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The relationship between breastfeeding motivation, workplace breastfeeding support, and job satisfaction among working mothers

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Abstract

Women of childbearing age constitute a vital part of the workforce, and some may be working when they start and continue breastfeeding. This study aims to determine the relationship between working mothers' breastfeeding motivation, workplace breastfeeding support, and job satisfaction. This descriptive and correlational study was conducted in Turkey between January and March 2020. Data from 195 mothers, who worked in three different public institutions, were collected in person using the Questionnaire Form and Workplace Breastfeeding Support Scale, Breastfeeding Motivation Scale, and the Minnesota Satisfaction Questionnaire Short Form. We used the statistical tests analyses of variance (ANOVA), Kruskal–Wallis H test, and Spearman's rho correlation analysis, with a significance level of $p < 0.05$. There was a weak positive correlation between the workplace breastfeeding support total score and breastfeeding intrinsic motivation ($r = 0.151$, $p < 0.05$). A weak positive correlation was found between the total score of the job satisfaction scale and the peer and environmental support subscale ($r = 0.182$, $p < 0.05$). Participants self-evaluated their breastfeeding competence. The difference between workplace breastfeeding support and breastfeeding competence was significant ($F = 4.443$, $p < 0.05$). Working mothers who perceived greater peer and environmental support also reported more breastfeeding intrinsic motivation and higher job satisfaction. Mothers with high breastfeeding competence had positive perceptions of workplace breastfeeding support. The study found no significant relationship between facility support and technical support subscales and job satisfaction *(Afr J Reprod Health 2024; 28 [11]: 141-151)*

Keywords: Breastfeeding, breastfeeding motivation, job satisfaction, midwifery, nursing, workplace breastfeeding support, working mothers

Résumé

Les femmes en âge de procréer constituent une partie vitale de la main-d'œuvre, et certaines peuvent travailler lorsqu'elles commencent et continuent d'allaiter. Cette étude vise à déterminer la relation entre la motivation des mères qui travaillent à allaiter, le soutien à l'allaitement sur le lieu de travail et la satisfaction au travail. Cette étude descriptive et corrélationnelle a été menée en Turquie entre janvier et mars 2020. Les données de 195 mères, qui travaillaient dans trois institutions publiques différentes, ont été collectées en personne à l'aide du formulaire de questionnaire et de l'échelle de soutien à l'allaitement maternel sur le lieu de travail, de l'échelle de motivation pour l'allaitement maternel et de l'échelle de satisfaction du Minnesota. Formulaire abrégé du questionnaire. Nous avons utilisé les tests statistiques d'analyse de variance (ANOVA), le test Kruskal – Wallis H et l'analyse de corrélation rho de Spearman, avec un niveau de signification de $p < 0,05$. Il y avait une faible corrélation positive entre le score total de soutien à l'allaitement sur le lieu de travail et la motivation intrinsèque à l'allaitement ($r = 0,151$, $p < 0,05$). Une faible corrélation positive a été trouvée entre le score total de l'échelle de satisfaction au travail et la sous-échelle de soutien par les pairs et l'environnement ($r = 0,182$, $p < 0,05$). Les participantes ont auto-évalué leurs compétences en matière d'allaitement. La différence entre le soutien à l'allaitement sur le lieu de travail et la compétence en matière d'allaitement était significative ($F = 4,443$, $p < 0,05$). Les mères qui travaillent et qui perçoivent un plus grand soutien de leurs pairs et de leur environnement ont également signalé une plus grande motivation intrinsèque à l'allaitement et une plus grande satisfaction au travail. Les mères ayant une compétence élevée en matière d'allaitement avaient une perception positive du soutien à l'allaitement sur le lieu de travail. L'étude n'a trouvé aucune relation significative entre les sous-échelles de soutien aux installations et de soutien technique et la satisfaction au travail. *(Afr J Reprod Health 2024; 28 [11]: 141-151).*

Mots-clés: Allaitement maternel, motivation pour l'allaitement maternel, satisfaction au travail, sage-femme, soins infirmiers, soutien à l'allaitement maternel sur le lieu de travail, mères qui travaillent

Introduction

Women of childbearing age constitute a significant part of the workforce. They actively contribute at work during times in their lives when they may have children. This may force them to choose between working life and breastfeeding and mothers' work situations impact their behaviors and decisions to

start and continue breastfeeding[1,2]. The American College of Obstetricians and Gynecologists (ACOG) argues that policies that protect mothers' and infants' rights are essential in sustaining breastfeeding, such as parental leave, paid lactation breaks, workplace childcare, and non-bathroom lactation rooms[3]. Mothers who have breaks and space for breastfeeding at work are 2.3 times more likely to breastfeed exclusively for the first six months[4], while mothers who return to work without this support have a higher risk of stopping breastfeeding early[5]. Among mothers who are 3–12 months postpartum and return to work, those who do not receive workplace breastfeeding support also have lower job satisfaction[6]. In a study conducted with female healthcare professionals, workplace breastfeeding support has been found to increase job satisfaction and also positively impact exclusive breastfeeding rates and breastfeeding duration[7].

Mothers' motivation to breastfeed has a significant impact[1] and "in the real world, motivation is precious because of its consequences: motivation produces"[2]. When it comes to breastfeeding, motivation always produces[8]. Women who believe they are breastfeeding adequately are motivated and become more insistent on breastfeeding with more experience. Motivational and cultural influences play an important role in maternal decision-making and behavior, which influence both the initiation and duration of breastfeeding[9]. The high motivation of working mothers in Indonesia was related to the high rate of 31% of mothers who breastfed exclusively for the first six months[10]. Breastfeeding self-efficacy is a mother's perceived ability to breastfeed her newborn baby or her confidence in breastfeeding. In order to develop breastfeeding self-efficacy, mothers must be supported, encouraged, adequately informed about breastfeeding, and practice this skill[11].

The United States Breastfeeding Committee (USCB) confirms that working conditions significantly impact breastfeeding. More positive perceptions of workplace breastfeeding support correlate with longer breastfeeding times and higher job satisfaction[9,12-13]. Bai & Wunderlich (2013) argue that working mothers' experiences with work, family, and breastfeeding should improve when support is provided by both health professionals and employers[14].

For the 2023 breastfeeding week, the WHO and UNICEF emphasized breastfeeding support for working mothers. More than half a billion working women worldwide do not benefit from national maternity rights, and less than half of babies under six months old are exclusively breastfed[15]. Continuing breastfeeding among working mothers is a current issue. When the studies on the subject were examined, no study was found that examined the concepts of workplace breastfeeding support, work motivation and breastfeeding motivation together. Therefore, it is thought that our study is original and will contribute to the literature.

Methods

Study aim, objectives and design

This research aims to determine the relationship between breastfeeding motivation, workplace breastfeeding support, and job satisfaction of working mothers. The research was planned and conducted as descriptive and correlational. The data were collected in public institutions in a city in northern Turkey in January–March 2020.

Sample

The study was conducted in the largest district of a city in northern Turkey. Turkish Statistical Institute (TSI), 2021 reported; The labor force participation rate of women in the region (36.5 %) is above the Turkish average (32.8 %). The study included mothers aged 18 and over who were working in the public sector for at least one month after maternity leave, had an infant aged 4–12 months, and had breastfed for a while or were still breastfeeding. Before the study, the sample size was calculated using the G Power program's biserial correlation power analysis test. Considering the r=0.26 correlation between breastfeeding duration and workplace environment, 182 samples were calculated with 95% (1-α) confidence and 95.1% (1-β) test power[16]. We sampled 195 women, anticipating potential data loss. The sample of the study consisted of women working in the University (74 women), Metropolitan Municipality (71 women) and the National Education Directorate (50 women).

Data collection

The study included women working in government offices, universities, and municipalities. We chose them because they were the institutions with the highest number of included women working in the region we conducted research. We obtained the necessary ethics and institutional permits to conduct the research in January–March 2020 using the Questionnaire Form, WBSS, BMS, and MSQ-SF. Necessary permission was obtained for the scales used in the study. Researchers went to the institutions and identified women who met the sample criteria. After mothers provided verbal and written consent to participate in the study, an appointment was made to meet again. At each appointment, a researcher met with each woman in person for approximately 30–35 minutes and helped them fill out the forms.

Measurement

Questionnaire Form: In the descriptive phase of the study, the form prepared by the researchers included a total of questions, including items about sociodemographic characteristics (age, education level, income status), breastfeeding, work, and maternity leave.

Workplace Breastfeeding Support Scale (WBSS): The scale was developed by Bai, Peng, and Fly (2008)[17] to assess the perception of workplace breastfeeding support among working mothers. Karakaya & Kılıç (2021)[18] made the Turkish adaptation of the scale, which has 12 items with seven-point Likert-type response options. Response options numbered 1–7 range from "strongly disagree" to "strongly agree." There are two subscales: Peer and Environmental Support has seven items; Facility and Technical Support has five items. The possible score range is 12–84. Higher scores reflect more positive perceptions of workplace breastfeeding support. In the current study, the Cronbach's alpha coefficient of the Workplace Breastfeeding Support Scale was 0.78, the Peer and Environmental support subscale was 0.80, and the Facility and Technical Support subscale was 0.71.

Breastfeeding Motivation Scale (BMS): The scale, based on the self-determination theory, was developed by Kestler-Peleg *et al*. (2015) to assess mothers' motivation to breastfeed. Sahin et al. (2019)[19] validated it in Turkey. The scale consists of 24 items with four-point Likert-type response options. The scale has five subscales: intrinsic motivation, identified regulation, introjected regulation, external regulation (instrumental needs), and external regulation (infant health). Higher scores indicate higher motivation. The current study uses the intrinsic motivation subscale. The possible range of scores is 9–36. Cronbach's alpha coefficient was 0.89.

Minnesota Satisfaction Questionnaire-Short Form (MSQ-SF): Weiss *et al.* (1967) developed this scale to evaluate employee satisfaction and Baycan (1985)[20] did the Turkish adaptation. The short form includes intrinsic and extrinsic job satisfaction subscales and consists of 20 items with five-point Likert-type response options. The intrinsic job satisfaction subscale has 12 items with a possible score range of 12–60. The extrinsic job satisfaction subscale has eight items with a possible score range of 8–40. No items have negative scores. The overall possible score has a range of 20–100, which reflects job satisfaction. In the current study, the Cronbach's alpha coefficient was 0.93. For the subscale on intrinsic job satisfaction, it was 0.90; for extrinsic job satisfaction, it was 0.85.

Data analysis

The data were evaluated with descriptive statistics (number, percentage, mean, standard deviation, minimum, maximum values) in the program SPSS Statistics 22.0 (IBM Corp., Armonk, New York, USA). First of all, the data used were tested for suitability for normal distribution using the Shapiro-Wilk and Kolmogorov-Smirnov tests. We performed parametric and nonparametric analyzes for comparison of means of more than two groups. We used the statistical tests analyses of variance (ANOVA), Kruskal–Wallis H test, and

Spearman's rho correlation analysis, with a significance level of $p<0.05$.

Results

This study was conducted with 195 women who continued or stopped breastfeeding after returning to work.

Demographic characteristics of working mothers findings regarding birth, breastfeeding, and work life

The sociodemographic results show most had higher education (91.3%). The average age was 32.7±4.3. Family income was balanced (50.3%). Working mothers exclusively breastfed for an average of five months. More than half (59.5%) reported giving their babies formula; 61% planned to breastfeed for up to two years; 49.1% said they started complementary feeding because their own milk production was low; 95.4% said their partners supported breastfeeding. About half (51.8%) had been working for 5–10 years. The mean time to return to work after birth was 22.8±10.3 weeks and the mean duration of maternity leave was 11.3±2.4 weeks (Table 1).

Findings on the relationship between workplace breastfeeding support, breastfeeding motivation, and job satisfaction

Table 2 shows the average scores for overall and subscales of the WBSS, BMS (intrinsic motivation), and MSQ-SF. Spearman's rho correlation analysis was used to test for a relationship between the WBSS, BMS (intrinsic motivation), and MSQ-SF scores (Table 3). There was a weak positive correlation between the peer and environmental support subscale and the breastfeeding intrinsic motivation (r=0.177, $p<0.05$). There was a weak positive correlation between the WBSS total score and breastfeeding intrinsic motivation (r=0.151, $p<0.05$).

High scores for intrinsic motivation tended to coincide with more positive scores for perceptions of workplace breastfeeding support and peer and environmental support.

There was a weak positive correlation between the intrinsic satisfaction subscale of the job satisfaction scale and breastfeeding intrinsic motivation (r=0.193, $p<0.001$). Higher intrinsic breastfeeding motivation of working mothers correlated with higher intrinsic job satisfaction.

There was a weak positive correlation between the extrinsic satisfaction subscale of the job satisfaction scale and the peer and environmental support subscale (r=0.222, $p<0.001$). A weak positive correlation was found between the total score of the job satisfaction scale and the peer and environmental support subscale (r=0.182, $p<0.05$). Working mothers with more positive perceptions of peer and environmental support at work have higher job satisfaction scores.

Differences in the WBSS, BMS (intrinsic motivation), and MSQ-SF scores are shown in Table 4. Participants self-evaluated their breastfeeding competence. The difference between workplace breastfeeding support and breastfeeding competence was significant (F=4.443, $p<0.05$). The WBSS scores of mothers who reported being at least very good at breastfeeding were higher than mothers who reported being only moderately competent at breastfeeding. Mothers who feel more competent also have a more positive perception of workplace breastfeeding support. No significant difference was found between the perception of breastfeeding competence and breastfeeding intrinsic motivation and job satisfaction.

The differences between working mothers in terms of the WBSS and MSQ-SF scores according to their positions at work were significant ($p<0.05$). Our results show a difference between the WBSS and MSQ-SF scores based on profession. The WBSS scores for nurses were higher than research assistants. However, nurses' job satisfaction was lower than others. Nurses' perception of workplace breastfeeding support was higher than other professions but their job satisfaction was lower. There was no significant difference between partner's breastfeeding support, total working time, and time at the more recent workplace.

Table 1: Findings regarding birth, breastfeeding, and work life of working mothers

Characteristics		N	%
Partner's supports breastfeeding	Yes	186	95.4
	No	4	2.1
	Partly	5	2.6
Planned breastfeeding duration	2 years	119	61.0
	Less than 2 years	62	31.8
	More than 2 years	14	7.2
Formula feeding status	Yes	116	59.5
	No	79	40.5
Supplementary food time	No	12	6.2
	6th month	124	63.6
	Before 6 months	43	22.1
	After 6 months	16	8.2
Reason for starting supplementary food	Breast refusal	5	9.4
	Low milk supply	26	49.1
	Back to work	13	24.5
	Poor weight gain	6	11.3
	Baby's health problems	3	4.9
Total working time	Less than 5 years	32	16.4
	5-10 years	101	51.8
	More than 10 years	62	31.8
Working time at last workplace	Less than 5 years	89	45.6
	5-10 years	82	42.1
	More than 10 years	24	12.3
Weekly working time	Less than 40 hours	88	45.1
	40 hours	82	42.1
	More than 40 hours	25	12.8
	Mean±SD		
Duration of exclusive breastfeeding (months)	5.12±1.79		
Return to work after giving birth duration (weeks)	22.78±10.28		
Maternity leave period (weeks)	11.34±2.43		
Annual leave duration (weeks)	2.16±2.65		
Sick leave (weeks)	4.54±5.65		
Leave without pay (weeks)	4.64±9.01		

Table 2: WBSS, BMS, MSQ-SF average scores of working mothers

Scales	N	Min.	Max.	Mean	SD
Peer and environmental support	195	9	49	39.35	8.59
Facility support and technical support	195	5	35	15.45	7.58
WBSS total	195	22	84	54.81	12.95
Breastfeeding intrinsic motivation	195	13	36	34.80	4.70
Intrinsic job satisfaction	195	19	60	45.71	8.18
Extrinsic job satisfaction	195	10	40	28.38	6.22
MSQ-SF total	195	30	100	74.10	13.62

Abbreviations: WBSS, workplace breastfeeding support scale; BMS, Breastfeeding Motivation scale; MSQ-SF, Minnesota Satisfaction Questionare; SD, standard deviation

Table 3: Correlation values of the relationship between study variables scores of working mothers

		1	2	3	4	5	6	7
1.Peer and environmental support	r	1						
2.Facility support and technical support	r	.287**	1					
3.WBSS total	r	.820**	.758**	1				
4. Breastfeeding intrinsic motivation	r	.177*	.025	.151*	1			
5.Intrinsic job satisfaction	r	.128	.028	.109	.193**	1		
6.Extrinsic job satisfaction	r	.222**	-.033	.122	.075	.771**	1	
7.MSQ-SF total	r	.182*	.001	.123	.145*	.940**	.931**	1

Spearman' rho coefficient. *p<0.05, **p<0.001

Table 4: Differences in study variables scores of working mothers by breastfeeding and work-related charateristics

		S	**WBSS** X±SD	**BMS (Intrinsic)** X±SD	**MSQ-SF** X±SD
Breastfeeding competence	Bad	9	58.11±11.07	30.77±4.02	71.11±13.61
	İntermediate	42	49.69±13.30	30.40±4.28	73.55±15.64
	Good	68	53.78±11.50	31.77±4.49	76.97±9.99
	Very good	76	58.16±13.32	32.07±4.33	72.18±14.97
	Test		F= 4.443[d]	KW= 5.390[b]	F= 2.063[c]
			***p*= 0.005**	p= 0.145	p= 0.123
	Difference		4>2-3[d]	-	-
Partner's breastfeeding support	Yes	186	54.65±13.05	31.49±4.45	73.69±13.51
	No	4	53.75±11.95	31.25±3.30	75.00±19.30
	Partly	5	58.20±12.07	34.40±1.14	83.00±5.33
	Test		F= 0.528[d]	F= 5.991[c]	F= 2.009[d]
			p= 0.664	***p*= 0.011***	p= 0.114
	Difference		-	3>2-1	-
Total working time	Less than 5 years	32	57.06±15.219	78.56±9.903	75.19±16.996
	5-10 years	101	53.27±11.967	79.97±10.389	75.23±12.158
	More than 10 years	62	56.15±13.140	80.16±8.580	71.69±13.850
	Test		F= 1.538[d]	F= 0.314[d]	F= 1.423[c]
			p= 0.217	p= 0.731	p= 0.243
Time at the more recent workplace	Less than 5 years	89	53.95±14.06	31.29±4.64	75.66±14.29
	5-10 years	82	54.91±11.53	31.75±4.35	74.42±13.54
	More than 10 years	24	57.58±13.39	31.87±3.48	74.58±11.59
	Test		F= 0.745[d]	KW= 0.366[b]	KW= 0.181[b]
			p= 0.476	p= 0.833	p= 0.913
Institutions and position in the workplace					
University	Lecturer	29	54.34±14.06	31.34±14.06	80.45±7.81
	Nurse	23	61.48±13.41	31.17±3.74	58.13±12.72
	Assistant physician	5	49.40±8.56	31.00±5.56	72.20±9.28
	Research assistant	17	49.29±11.39	32.23±4.64	76.71±9.99
Metropolitan Municipality	Officer	42	52.95±12.26	30.54±5.08	72.67±15.74
	Worker	29	58.76±15.38	32.48±3.99	73.93±13.89
Directorate of national education	Director	4	62.50±8.06	31.00±7.07	81.00±10.52
	Teacher	46	52.91±10.53	31.97±3.85	78.13±10.17
	Test		F= 2.409[d]	KW = 4.892[b]	F = 7.676[c]
			***p*= 0.022**	p = 0.673	***p* = 0.001**
	Difference		4>1-2-3-7-8[a]	-	1-2-3-5-6-7-8>4*

[a] Tukey HSD test; [b] Kruskal Wallis H Test; [c] Welch Test; [d]One Way ANOVA test; * Tamhane's T2 test. The mean difference is significant at the 0.05 level

Discussion

The healthiest thing for a person in the first years of life is for the baby to be fed with milk sucked from the mother's breast. In middle and low-income countries, two out of every three infants[21] can be exclusively breastfed for the first six months; in Turkey, this is four out of every ten babies (41%)[22]. In our research, more than half of the mothers (60%) stated that they breastfed or planned to breastfeed their babies until the sixth month. According to the Turkish Demographic and Health Survey (TDHS, 2018), the average duration of exclusive breastfeeding was 1.8 months[21]. In another study in Turkey, the average duration of exclusive breastfeeding of working mothers was 5.20 months[22]. We obtained a similar result, 5.1±1.8 months. According to TDHS data, these longer breastfeeding times may be because mothers are more willing to breastfeed and have higher levels of education. Unfortunately, most of these mothers give formula to their babies (59.5%). Those who cannot exclusively breastfeed often turn to foods other than breast milk. The main reason for this is the fear of insufficient breast milk or the baby going hungry. In Turkish culture, social pressure is a factor. Mothers may not be able to devote enough time to feeding their babies due to work. Unfortunately, they may have to choose between keeping their jobs or caring for their children. Mothers should not deal with all this alone. In its Global Breastfeeding Partnership declaration, UNICEF emphasizes breastfeeding support with the slogan "Breastfeeding is not just for women"[24]. It is expected that working mothers' work, family, and breastfeeding experiences improve when support is provided by healthcare professionals and employers[14].

Recent Turkish laws allow for 16 weeks of paid maternity leave – eight weeks before birth and eight weeks after birth. With a medical report, this can be extended to a maximum of 13 paid weeks as well as 24 months of unpaid leave after birth. In addition, when they return to work after leave, they can take three-hour breaks for the first six months and one-and-a-half-hour breaks for the second six months[25]. In our research, mothers were able to use their legal leave to the fullest extent because they worked in public institutions. However, since paid maternity and breastfeeding leaves were not sufficient, they planned to spend more time with their babies by extending the period with sickness reports. Returning to work is a principal reason for discontinuing breastfeeding sooner than recommended. It is difficult for mothers to continue breastfeeding at work because adequate conditions are not provided. Women who have difficulty balancing their work roles and reproductive roles often decide to quit breastfeeding instead of their jobs[23]. There is a strong relationship between paid maternity leave and starting and continuing breastfeeding[26]. Mothers can be provided with a suitable time and place for breastfeeding at work with minimal cost and effort, but many mothers experience difficulties because this is not available[27-28]. Lack of facilities and technical support in the workplace is the most significant barrier to breastfeeding [29-30]. In our study, facility and technical support scores were low (15.5±7.6). A 2013 Turkish law states: "In workplaces where 100–150 women work, regardless of their age and marital status, the employer must provide a place for them to take breaks, and care for and breastfeed their children under one year old. It is mandatory to establish a lactation room so women can breastfeed their children at work"[31]. We observed that institutions where we conducted our study did not have this infrastructure, managers were not sensitive to this issue, and the legislation was not implemented.

One study revealed that the majority of mothers had high motivation, and this correlated with 31% of them exclusively breastfeeding for the first six months[32]. Another study found that working status did not affect breastfeeding motivation[19] and another found that primiparous mothers who did not work had lower expectations regarding breastfeeding motivation[33]. In our study, intrinsic motivation was high and there was a positive and significant relationship between motivation and the perception of workplace breastfeeding support. To maintain and further improve breastfeeding support in the workplace, it is essential to evaluate the degree of support from mothers' perspectives[17].Women

who enjoy breastfeeding and are happy are also highly intrinsically motivated[19].

In our study, we found that the participants' perception of peer and environmental support was high. We also found positive and significant relationships between the perception of peer and environmental support at work and breastfeeding intrinsic motivation and job satisfaction. We surmise that the reason for this is traditional cultural practices. In Turkey, breastfeeding is supported by society. A breastfeeding woman is always respected and a suitable environment is prepared for her to breastfeed. However, since employers and institutions have not prepared technical and infrastructural environments for breastfeeding, participants' perception of workplace facility support and technical support is low. Workplaces have more potential power in this regard and must provide this to their employees. In Thailand, breastfeeding employees also wanted employers to provide specific breastfeeding breaks. Similar to our study, it was found that mothers received support from their families, healthcare professionals and colleagues when returning to work after giving birth[34].

Previous studies have concluded that breastfeeding support at the workplace has a positive effect on job satisfaction, and job satisfaction increases when mothers spend time expressing milk[12,30,35]. However, our study found no significant relationship between facility support and technical support subscales and job satisfaction. This is because workplaces still need the necessary infrastructure for breastfeeding, expressing, and storage. Another study also concluded that mothers who did not receive breastfeeding support at work had lower job satisfaction, among mothers who returned to work 3–12 months after birth[7].

According to self-determination theory, people who perform activities or behaviors because they bring interest, success, pleasure, happiness, and excitement are intrinsically motivated. Highly motivated people feel completely independent and believe that their behavior is a form of self-expression. As Sahin and Özerdoğan (2018) describe, Deci & Ryan (2000) define the forces that motivate people from birth as intrinsic motivation. In our study, participants' intrinsic breastfeeding motivation was high, as was the rate of exclusive breastfeeding in the first six months (63.6%). Hidayati *et al*. (2019) found a similar relationship; mothers with high breastfeeding motivation had high rates of exclusive breastfeeding in the first six months (61.4%). Mothers with high intrinsic motivation to breastfeed want to continue breastfeeding because they enjoy this activity.

In our study, a significant difference was found in mothers' perception of workplace breastfeeding support based on profession. Scores were higher for nurses than other professions. This is probably because nurses working in hospitals have a breastfeeding room and there is a breastfeeding nurse in the institution where they work. In a study conducted with mothers working at a university in Spain, faculty members took more breaks for breastfeeding and could arrange their breaks more easily[30]. In another study, workplace support also varied by profession and mothers working in service, production, and transportation sectors were disadvantaged[36].

Our study found that profession had a significant impact on job satisfaction scores. Nurses' job satisfaction was lower than other professions. Another study in Turkey reported similar job satisfaction scores for female nurses[37]. Nurses often have busy work schedules, which is more difficult for new mothers. Low job satisfaction scores can mostly be explained by administrative problems.

Our study found a significant difference between mothers' breastfeeding competence and perception of workplace breastfeeding support. The WBSS scores of mothers who evaluated their breastfeeding competence as very good (58.2±13.3) were higher than those of mothers who evaluated their breastfeeding adequacy as moderate (49.7±13.3) and good (53.8±11.5). It has been suggested that breastfeeding competence improves in workplace environments with supportive colleagues[38-40]

Conclusion

Mothers with a more positive perception of workplace, colleague, and environmental support have higher intrinsic breastfeeding motivation and job satisfaction. The perception of breastfeeding

support at work is higher in mothers with higher self-reported breastfeeding proficiency. Positive developments occur when women feel supported about breastfeeding while at work. Self-confident, satisfactory, and determined behavior ensures the continuity of breastfeeding.

In order to ensure the continuation of breastfeeding and the continuity of the mother–baby bond, we suggest opening childcare centers at or near workplaces, which are included in the current regulations, and providing an environment where women can receive education on this subject. They need to feel comfortable in the workplace and have access to a lactation room so that they can continue breastfeeding when they return to work. Breastfeeding mothers need to be able to express milk and breastfeed their babies in line with their needs. Occupational physicians and workplace nurses should guide employers and employees on providing workplace breastfeeding support. Maternity and breastfeeding breaks and leaves should follow recommendations of international organizations. More research is needed with larger, more diverse samples. Women working in the private sector may experience more serious problems, so this area should be a priority for future research.

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Ethics approval and consent to participate

The study was approved by the clinical research ethics committee (Clinical Research Ethics Committee decision no. 2019/548).

Contribution of author

MK and NK conceptualized the study design, supervised the data collection, conducted the data analysis, wrote the first draft of the article, and revised subsequent drafts in response to coauthor input. NK collected data. MK and NK performed the statistical analyses. NK wrote the manuscript and performed the critical review of the first draft. All authors approved the final version of the manuscript.

Consent for publication

Not applicable.

Availability of data and materials

The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

Competing interests

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References

1. Şolt Kırca A and Hür S. Breastfeeding fact. In: Aktaş Reyhan E (Ed.). A Guide to Breastmilk and Breastfeeding. Ankara: Vize Publishing, 2022, 6-11.
2. Ryan RM and Deci EL. Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. Am Psychol 2000;55(1):68-78. https://doi.org/10.1037/0003-066X.55.1.68
3. ACOG. Optimizing support for breastfeeding as part of obstetric practice. Committee Opinion No. 658. Obstet Gynecol 2016;127:86-97.
4. Kim JH, Shin JC and Donovan SM. Effectiveness of workplace lactation ınterventions on breastfeeding outcomes in the United States: An updated systematic review. J Hum Lact 2019;35(1):100-113. https://doi.org/10.1177/0890334418765464
5. Gianni ML, Bettinelli ME, Manfra P, Sorrentino G, Bezze E, Plevani L, Cavallaro, Raffaeli G, Crippa G, Colombo BL, Morniroli L, Liotto D, Roggero N, Villamor P, Marchisio EP, and Mosca F. Breastfeeding difficulties and risk for early breastfeeding cessation. Nutrients 2019;11(10). https://doi.org/10.3390/nu11102266
6. Anderson J, Kuehl RA, Drury SAM, Tschetter L, Schwaegerl M, Hildreth M, Bachman C, Gullickson H, Yoder J, and Lamp J. Policies aren't enough:the importance of interpersonal communication about workplace breastfeeding support. J Hum Lact 2015;31(2):260-266 https://doi.org/10.1177/0890334417707956

7. Whitley MD, Ro A, and Choi B. Workplace breastfeeding support and job satisfaction among working mothers in the United States. Am J Ind Med. 2019;62(8):716-26. https://doi.org/10.1002/ajim.22989
8. Stockdale J, Sinclair M, Kernohan G, and Keller J. Understanding the psychology of breastfeeding and the theory of motivation. In: Bryar RSM (Ed.). Theory for Midwifery Practice. Ankara: Alter Publishing, 2017.
9. Scott VC, Taylor YJ, Basquin C, and Venkitsubramanian K. Impact of key workplace breastfeeding support characteristics on job satisfaction, breastfeeding duration, and exclusive breastfeeding among health care employees. Breastfeed Med 2019;14(6):416-23. https://doi.org/10.1089/bfm.2018.0202
10. Dornan L, Sinclair M, Kernohan WG, Chaloumsuk N, and Suppasan P. Breastfeeding, Motivation and Culture: an Exploration of Maternal Influences Within Midwife-Led Instruction in an Asian Setting. 2020.
11. Ergezen Y, Efe E, Çalışkan Özdöl F, and Dikmen Ş. The Relationship between mothers' breastfeeding self-efficacy perceptions and breastfeeding success in postpartum period. DEUHFED 2021; 14(3): 217-223. https://doi.org/10.46483/deuhfed.675733The
12. Jantzer AM, Anderson J, and Kuehl RA. Breastfeeding support in the workplace: the relationships among breastfeeding support, work-life balance, and job satisfaction. J Hum Lact 2018;34(2):379-85. https://doi.org/10.1177/0890334417707
13. Payton C, Romney M, Olson BH, Abatemarco DJ, LaNoue M, and Leader AE. Evaluation of workplace lactation support among employers in two Pennsylvania cities. Business Horizons 2019;62(5):579-87.
14. Bai Y, and Wunderlich SM. Lactation accommodation in the workplace and duration of exclusive breastfeeding. J Midwifery Womens Health. 2013;58(6):690-696. https://doi.org/10.1111/jmwh.12072
15. Russell C. Let's make breastfeeding and work, work!, World Breastfeeding Week 2023. https://www.who.int/campaigns/world-breastfeeding-week/2023 (20 September, 2023)
16. Dinour LM and Szaro JM. Employer-based programs to support breastfeeding among working mothers: a systematic review. Breastfeeding medicine. 2017;12(3), 131-141.
17. Bai Y, Peng CY, and Fly AD. Validation of a short questionnaire to assess mothers' perception of workplace breastfeeding support. J Am Diet Assoc. 2008;108(7):1221-1225. https://doi.org/10.1016/j.jada.2008.04.018
18. Karakaya N and Kılıç M. Turkish Adaptation of the Workplace Breastfeeding Support Scale: A Validity And Reliability Study. Journal of Samsun Health Sciences. 2021; 6(3): 721-736. https://doi.org/10.47115/jshs.1029188
19. Mizrak Sahin B, Ozerdogan N, Ozdamar K, and Gursoy E. Factors affecting breastfeeding motivation in primiparious mothers: An application of breastfeeding motivation scale based on self-determination theory. Health Care Women Int. 2019;40(6):637-52. https://doi.org/10.1080/07399332.2018.1526289
20. Baycan A. An analysis of the several aspects of job say satisfaction between different occupational groups (Master thesis). Istanbul: Department of Psychology, Institute of Social Sciences Bogazici University 1985.
21. Victora CG, Bahl R, Barros AJ, França GV, Horton S, Krasevec J, Murch S, Sankar MJ, Walker N, and Rollins NC. Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. Lancet. 2016;387(10017):475-90. https://doi.org/10.1016/S0140-6736(15)01024-7
22. Ergöçmen B, Türkyılmaz S, Kaptanoğlu İY, and Çavlin A. Domestic violence against women in Turkey. Ankara: Hacettepe University Institute of Population Studies. 2018.
23. Sağlam H, Özerdoğan N, Gürsoy E, and Çağan Ö. Factors associated with time of ınitiation and continuation of breastfeeding in working women. Mersin University Faculty of Medicine Lokman Hekim Journal of Medical History and Folkloric Medicine. 2020;10:468-80.
24. UNICEF. The global breastfeeding collective. 2019 https://www.unicef.org/nutrition/index_98470.html. (17 June, 2020).
25. Official Gazette. Regulation on partial time work to be done after maternity leave or unpaid leave. 2016 https://www.resmigazete.gov.tr/eskiler/2016/11/20161108-11.htm (20 June, 2023).
26. Dagher RK, McGovern PM, Schold JD, and Randall XJ. Determinants of breastfeeding initiation and cessation among employed mothers: a prospective cohort study. BMC Pregnancy Childbirth. 2016;16(1):194. https://doi:10.1186/s12884-016-0965-1
27. Eroğlu V, and Yurtsal ZB. Breastfeeding and working life. In: Yurtsal ZB (Ed.). Evidence-Based Practices in Breastfeeding and Breastfeeding. Elazığ.: Anadolu Nobel Medical Bookstores; 2018.
28. Lee J. Supporting Breastfeeding moms at work: how a doctor's note can make the difference. Breastfeed Med. 2017;12(8):470-472. https://doi.org/10.1089/bfm.2017.0107
29. Cervera-Gasch Á, Mena-Tudela D, Leon-Larios F, Felip-Galvan N, Rochdi-Lahniche S, Andreu-Pejó L, and González-Chordá VM. Female employees' perception of breastfeeding support in the workplace, public universities in Spain: A multicentric comparative study. Int J Environ Res Public Health. 2020;17(17). https://doi.org/10.3390/ijerph17176402

30. Leon-Larios F, Pinero-Pinto E, Arnedillo-Sanchez S, Ruiz-Ferron C, Casado-Mejia R, and Benitez-Lugo M. Female employees' perception of breastfeeding-friendly support in a public university in Spain. Public Health Nurs. 2019;36(3):370-8. https://doi.org/10.1111/phn.12590
31. Official Gazette. Regulation on working conditions of pregnant or nursing women, and lasting rooms and child care dormitory. 2004. https://www.resmigazete.gov.tr/eskiler/2004/07/20040714.htm. (20 June, 2023)
32. Hidayati FN, Kamala RF, Nurhayati E, and Hadi H. Motivation and exclusive breastfeeding among mothers in employment. Indonesian Journal of Nutrition and Dietetics. 2019; 7(1):16-22.
33. Akçay İ. Breastfeeding motivations of primiparous mothers and affecting factors. Midwifery Department, Master thesis, İstanbul: Marmara University; 2019.
34. Cetthakrikul N, Voramongkol N, Siritanaratkul S, & Hangchaovanich Y. Mothers' needs and wishes for breastfeeding support in workplaces in Thailand: a qualitative study. International Breastfeeding Journal. 2024; 19(1), 67. https://doi.org/10.1186/s13006-024-00674-5
35. Waite WM, and Christakis D. Relationship of maternal perceptions of workplace breastfeeding support and job satisfaction. Breastfeed Med. 2015;10(4):222-227. https://doi.org/10.1089/bfm.2014.0151
36. Snyder K, Hansen K, Brown S, Portratz A, White K, and Dinkel D. Workplace Breastfeeding support varies by employment type: The service workplace disadvantage. Breastfeed Med. 2018;13(1):23-27. https://doi.org/10.1089/bfm.2017.0074
37. Karabulut F, Abacıgil F, and Arslantaş H. Factors affecting job satisfaction and quality of work life in nurses: a crosssectional study. Journal of Adnan Menderes University Health Sciences Faculty. 2022;6. https://doi: 10.46237/amusbfd.918747
38. Rashid AA, Shamsuddin NH, Ridhuan R, Sallahuddin N, and Devaraj N. Breastfeeding practice, support, and self-efficacy among working mothers in a rural health clinic in Selangor. Malaysian Journal of Medicine and Health Sciences. 2018;14:39-49.
39. Wallenborn JT, Perera RA, Wheeler DC, Lu J, and Masho SW. Workplace support and breastfeeding duration: The mediating effect of breastfeeding intention and self-efficacy. Birth. 2019;46(1):121-8. https://doi.org/10.1111/birt.12377
40. Zhuang J, Bresnahan MJ, Yan X, Zhu Y, Goldbort J, and Bogdan-Lovis E. Keep Doing the good work: Impact of coworker and community support on continuation of breastfeeding. Health Commun. 2019;34(11):1270-8. https://doi.org/10.1080/10410236.2018.1476802.