

Peer Support and Job Satisfaction Among Ultra-Orthodox Jewish Women in Israel's Hi-Tech and Finance Industries

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This study examines the relationship between peer support and job satisfaction among ultra-Orthodox women in Israel's hi-tech and finance sectors. Addressing a research gap, the study employed a quantitative survey ($n = 155$) grounded in social identity theory. Peer support was found to be a statistically significant but modest predictor of job satisfaction. Mediation analysis identified appraisal as the strongest mechanism linking peer support to satisfaction. Salary consistently influenced job satisfaction, and the data revealed pay disparity between this population and others in these fields. Findings highlight the crucial role of appraisal-driven peer support in enhancing workforce satisfaction and success.

Keywords: peer support, job satisfaction, Ultra-Orthodox Jewish women, Haredi women, hi-tech industry, workplace integration, employee well-being, religious minority employment, diversity management, intersectional identity, Israel

INTRODUCTION

The integration of the ultra-Orthodox Jewish population into the workforce is a challenge of economic and sociocultural significance in Israel. While formerly a relatively small portion of the Israeli population, due to their high birthrate, ultra-Orthodox Jews now constitute approximately 14% of the population of Israel (Cahaner & Malach, 2024).

Since the ultra-Orthodox society encourages males to engage in full-time religious study, women in this population are educated and employed at high rates, enabling them to serve as primary breadwinners. Yet, ultra-Orthodox women face many challenges integrating into the Israeli workforce and are significantly underrepresented and underpaid in high-income fields they are increasingly entering, such as hi-tech and finance (Jean, 2020).

More suitable frameworks of higher education, better opportunities for professional advancement, and flexible work-life balance are paramount needs for the increased integration of ultra-Orthodox women into the workforce. While academic research has examined how various factors contribute to job satisfaction rates among ultra-Orthodox women, the role of peer support has not been quantitatively examined. This survey was designed to do so.

BACKGROUND

Ultra-Orthodox Jews adhere strictly to religious law and establish community structures that separate them from non-Jews and less religiously observant Jews (Britannica, 2024). Per a status quo agreement in

Israel dating back to the 1940s, ultra-Orthodox Jews in Israel operate an autonomous educational system, are exempt from mandatory military conscription, and maintain religious practices that limit contact with the secular world (Zalzberg, 2017). Combined with the state's generous social safety net, these caveats have allowed the ultra-Orthodox population to position male religious study as its central focus. Economic sustainability is often a secondary concern, and in most cases, ultra-Orthodox women serve as the primary breadwinners of their families while simultaneously raising their children (Binhas & Moskovich, 2022).

In recent decades, the ultra-Orthodox birthrate has increased rapidly, and this once-small community is projected to comprise one-third of the Israeli population by 2065. Their birthrate has propelled Israel to have the highest fertility rate of any developed country; yet, the country's labor productivity growth has lagged behind that of other countries in the Organisation for Economic Co-operation and Development (OECD), mainly due to the low employment rate of ultra-Orthodox men (Koelle, 2023).

This population's relative autonomy increasingly impacts an Israeli knowledge economy that is already vulnerable to brain drain, security considerations, and powerful organized labor. While the employment rate of ultra-Orthodox women is slightly above the national average, equal pay and professional advancement have been limited by an array of factors, including education, religious sensitivities, workplace prejudice, limited ability to self-advocate, and work-life balance considerations (Black et al., 2021). Employers acknowledge the challenges of integrating minority populations such as the ultra-Orthodox and Israel's Arab population (representing 20% of the citizens) into the workforce (Magen, 2022). In Israel's fast-growing high-tech industry, which comprises a fifth of its gross domestic product, an increasing number of Ultra-Orthodox women are entering the fields of high-tech and finance, at times passing qualification exams at rates well above the national average (Dov, 2023). However, ultra-Orthodox women are significantly underrepresented and underpaid (Sharabi & Kay, 2023). The Israel Tax Authority has estimated that the average salary of an ultra-Orthodox hi-tech employee is less than half the monthly wage of other Israeli hi-tech workers (Jean, 2020).

Large-scale survey data indicate that most ultra-Orthodox women prefer gender-segregated educational frameworks and work environments, but the data are nuanced and evolving (Cahaner & Malach, 2024). These women report struggling to balance work and large families, and experience a dual identity between traditionalism and modernity (Kalagy, 2020). More ultra-Orthodox women are taking the secular Israeli matriculation exams that are a prerequisite for higher education (Blass, 2014). New educational institutions have been established explicitly for this population. The Israeli government, non-governmental organizations (NGOs), and private companies have been developing and testing frameworks to better integrate and retain ultra-Orthodox women in various sectors (Black et al., 2021). These efforts include a dedicated government technology training initiative, as well as partnerships with organizations that work closely with the government. These organizations identify gaps in technological training and employer bias as the most significant obstacles to ultra-Orthodox integration, while also providing peer support through career guidance, job placement, mentorship, conferences, and workshops on soft skills.

Ultra-Orthodox Women in Israel's Workforce

A growing body of academic research has explored structural causes of Israel's economic imparity and how the social and psychological difficulties minority communities face in the workplace factor into this imparity. One study surveyed female ultra-Orthodox computer programmers, revealing disadvantages in pay, job satisfaction, commitment, and burnout. Ultra-Orthodox women were incentivized by the benefits of employment but strove to balance work and family commitments, as well as manage professional class conflicts, in their assimilative environments (Raz & Tzruya, 2017).

Another study focused on how the social identity of ultra-Orthodox women affects this, indicating that the subjects possessed high levels of psychological coping skills, such as optimism, resilience, hope, and self-efficacy (Rabenu & Yaniv, 2017). Others romanticized an alleged ultra-Orthodox "feminist movement" (Zion-Waldoks, 2023) and agency (Kook & Harel-Shalev, 2020). Many of them circled back to the dual identities ultra-Orthodox women must establish to maintain traditional roles at home and in the community while functioning successfully at work (Binhas & Moskovich, 2022).

More recent research has explored job satisfaction and well-being among ultra-Orthodox women in advanced fields such as hi-tech, psychology, graphic design, accounting, and education. A study of 304 ultra-Orthodox women examined the relationship between family quality of life, sense of personal coherence, sense of community coherence, diversity perceptions, and inclusive leadership, and their correlation with a general sense of well-being and employee satisfaction (Abu-Kaf et al., 2023).

One method for mitigating the stress associated with dual identities was the strengthening of formal and informal peer networks, such as professional communities and social media platforms. Qualitative research has indicated that these peer support mechanisms enhance the coping skills of ultra-Orthodox women, cultivate their professional talents, strengthen the ties between the religious and secular segments of Israeli society, and ultimately increase job satisfaction (Kalagy, Malachi, & Braun-Lewensohn, 2020). However, whether peer support specifically contributed to job satisfaction had yet to be quantitatively assessed (Kalagy, Abu-Kaf, & Braun-Lewensohn, 2022).

Peer Support

Peer support is a subtype of social support, distinct from family or therapeutic support (Goldsmith, 2004). For this study, it is defined as “the provision of emotional, appraisal, and informational assistance by a created social network member who possesses experiential knowledge of a specific behavior or stressor and similar characteristics as the target population” (Dennis, 2023, p. 329). Peer support in this context is generally provided by mentors, coworkers, or other professionals. Homans’ (1958) social exchange theory posits that individuals aim to maximize reward and minimize effort in relationships. Peer support provides the reciprocity that fulfills an individual’s needs for social acceptance and emotional comfort, while contributing to a network of mutual aid that reinforces social influence and collective well-being. Analyzing social support’s role in helping individuals cope with stress and adversity and thereby strengthening resilience and well-being can offer valuable insights regarding job satisfaction, as well as work-life balance (Taylor, 2011).

Supportive peer and mentorship relationships have been positively correlated with mitigating demographic and gender diversity. Individual growth and organizational success among women were buttressed by social peer support across various professional settings (Ragins & Cotton, 1999). A survey of working women in Pakistan examined the effects of social support on job performance and job satisfaction, affirming a moderately positive correlation and a strongly positive correlation between social support and work-life balance (Malik et al., 2010). An analysis of the trends and challenges facing working women in India also revealed significant pay disparity between men and women in technical and professional roles. The stagnant female employment rate was attributed to domestic duties, conservative social norms, and a lack of role models (Bhardwaj, 2022). The correlation between peer support and general well-being has been shown to increase as individuals age (Uchino, 2006). Additionally, peer support can be particularly beneficial to midlife women (Marcinkus, Whelan-Berry, & Gordon, 2007).

Peer support for working ultra-Orthodox women in Israel can also be considered within the context of cognitive dissonance theory. Festinger (1957) postulated that psychological discomfort motivates an individual to reduce dissonance. The dissonance reported by ultra-Orthodox women may, in turn, affect career decisions, workplace behavior, and job satisfaction (Harmon-Jones & Mills, 2019).

Theories of Social Identity

Seminal social science theories help explain the tension ultra-Orthodox women experience as participants in the secular Israeli workforce. Social identity theory posits that shared characteristics form the foundation of group identity. An individual’s self-concept is shaped by both personal uniqueness and group membership, influencing how they perceive themselves and others, particularly in terms of ingroups and outgroups. Social context plays a complex role in shaping identity, and understanding these dynamics can provide insight into issues like prejudice and group conflict (Postmes & Branscombe, 2010; Tajfel & Turner, 1979; Turner et al., 1994).

Professional ultra-Orthodox women have multiple, salient social identities, based on similarities and differences between themselves and their peers and coworkers (Kalagy, 2020). While their behavior may

shift depending on context, the pressure to do so can plausibly affect job satisfaction. As increasing numbers of ultra-Orthodox women enter the high-skill workforce, social norms of the ultra-Orthodox collective identity may also be changing (Turner et al., 1987). As salience increases, the stress of dual identities may be offset by increased fluidity (Brewer, 1991), which in turn affects the dynamic between minority identities and larger social systems (Postmes & Branscombe, 2010).

A consideration of cultural differences between ultra-Orthodox and secular Israeli societies facilitates a deeper understanding of this tension (Hofstede, 1980, 2001). Secular Israeli society is generally individualistic, emphasizing self-determination and unique accomplishments, although individualism has been somewhat tempered by the nation's socialist roots and compulsory military service (Culture Factor Group, n.d.). Highly religious communities, on the other hand, tend to prioritize collective interests and goals that revolve around family and community units (Hofstede, Hofstede, & Minkov, 2010). Secular Israel's proclivity for low power distance and promotion of self-actualization can be anathema to an ultra-Orthodox individual with a profound respect for hierarchy and group ideals. A recent survey of 467 Israeli women, ranging in religious observance, indicated that secular Jewish Israeli women were markedly more individualistic than ultra-Orthodox women, who displayed a pragmatic social identity focused on work-life balance and career advancement. Yet both groups valued pay, autonomy, interpersonal relationships, and job security (Sharabi & Kay, 2023).

Maslow's (1954) traditional theory of motivation contextualizes how much job satisfaction may be important to ultra-Orthodox women. As their families' primary breadwinners, ultra-Orthodox women may be less interested in job satisfaction than job security. Needs for achievement, affiliation, and power in the workplace may be relatively muted (McClelland, 1961).

Research Gap

As policymakers, businesses, and community leaders strive to enhance the integration and retention of ultra-Orthodox women in competitive workplaces, the issue of job satisfaction among ultra-Orthodox women warrants further examination. The authors of a recent study on the correlation between various personal, professional, and community factors and a general sense of well-being and employee satisfaction acknowledged that one of its limitations was neglecting to include peer support as an independent variable (Abu-Kaf et al., 2023). Professional and informal peer support networks for ultra-Orthodox women have only been studied qualitatively. A quantitative survey and data analysis of the relationship between peer support and job satisfaction among ultra-Orthodox women aimed to bridge this research gap.

Research Question

The research question addressed in this study was:

RQ: What is the correlation between peer support and job satisfaction among ultra-Orthodox women in the Israeli workforce?

Hypothesis

The hypothesis was:

Ha: There is a positive correlation between peer support and job satisfaction among ultra-Orthodox women in the Israeli workforce.

METHODOLOGY

Research Design

This study was conducted through correlational research, specifically the administration and analysis of a survey among ultra-Orthodox Israeli women employed in high-tech or finance. The conceptual framework was constructed by positing peer support as an independent variable and assessing its impact on the dependent variable of job satisfaction. Peer support was measured via an adapted version of the

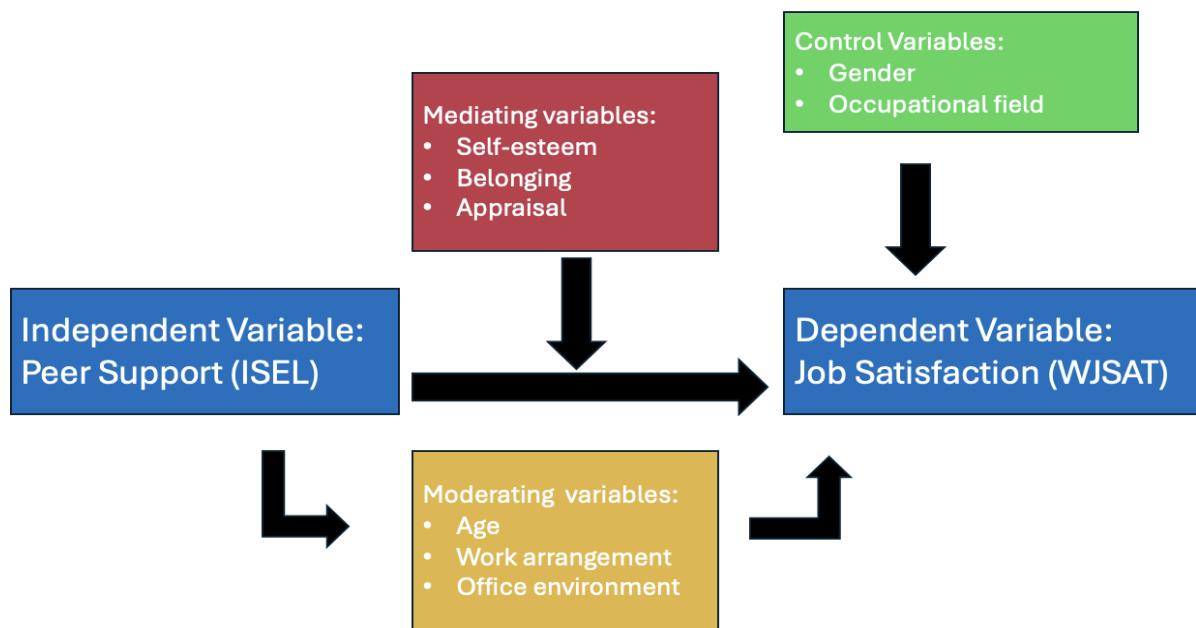
Interpersonal Support Evaluation List (ISEL), also known as the Cohen Social Support Questionnaire (Cohen & Hoberman, 1983). Job satisfaction was defined, for the purposes of this study, as “the degree to which a person reports satisfaction with intrinsic and extrinsic features of the job” (Warr, Cook, & Wall, 1979, p. 133).

Job satisfaction was measured via an adapted version of the Warr Work-Related Journey’s Satisfaction Scale (WJSAT). The WJSAT has 15 questions, and the possible answer choices comprise a 5-point Likert scale, adapted from Warr et al.’s original 7-point scale. Three of the original four sections of the ISEL survey, comprising 24 questions, with possible responses along a 5-point Likert scale, adapted from the original 4-point scale (Cohen & Hoberman, 1983). These questions covered the subtopics of appraisal, self-esteem, and belonging. The fourth factor, tangible support, was financial and therefore not as easily applicable to the ultra-Orthodox population.

The study collected demographic information to examine the possibility of moderating, mediating, and controlling variables that might influence the relationship between the independent and dependent variables. This information included age, educational degree, years in the workforce, occupational field, work environment, seniority level, monthly income, marital status, and number of children. Respondents could complete the survey in either Hebrew or English.

This quantitative research method allowed for a limited answer set to a large number of questions, thereby generating a representatively sized data pool suitable for statistical analysis. The study hypothesized that a positive correlation between peer support and job satisfaction among ultra-Orthodox women in the Israeli workforce would be demonstrable via a quantitative analysis of the data, including descriptive statistics, hypothesis testing, mediation analysis, and moderation analysis (Figure 1).

FIGURE 1
CONCEPTUAL FRAMEWORK



Procedure

The survey aimed to collect primary data from a specific and not easily accessible demographic. Given the constraints, the non-probability sampling methods of convenience sampling and the snowball method were employed. The survey was composed in English and translated into Hebrew by a certified translator, and was available to respondents in either language.

After receiving approval from the doctoral ethics committee, the researcher sent a survey link, along with a cover letter outlining the research value. The survey was administered via the Survey Legend platform over a three-week period in May and June of 2024. This was not a predetermined window of time; rather, the goal was to elicit enough respondents to generate results with a 90% confidence level and an 8% margin of error. Recruitment proceeded faster than anticipated, and the survey elicited enough responses to raise the confidence level to 95% with an 8% margin of error.

Convenience sampling provided the initial respondents in the ultra-Orthodox neighborhood of Ramat Beit Shemesh, Israel, where the researcher resides. These respondents were enlisted to recruit others by posting the survey on email listservs, the professional networking site LinkedIn, and closed Internet forums for ultra-Orthodox professional women. Data were submitted anonymously, and individualized answers were kept confidential.

Sample

The population for this study consisted of ultra-Orthodox women living in Israel and working in the fields of finance or high-tech. There are an estimated 20,000–25,000 ultra-Orthodox Israeli women who work in finance or hi-tech (Bin, 2023; Cahana & Malach, 2023). There were 155 respondents, providing a sample size with a 95% confidence level and an 8% margin of error. Most responses were in Hebrew (79.4%), while the remainder were in English.

Data Analysis

Once all the data were collected, they were prepared for analysis. The raw data were exported from SurveyLegend, sorted, and coded in Excel, and then imported into SPSS. Statistical analyses were conducted to evaluate the relationship between peer support and job satisfaction.

The central tendency and variability for each survey question were determined via descriptive statistics. Precise distribution of the survey responses outlined the data's basic features and checked for anomalies or outliers. Inferential analysis enabled predictions about the dataset, the hypothesis, and the general population based on the sample data. A bivariate analysis was conducted to illustrate whether the results had a normal or skewed distribution.

Hypothesis t-testing was used to determine whether there was a statistically significant difference in job satisfaction levels. This involved calculating a test statistic and a p-value to assess whether to reject the null hypothesis in favor of the alternative. Correlation analysis examined the strength and direction of the relationship between peer support and job satisfaction, without implying causation. Specifically, it tested whether higher levels of perceived peer support were associated with increased job satisfaction. Finally, regression analysis was used to quantify the impact of peer support on job satisfaction, measuring how the independent variable influenced the dependent variable. This method helped explain the extent to which peer support accounted for variability in job satisfaction, while controlling for other factors.

Mediation analysis was conducted to assess how selected variables contributed to the influence of peer support on job satisfaction. The questions on peer support covered three subtopics: appraisal, belonging, and self-esteem. Each subtopic was individually measured to assess its impact on job satisfaction. Each subtopic was regressed on peer support. The factors of work experience (in years), salary, and education were controlled for and evaluated through bootstrapping. Moderation analysis was then conducted to examine how the impact of peer support on job satisfaction varied according to age, work arrangement, and office environment, while controlling for additional variables.

RESULTS

Demographics

The respondents' ages ranged from 20 to 60 years old, with an average of 27.8 years. Most respondents (83%) were married, and that cohort reported an average of 2.4 children. The relatively young age of many participants may be related to hi-tech being a relatively new field. Respondents reported that they had been working for an average of 5.6 years.

Most respondents (83%) worked in hi-tech, while a minority (17%) worked in finance. Only 12% held management positions. Respondents reported a range of working conditions: 32% worked remotely, 15.5% worked full-time in an office, and 52.5% had a hybrid work arrangement. In terms of workplace diversity, 22% reported working in a completely ultra-Orthodox environment, 43.5% said their coworkers expressed mixed levels of religiosity, and 34.5% said they were among a minority of ultra-Orthodox individuals, or the only one, in their workplace.

Based on Israel Tax Authority estimates of tech workers' salaries and assuming a pay disparity, the survey listed four tiers of monthly income, and the survey responses confirm this pay gap. While the average monthly salary of an Israeli hi-tech worker in 2022 was 28,385 NIS (new Israeli shekels) (Bin, 2023), only 22.2% of the survey respondents working in hi-tech reported earning above 25,000 NIS. Hi-tech workers reported a higher monthly salary range than finance workers. Overall, among the respondents, only 21% reported monthly salaries higher than 25,000 NIS, 23% reported between 18,000 and 25,000 NIS, 30% reported between 10,000 and 18,000 NIS, and 26% earned below 10,000 NIS monthly. (The exchange rate in 2023 was USD 1 = NIS 3.687; Internal Revenue Service, n.d.)

Survey participants were asked to indicate all formal courses of study they had completed from a list of seven options. Most respondents (78%) attended a religious seminary for 1–2 years after high school; this is the generally accepted course of study for ultra-Orthodox Israeli women. These seminaries typically offer academic certifications in subjects such as accounting and computer science (Cahaner & Malach, 2023). Among the other courses of study respondents could select, 19% reported taking an in-person certification course or boot camp, 11% reported completing an online certification course, and 15.5% reported getting a degree from a technical college, 21% reported obtaining an undergraduate degree from a secular university, and only 3% had a graduate degree. While there was often overlap among these choices, among the respondents who went to seminary, 66% indicated that they had not received any additional education.

In response to the questionnaire item about the use of peer networks, 20% of the respondents reported often using such networks, 30% reported using them occasionally, and 50% reported never using them. It is possible this outcome was affected by the fact that the survey was posted on such peer networks.

Inferential Statistics

A paired samples t-test was conducted to evaluate the difference between peer support and job satisfaction scores among 154 participants. The mean score for job satisfaction ($M = 3.83$, $SD = 0.69$) was significantly higher than that for peer support ($M = 3.09$, $SD = 0.39$), $t(153) = -13.03$, $p < 0.001$. The correlation between the two variables was moderate and significant ($r = 0.231$, $p = 0.004$). The mean difference was -0.74 (95% CI: -0.85 to -0.63), with a large effect size (Cohen's $d = 1.05$, Hodges' $g = 1.04$), indicating a substantial increase in job satisfaction relative to peer support (see Table 1).

TABLE 1
PAIRED SAMPLES T-TEST RESULTS FOR PEER SUPPORT AND JOB SATISFACTION

Measure	M	SD	t	df	p	95% CI	Cohen's d
Peer Support	3.09	0.39					
Job Satisfaction	3.83	0.69	-13.03	153	<.001	[-0.85, -0.63]	1.05

Note. M = mean; SD = standard deviation; CI = confidence interval. Cohen's d is calculated from paired difference scores.

Correlation Testing

Correlation testing was conducted to assess the strength and direction of the relationship between peer support and job satisfaction without implying causation. The mean scores for each participant's responses to the questions related to the independent variable (peer support) and the questions related to the dependent variable (job satisfaction) were calculated. A bivariate analysis was conducted with a one-tailed significance test, as the alternative hypothesis aimed to reveal a single, positive direction of correlation. Results indicated

a weak but statistically significant positive correlation between peer support and job satisfaction, $r(154) = .231, p = .002$ (two-tailed). The low p-value suggests a minimal likelihood that the result occurred by chance, allowing for rejection of the null hypothesis. These findings support the hypothesis that higher peer support is associated with higher job satisfaction (Table 2).

TABLE 2
PEARSON CORRELATION BETWEEN PEER SUPPORT AND JOB SATISFACTION

	Peer Support	Job Satisfaction
Peer Support	1.00	0.231**
Job Satisfaction	0.231**	1.00

Note. $N = 154$.

** $p < .01$ (2-tailed). One response was omitted due to missing data on peer support items.

Regression Analysis

A simple linear regression was conducted to examine the extent to which peer support predicts job satisfaction. Given the previously established linear relationship between the variables, regression analysis was deemed appropriate. The results revealed that peer support significantly predicted job satisfaction, $R = 0.231, R^2 = .054, F(1, 152) = 8.60, p = 0.004$, indicating that peer support accounted for approximately 5.4% of the variance in job satisfaction. The analysis of variance (ANOVA) associated with the regression model further confirmed that the model significantly explained the variance in job satisfaction, supporting the rejection of the null hypothesis. Although statistically significant, the effect size was modest. The regression coefficients estimate the effects of peer support on job satisfaction. The low p-values indicate that peer support is a statistically significant predictor of job satisfaction, providing evidence against the null hypothesis (Table 3).

TABLE 3
LINEAR REGRESSION MODEL SUMMARY PREDICTING JOB SATISFACTION FROM PEER SUPPORT

Model	R	R^2	Adjusted R^2	Std. Error of the Estimate	$F(1, 152)$	p	Unstandardized Coefficients (B)	Standardized Coefficients (Beta)	t	p
1	0.231	0.054	0.047	0.67	8.60	0.004	2.568 (Constant)	-	5.924	<0.001
							0.409 (Peer Support)	0.231	2.933	0.004

Note. $N = 154$. Predictor: peer support (entered simultaneously).

Mediation Analysis

A mediating linear regression analysis was conducted to test whether peer support directly influenced job satisfaction, after controlling for salary, years of experience, and five of the seven educational responses (university graduate degree and university doctorate were omitted due to sparse data). The regression model was statistically significant, explaining 23.5% of the variance in job satisfaction. Peer support and salary significantly increased job satisfaction, with peer support having a moderate positive effect and salary showing a strong positive effect. However, years of experience and educational background did not significantly affect job satisfaction.

Building on the regression findings, a bootstrapped mediation analysis was conducted to examine whether three dimensions of peer support—appraisal, belonging, and self-esteem (Cohen & Hoberman, 1983)—mediated the relationship between peer support and job satisfaction. Appraisal received the highest

average scores, followed by belonging and self-esteem. All mediation models controlled for years of work experience, salary, and education to ensure a more robust understanding of the indirect effects (Table 4).

TABLE 4
REGRESSION MODEL SUMMARY FOR PREDICTING JOB SATISFACTION FROM PEER SUPPORT AND CONTROL VARIABLES

Predictor	B	Std. Error	Beta	t	p
(Constant)	2.063	0.474	-	4.353	<0.001
Peer Support	0.379	0.135	0.214	2.820	0.005
Salary	0.250	0.054	0.393	4.604	<0.001
Years of Experience	-0.002	0.014	-0.011	-0.121	0.903
Bootcamp	-0.062	0.136	-0.036	-0.454	0.650

Note. The model explains 23.5% of the variance in job satisfaction. Predictors include peer support, salary, years of experience, and educational background (college, seminary, bootcamp).

Mediation Analysis: Appraisal

A multiple regression analysis was conducted to examine the effect of peer support on appraisal while controlling for salary, years of experience, and educational course responses. The predictors in this model explained 60.8% of the variance in appraisal. Peer support and salary were strongly associated with appraisal, while years of experience and education were not.

A mediating linear regression was then conducted to test the effect of appraisal on job satisfaction while controlling for peer support and the other variables. Approximately 32.9% of the variance in job satisfaction could be explained by the combined variables, or 28.6% after adjusting for the number of predictors. The regression analysis revealed that appraisal and salary were significant predictors of job satisfaction, while the other variables had no significant influence. These findings indicate that job satisfaction is more strongly associated with job appraisal and salary than with the other variables in the model. Appraisal was found to significantly mediate the relationship between peer support and job satisfaction. Specifically, higher peer support led to increased appraisal, which in turn enhanced job satisfaction (Table 5).

TABLE 5
EFFECT OF PEER SUPPORT ON APPRAISAL WITH CONTROLS (CONDENSED)

Model Summary	R	R ²	Adjusted R ²	F	Sig.
1	0.780	0.608	0.586	27.322	<0.001
Coefficients	B	Beta	t	Sig.	
(Constant)	-1.508	—	-3.833	<0.001	
peersuIV	1.546	0.751	13.845	<0.001	
SalaryCO	0.141	0.192	3.137	0.002	

Mediation Analysis: Belonging

A mediating regression analysis was then conducted to test the effect of peer support on belonging while controlling for the same variables. The model explained 37.8% of the variance in belonging. Peer support was strongly associated with feelings of belonging, and both years of experience and university education also significantly influenced feelings of belonging.

A mediating linear regression was conducted to test the effect of belonging on job satisfaction while controlling for peer support and the other variables. The model explained approximately 28.6% of the

variance in job satisfaction, or 24% after adjusting for predictors. The analysis revealed that peer support significantly predicted job satisfaction, while belonging negatively predicted job satisfaction. Salary was positively associated with job satisfaction; however, the other control variables, including years of experience, did not significantly impact job satisfaction. Overall, this analysis found that peer support significantly affected job satisfaction, both directly and indirectly through the sense of belonging. However, belonging demonstrated a suppressor effect, which might be masking the otherwise positive effects of peer support on job satisfaction (Table 6).

TABLE 6
EFFECT OF PEER SUPPORT ON BELONGING WITH CONTROLS (CONDENSED)

	Model Summary	R	R²	Adjusted R²	F	Sig.
	1	0.615	0.378	0.342	10.699	<0.001
Coefficients	B	Beta	t	Sig.		
(Constant)	0.758	—	1.918	0.057		
peersuIV	0.664	0.404	5.915	<0.001		
Years of Experience	0.026	.185	2.309	.022		
University Education	0.400	.255	2.892	.004		
SalaryCO	-0.115	-0.195	-2.533	0.012		

Mediation Analysis: Self-Esteem

A mediating regression analysis was then conducted to test the effect of peer support on self-esteem while controlling for the same variables. Peer support significantly predicted self-esteem, explaining 48.5% of the variance in the model. Other predictors did not have a significant effect on self-esteem.

A mediating linear regression analysis was conducted to test whether self-esteem influences job satisfaction while controlling for peer support and other variables. The model explained 27.2% of the variance in job satisfaction, or 22.5% after adjusting for predictors. Self-esteem demonstrated a suppressor effect like belonging. Overall, peer support and self-esteem were positively associated with job satisfaction, but self-esteem did not significantly mediate the relationship between peer support and job satisfaction (Table 7).

TABLE 7
EFFECT OF PEER SUPPORT ON SELF-ESTEEM WITH CONTROLS (CONDENSED)

Model Summary	R	R²	Adjusted R²	F	Sig.
1	.696	.485	.455	16.233	<.001
Coefficients	B	Beta	t	Sig.	
(Constant)	0.798	—	3.210	.002	
Peer Support	0.780	.698	11.068	<.001	

Mediation Analysis Conclusion

Mediation analysis revealed that appraisal significantly mediated the relationship between peer support and job satisfaction, while self-esteem and belonging did not. In fact, their negative indirect effects suggested a mild suppressor effect. Across all models, salary consistently emerged as a significant predictor of job satisfaction, and in some cases, also influenced appraisal and belonging. This highlights the

importance of compensation in shaping workplace attitudes. Overall, the data indicated that employee appraisal was the most effective indicator of enhanced job satisfaction.

Moderation Analysis

Moderation analysis was conducted to examine whether age, work environment, and religious level moderated the relationship between peer support and job satisfaction. Each moderator was tested in separate models while controlling for salary, years of experience, and education. To reduce multicollinearity, predictor and moderator variables were centered, and interaction terms were computed. Multiple regression was used to test moderation effects, with attention given to both main effects and interaction terms.

Moderation Analysis: Age

Multiple regression analysis was conducted to assess how age moderated the relationship between peer support and job satisfaction, controlling for salary, years of experience, and education. The model explained 27.9% of the variance in job satisfaction. Peer support, religious level, and salary were significant predictors of job satisfaction, with salary having the strongest impact. The interaction term between peer support and age was not significant, indicating that age did not significantly moderate the relationship (Table 8).

TABLE 8
AGE MODERATION ANALYSIS WITH CONTROLS

Model Summary	R	R-Square	Adjusted R-Square	Std. Error of the Estimate		
1	0.528	0.279	0.227	0.60467		
Variable	B	Standard Error	Beta	t	Sig.	
Peer Support	0.305	0.138	0.172	2.210	0.029	
Age (centered)	0.027	0.011	0.276	2.459	0.015	
Interaction	-0.019	0.014	-0.106	-1.376	0.171	
Salary (centered)	0.297	0.056	0.467	5.308	<0.001	

Moderation Analysis: Work Arrangement

Multiple regression analysis was conducted to assess how work arrangement moderated the relationship between peer support and job satisfaction, controlling for salary, years of experience, and education. The model explained 24.1% of the variance in job satisfaction. While salary remained a significant positive predictor, work arrangement was not a significant predictor of job satisfaction. The results suggest that work arrangement did not significantly influence the relationship between peer support and job satisfaction (Table 9).

TABLE 9
WORK ARRANGEMENT MODERATION ANALYSIS WITH CONTROLS

Model Summary	R	R-Square	Adjusted R-Square	Std. Error of the Estimate		
1	0.491	0.241	0.186	0.62040		
Variable	B	Standard Error	Beta	t	Sig.	
Peer Support	0.355	0.137	0.200	2.590	0.011	
Work Arrangement (centered)	0.052	0.051	0.137	1.020	0.310	
Interaction	-0.116	0.170	-0.093	-0.684	0.495	

Model Summary	R	R-Square	Adjusted R-Square	Std. Error of the Estimate		
Salary (centered)		0.245	0.055	0.385	4.413	<0.001

Moderation Analysis: Office Environment

Multiple regression analysis was conducted to examine how the office environment moderates the relationship between peer support and job satisfaction, while controlling for salary, years of experience, and education. The model explained 24.8% of the variance in job satisfaction. While salary remained a significant positive predictor, office environment did not significantly predict job satisfaction. The results suggest that the office environment did not significantly influence the relationship between peer support and job satisfaction (Table 10).

TABLE 10
OFFICE ENVIRONMENT MODERATION ANALYSIS WITH CONTROLS

Model Summary	R	R-Square	Adjusted R-Square	Std. Error of the Estimate		
1	0.498	0.248	0.194		0.61762	
Variable				B	Standard Error	Beta
Peer Support				0.401	0.135	0.226
Office Environment (centered)				0.012	0.074	0.013
Interaction				0.295	0.192	0.116
Salary (centered)				0.253	0.057	0.397
						<0.001

Moderation Analysis Conclusion

In conclusion, age, work arrangement, and office environment did not significantly influence the relationship between peer support and job satisfaction, controlling for salary, experience, and education. These factors had similar, marginal effects on job satisfaction and did not substantially alter the relationship between peer support and job satisfaction. Peer support and salary emerged as the primary predictors of job satisfaction, with salary being the most significant external factor contributing to job satisfaction.

DISCUSSION

This study investigated whether peer support influences job satisfaction among professional ultra-Orthodox women in Israel. The scope was relatively narrow, namely to determine whether peer support should be one of several factors considered when gauging job satisfaction among professional ultra-Orthodox women in Israel. It was hypothesized that a positive correlation would exist between peer support and job satisfaction. Correlation analysis revealed a weak but statistically significant positive relationship between the variables. Linear regression analysis confirmed that peer support was a significant predictor of job satisfaction, although it accounted for only 5.4% of the variance in job satisfaction. Respondents reported higher levels of job satisfaction than peer support. These findings provided sufficient evidence to reject the null hypothesis.

Mediation analysis examined whether appraisal, self-esteem, and belonging explain how peer support influences job satisfaction, while controlling for salary, experience, and education. Appraisal emerged as a significant and positive mediator: higher peer support was associated with stronger appraisal, which in turn predicted greater job satisfaction. In contrast, self-esteem and belonging did not serve as effective mediators and showed negative indirect effects, suggesting a possible suppressor effect. While peer support significantly predicted both self-esteem and appraisal, its direct effect on job satisfaction was inconsistent across models. These findings support the alternative hypothesis but highlight a more nuanced relationship,

suggesting that strengthening employees' sense of appraisal may be a more effective route to improving job satisfaction than general peer support alone.

Moderation analysis indicated that neither age, work arrangement, nor office environment influenced the relationship between peer support and job satisfaction, controlling for salary, experience, and education. As in the mediation analysis, salary consistently emerged as the strongest external predictor of job satisfaction.

IMPLICATIONS

Policy

This study offers valuable insights for policymakers and NGOs working to support ultra-Orthodox women in sectors such as high-tech and finance. Enhancing peer support mechanisms could increase job satisfaction, especially among younger workers entering these industries. Appraisal, the perceived availability of feedback and guidance, was the most significant contributor to job satisfaction. Strengthening appraisal could be especially beneficial for ultra-Orthodox women entering the workforce, addressing both job satisfaction and the broader issue of workforce integration.

The survey collected significant data on demographics, particularly salary and education. With salary disparities prevalent, efforts to promote equitable pay for ultra-Orthodox women and further integrate them into the workforce are essential. The survey revealed a concerning wage gap for ultra-Orthodox women in the Israeli workforce, with less than a quarter of the respondents reporting a salary similar to the national average for hi-tech workers. This aligns with existing data showing pay discrimination against ultra-Orthodox tech employees (Jean, 2020). Another key finding to consider in relation to salary disparities is education. Seventy-eight percent of respondents reported receiving a religious seminary certification, yet only one-third pursued additional education. Interestingly, 73% of seminary graduates in the highest income bracket had no further education beyond their seminary studies. This discrepancy, particularly in light of salary gaps reported between ultra-Orthodox and other workers, may point to broader systemic issues at play. This underscores the need for further exploration into how education, gender, and religious background intersect to influence pay disparities in the labor market. This could guide future policy in creating inclusive work environments.

Academic

This research contributes to the growing body of literature on job satisfaction among ultra-Orthodox women, particularly as knowledge workers. The study underscores the importance of peer support as a contributing factor to job satisfaction. Furthermore, it adds depth to understanding how different forms of peer support—particularly appraisal—can influence job satisfaction. The findings can inform future research and interventions aimed at improving job satisfaction among this demographic. The notion of salary positively contributing to job satisfaction is unsurprising, yet it adds to the academic body of evidence about this demographic cohort.

Socioeconomic

The study highlights the role of peer support in facilitating workforce integration among minorities and women. Given the pay disparity and sociocultural dynamics, the research offers insights into how social support can mitigate the challenges of entering and remaining in high-income fields. The findings suggest that improving peer support, particularly through appraisal, can not only enhance job satisfaction, but help address broader socioeconomic disparities.

LIMITATIONS

There were some limitations to the study. While the data indicated a significant positive linear relationship between peer support and job satisfaction, the relationship was modest. The data was further

limited by appraisal having a greater impact than general peer support, and belonging and self-esteem displaying mild suppressor effects.

The overall target sample size of the survey accounted for only a moderate confidence level and margin of error, a pragmatic but limiting constraint. The applicability of results was narrowed by the low number of responses from ultra-Orthodox women working in finance. However, the overall number of responses was significantly higher than anticipated, which boosted the level of confidence and provided a rich dataset of insights on hi-tech workers in the cohort.

Qualitative data could have been collected through interviews or focus groups with some survey respondents, or even via short-answer options in the survey. Analyzing such data would have required a completely separate collection methodology and different investigative techniques.

These results may not be fully representative of the broader demographic, as the survey was only accessible via the Internet and promoted through peer support mechanisms. The ultra-Orthodox community is less likely to use the Internet outside of strict work responsibilities, and although this trend is gradually reversing, it may still have skewed responses (Cahaner & Malach, 2024).

FUTURE RESEARCH

To gain a more comprehensive understanding, this survey could be replicated across the entire female ultra-Orthodox division of a large high-tech company in Israel. This would help determine if the reliance on or interest in peer support is consistent across a more extensive and potentially more diverse population of ultra-Orthodox professionals.

The survey collected information that can be used for future research, particularly for exploring pay disparity and the relationship between salary and education. Pay discrimination emerges from the demographic information as an area in critical need of more study and policy prescription. The survey also collected information that may be helpful for future studies about peer support in various office environments and working arrangements.

CONCLUSION

This study demonstrated that peer support should be considered among the variables contributing to job satisfaction among female ultra-Orthodox Israeli knowledge workers. The findings provide avenues for further research through replication, and the data can reveal additional insights about this population. Overall, this research helped deepen the understanding of how social dynamics within and between cultures influence employee satisfaction. Most importantly, the data indicated that appraisal-centric peer support networks may help integrate ultra-Orthodox women into the Israeli workforce.

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ChatGPT (OpenAI, 2024) was used to assist in double-checking statistical calculations presented in this article.

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