11,962 | 1,289 | 1,289 | 1,289 |
| Source: Israel Social Survey 2002–2013, Jewish and Arab women age 20–45.Notes: + p<0.1, \*p<0.05, \*\*p<0.01; PTM= professional technological and managerial occupations. |

**All women**

The results show employment odds for married and divorced women vs. single women. Five of these models are presented for each of these groups (whole sample, Jewish, and Arab). Two logistic models (models 1a, 1b, 1c) show the odds of participation in the labor market vs non-participation, and also the odds of working in full-time vs. part-time jobs (models 2a, 2b, 2c).

Multinomial logit models were made for examining the odds of working in PTM vs. teaching (Models 3a, 3b, 3c); working in PTM vs. other occupations (Models 4a, 4b, 4c), and working in teaching vs. other occupations (Models 5a, 5b, 5c). In addition, the right-hand columns in Table 2 show the results of the Allison tests for examining differences between Arab and Jewish women.

First, we examine how marriage relates to women’s economic odds. The models for the whole sample show that marriage reduces women’s odds of participating in the labor market by 31%; working a full-time job by 21%; and working in PTM occupations vs. teaching by 58%. A divorce reduces a woman’s odds of working full-time by 22%. The picture is different for Jewish women, showing a more moderate decline where marriage reduces the odds of participation in the labor market by 18%; the odds of working a full-time job by 17%; and the odds of working in PTM occupations by 33%. Among Arab women, marriage decreases these odds significantly. Marriage decreases the odds of labor force participation by 67%, odds of working a full-time job by 49%; and odds of working in PTM occupations by 46%. Moreover, for Arab women, divorce reduces their odds of working full-time by 61%.

**Differences between Jewish and Arab women**

The Allison tests for examining the difference between Arab and Jewish women showed significant differences. For example, the odds of Jewish married vs. single women participating in the labor market vs. non-participation are only 22% lower; for Arab women, the figure is 67%. In addition, the odds for married Jewish women vs. single women working part-time vs. full-time decrease by only 17% compared to 50% among Arab women.

In the multinomial regression, interaction was examined to observe differences between Arab and Jewish women regarding prospects of working in prestigious professions vs. other occupations and vs. teaching professions. Significant differences were found: the odds of married Jewish women working in a prestigious profession were 1.09 times higher than those of married Arab women. Furthermore, Arab women pay a severe penalty for leaving a marriage, while Jewish women gain an advantage from divorce. Divorced Jewish women have 1.05 times higher odds of working in prestigious occupations than single women. The odds of divorce Arab women to work in prestigious occupations decrease by 90% compare to single women . The numbers are similar when examining the differences in the odds of working in a teaching profession: the results showed that Arab women prefer the teaching profession over other jobs, unlike Jewish women.

**Discussion**

The goal of this study was to examine the *employment penalties* that married and divorced women pay, and whether culture determines these penalties. Also important was to examine if teaching professions exempt women from paying these employment penalties. We focused on the Israeli labor force, examining whether married and divorced women pay higher penalties compared to single women. We also searched for differences between Arab and Jewish women to learn about the variances between women who live in traditional-patriarchal cultures (such as Arab women) and women who live in modern-liberal cultures (such as Jewish women).

The main goal of this study was to examine the employment penalties that women pay in the labor force. A second goal was to find differences between Arab and Jewish women to learn about the differences between women who live in a traditional culture, such as Arab women, and women who live in a modern-liberal culture, such as Jewish women. The third goal was to examine to what extent the teaching profession represents a workable resolution to the work-family conflict and if this resolution is more salient in the traditional Israeli Arab society.

This research examined *economic theories* about *human capital* ([Becker, 1985](#bookmark=id.44sinio), [1992](#bookmark=id.2jxsxqh)), *culture theories* ([Pollak & Watkins, 1993](#bookmark=id.z337ya)), *theory of preference* ([Hakim, 2002](#bookmark=id.3j2qqm3), [2003](#bookmark=id.1y810tw), [2006](#bookmark=id.4i7ojhp)), and *iIdeational ttheories* ([Lesthaeghe & Surkyn, 1988](#bookmark=id.17dp8vu)).

The first set of hypotheses dealt with employment penalties paid by all married women (Jewish and Arab). The findings show that the married women have significantly lower employment odds than single women. Married women have lower odds of participating in the labor force than single women. These results support the *job-search theory* (Oppenheimer, 1988) and are reinforced by results obtained by Nabwani (in press), who shows that women who purposely postpone marriage to develop the professional aspect of their lives pay a personal price by reducing their value in the marriage market, thus reducing their odds of marriage. On the other hand, women who do not postpone marriage pay employment penalties.

Moreover, married women are more likely to work in part-time jobs than single women. They are also more likely than single women to work in teaching professions as opposed to other professions (including prestigious ones). The results also show that divorced women’s odds of working full-time are lower than those of single women. Consistent with economictheories, which suggest that an increase in women’s economic independence increases the chances of divorce ([Becker, 1985](#bookmark=id.44sinio)), the results suggest that a woman’s increased economic independence makes divorce more likely. At the same time, divorce also forces women to pay employment penalties. These findings are consistent with *economic theories,* which predict a negative correlation between marriage, divorce and economic activity in the labor market and posit that disruptions brought on by marriage and divorce force women to pay penalties in the form of economic losses ([Becker, 1985](#bookmark=id.44sinio), [1992](#bookmark=id.2jxsxqh)). This is reflected in the importance that women attribute to their relative advantages (compared to men) in household work, something they are penalized for in the labor market ([Becker, 1992](#bookmark=id.2jxsxqh)). As women invest less time in the labor market and more in the family sphere ([Becker, 1985](#bookmark=id.44sinio)), a vicious cycle is created: women’s specialization in family matters increases their relative advantage in the household, which in turn increases the employment penalties they pay and works to keep them in household roles.

In line with *theory of preference* ([Hakim, 2002](#bookmark=id.3j2qqm3), [2003](#bookmark=id.1y810tw), [2006](#bookmark=id.4i7ojhp)), we hypothesized that women who focus on the family will pay occupational penalties, in the sense that they are likely to choose a teaching profession to ensure their work commitments do not interfere with their duties to the family. The results confirmed our hypothesis: women in the Israeli workforce who focus on family and marriage at a young age prefer teaching professions to other occupations, including prestigious ones.

This phenomenon is more common among Arab women, suggesting that culture plays a role in determining employment aspirations in traditional-patriarchal societies where women are encouraged to prioritize marriage over work (Sabbah-Karkaby and Stier, 2017). In traditional-patriarchal societies, it appears that gender segregation in the workforce can be attributed first and foremost to culture rather than to women’s choices.

The second set of hypotheses on employment penalties focused on the differences between Arab and Jewish women. The findings show significant differences between Arab and Jewish women. Arab women are likely to prioritize their traditional roles in the family over advancing their socio-economic status; they drop out of the job market, reduce their working hours, or choose teaching professions. These findings support *cultural theories* ([Lehrer & Son, 2017](#bookmark=id.1ksv4uv); [Pollak & Watkins, 1993](#bookmark=id.z337ya)) which argue that in traditional societies. individual choices are generally made within the scope of culturally approved behaviors. Jewish women also experience employment penalties, but these are comparatively lower and only occur after women have established themselves in the workforce. The result is that Arab women living in traditional-patriarchal ethnic minority groups pay significantly higher penalties for marriage and divorce than Jewish women do.

The results of this study suggest that *cultural theories* complement the explanations provided by *economic and sociological theories* on why women who live in traditional-patriarchal societies pay greater employment penalties than those living in modern-liberal societies.

Future studies of employment penalties in Israel should use longitudinal data to examine causality between individual characteristics and penalties paid. In addition, using micro-level data that directly measures attitudes (e.g. emancipative values) can provide a clearer picture of the role that culture and preference play in determining penalties. These findings imply that there is a need to raise awareness about the importance of sensitivity when dealing with traditional populations that are in the process of integrating into the modern European labor force, especially in light of increasing migration to European countries.

Moreover, this study highlights the benefits offered by teaching professions that allow women to effectively combine work and family with minimal penalties. We encourage policymakers to contribute to closing the gender gap in the work force by applying the family-related benefits characteristic of teaching professions to other (more prestigious) occupations, especially for women with preschool-aged children. Doing so could encourage young women living in both traditional and modern societies to choose more prestigious professions (for example: STEM = Science, Technology, Engineering, and Mathematics professions). Such professions will become more attractive when women know that they will receive government support to help them combine their prestigious professions with marriage and family expansion.

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