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The Effect of the Mamanet Cachibol League on Psychosomatic Symptoms, Healthy Eating, and Social Support Among Arab Women: A Mixed-Methods Study

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Background: The Mamanet Cachibol League (MCL), a community-based model developed in Israel, promotes physical activity and amateur team sports among women. Women in the Arab society have traditionally played few sports, especially team sports. ***Aims:*** The study aimed to assess the differences in health indicators and well-being, including psychosomatic symptoms, self-reported health, healthy eating habits, and social support, by comparing Arab women MCL participants and nonparticipants and examines benefits and motivations of community-based team sports for participants. ***Methods:*** An explanatory sequential mixed-methods approach included a cross-sectional study with intervention and control groups of Israeli Arab women aged 25–59 years. Two-way analyses of covariance and multiple regression models evaluated demographics, well-being, healthy eating, and social support. Quality in-depth interviews with 30 MCL participants further explained the quantitative findings. ***Results***: MCL participants reported higher self-assessed health ($P < .001$) and decreased psychosomatic symptoms ($P < .001$) than nonparticipants. Healthier eating and well-being were also linked to MCL participation. The women sense of belonging improved social interactions, personal and professional happiness, and group dedication. MCL attendees felt empowered because the group advocated equality and valued women. Women said their involvement helped their families. ***Conclusions:*** Findings on the MCL community-based model suggest that team sports may serve as an effective tool for promoting health and well-being of Arab women and foster positive community relationships. The sense of belonging and personal empowerment derived from being part of a sports team may also contribute to positive mental health outcomes.

Keywords: womens sports, Arab community, health behaviors, amateur team sports

Key Points

- Mamanet Cachibol League (MCL) participants reported significantly better self-assessed health and fewer psychosomatic symptoms than nonparticipants, highlighting the health benefits of team sports among Arab women.
- Participation in MCL was associated with healthier eating habits, improved social interactions, and enhanced well-being, demonstrating the broader impact of community-based sports.
- The sense of belonging and empowerment from MCL participation not only enhanced personal happiness but also positively influenced family dynamics and professional life for Arab women.

In many Arab countries, women's participation in sports has traditionally been limited due, in part, to cultural and societal norms.[1–3] However, in recent years, there has been a growing trend of Arab women becoming more active in sports, both at amateur and professional levels.[2–4] In Israel, Arab women face several challenges when it comes to participating in sports. One of the main obstacles is the lack of access to facilities and resources in many Arab communities, such as a lack of sports clubs, or teams, as well as limited funding and support for sports programs.[2,5,6] Traditional gender roles may discourage women from participating in sports and there may be a lack of role models or support for Arab women athletes.[7,8] Despite these challenges, some Arab women in Israel have succeeded in sports. Efforts to promote sports participation among Arab women in Israel include increasing access to facilities and resources, as well as providing education and awareness regarding the benefits of sports for women's health and well-being.[2,6] Some women have competed at the national level in various sports and a few have even represented

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Israel in international competitions.[8,9] Nevertheless, the participation of Arab women in sports teams in Israel is still quite limited, and the representation of Arab women in higher ranks of the sports domain is nearly nonexistent.[2,6,10] According to the Israeli Ministry of Health, Arab women report a lower rate of regular leisure physical activity (PA), 42% compared with 59% of Jewish women. In addition, only 24% of Arab women reported exercising for at least 30 consecutive minutes 3 times a week or more compared with 33% of Jewish women.[10,11] The effect of limited representation in sports may be of higher magnitude than reported. Moreover, limited participation at the community level as well as the low number of female professional athletes in Arab society, may hold back the general shift of this sector in Israel towards an active and healthy lifestyle.[10–12]

Health indicators in Israel present a picture of poorer health in the Arab population compared with the Jewish population.[2,11] Although there has been some improvement in certain indicators, there are still higher rates of chronic illness and a lower life expectancy in the Arab population compared with the Jewish population.[11–13] Correspondingly, PA may be one factor that contributes to the disparities in health between Jewish and Arab women.[2,5,14]

One of the major health concerns among Arab women is obesity.[11–15] Studies have shown that Arab women have a higher rate of obesity compared with other groups in the Middle East and North Africa regions.[14–16] Contributing factors include an unhealthy diet as well as lack of PA. Cultural and societal norms also may play a role in the development of obesity among Arab women.[16] In addition to the contribution of traditional gender roles that lead to a low level of PA, there may be a lack of education and awareness of the importance of healthy lifestyle choices.[5,13–15] Obesity is associated with several health problems, such as diabetes, heart disease, and certain types of cancer.[15–17] Moreover, mental health issues, such as depression and anxiety, also common among Arab women, often are linked to personal attributes and social-cultural factors, such as familial pressure.[2,17,18] and lack of autonomy.[4,5]

Eating habits among Arab women vary depending on factors, such as culture, religion, and socioeconomic status.[19–21] Studies have identified some common dietary patterns among Arab women. Many have a diet that is high in fat, sugar, and processed foods, and low in fruits and vegetables,[14,20] which can lead to health problems including obesity, diabetes, and heart disease.[19–22] Traditionally, Arab cuisine is rich in grains, legumes, fruits, and vegetables, and includes a wide variety of dishes that are cooked with olive oil and spices.[21] However, due to the increased availability of processed and fast foods, many Arab women have adopted a more western-style diet that is high in calories and low in nutrients.[22,23]

To encourage women to increase their PA and well-being, the Mamanet Cachibol League (MCL) was established in Israel in 2005.[24] It aims to promote health, fitness, and community among Arab and Jewish women in Israel. The league is open to women of all ages and abilities and is divided into several divisions based on skill level. It has been successful in encouraging more women to participate in sports and has grown in popularity in recent years. Participating in the Mamanet League cultivates a feeling of social engagement and support among women, encouraging them to become more active members of their community.[5,6,18]

Our research aimed to (1) assess differences between Arab women MCL participants and nonparticipants regarding their well-being (psychosomatic symptoms, self-reported health [SRH], and social support); (2) examine the relationship between health maintenance characteristics (healthy eating habits) and the likelihood of participating in the MCL among MCL participants; and (3) use a qualitative approach to shed light on benefits and motivations, the reasons Arab women participate in the MCL and continue their engagement in PA.

Materials and Methods

We performed a quantitative cross-sectional study among a sample of 177 female participants from the Arab sector: 96 MCL participants and 81 nonparticipants (comparison group). An online questionnaire was delivered to all participants to collect information about health indicators, psychological characteristics, and eating habits. Arab women who were not MCL participants but had similar sociodemographic characteristics to the MCL participants were used as a comparison group. Guided face-to-face qualitative interviews ($n = 30$) were then conducted with a target group of MCL participants to further explain the quantitative findings.

Sampling Method

The sample of Arab participants was recruited with the help of the MCL organization that provided the names and phone numbers of the team captains to whom the online questionnaire was sent. The captains sent the online questionnaire via the WhatsApp application (text messages platform) to all their team members. We utilized stratified sampling. The MCL management provided a list of teams across Israel that were active for at least 1 year.[24] A total of 8 teams were sampled from the Arab sector that included 96 participants. Teams were included from various geographic regions and socioeconomic levels (low, medium, and high), according to the Israeli Central Bureau of Statistics.[25] The data were anonymized prior to analysis. For the comparison group, Arab women ($n = 81$) were randomly sampled from an internet panel that included 100,000 people. The random sampling was intended to result in a comparison group that would have the same demographic, socioeconomic, and geographic characteristics as those in the MCL participant sample. Women in the selected comparison sample did not participate in any organized team sport.

Instruments and Measures

Quantitative Study

The questionnaire was based on existing valid questionnaires from the scientific literature in Arabic language.[2,6] It was delivered to participants either online or in printed form and included questions on SRH, body mass index (BMI), psychosomatic symptoms, drinking and eating habits, and reported social support. Internal consistencies (Cronbach α) were calculated for the study variables.

Independent Variables.

Participation in the MCL was measured by asking if individuals participated in MCL (yes/no).

Demographic characteristics included age, number of children, family status (married/in a relationship), education level (academic/nonacademic education), and family income (below average, average, and above average).

BMI[26] was calculated based on the participant's self-report of weight and height.

Dependent Variables.

SRH[27] was measured using the question: "How do you evaluate your health generally?" Answers ranged between 1 and 6 (1 = very poor, 6 = excellent). SRH was exponentially transformed due to a nonnormal distribution (skewness = −0.97, SE = 0.12).

Psychosomatic symptoms[28] were evaluated with a 6-item checklist of symptoms experienced in the past 6 months: stomachache, headache, backache, irritability or bad temper, nervousness, and dizziness. Answers ranged between 1 and 5 (1 = rarely or never, 5 = about every day). An overall psychosomatic symptom index was calculated from the mean scores of the items. Internal consistency was $\alpha = .78$, with higher scores representing a greater extent of experienced symptoms. Psychosomatic symptoms were log-transformed due to nonnormal distributions.[28]

Water consumption[29] was measured by one item that asked the respondents to report the quantity of water they drink daily (1 = do not know, 4 = at least 8 cups a day).

Eating habits[29] were measured by 2 questions that asked respondents about the extent to which they eat fruits and vegetables (1 = never, 7 = at least 3 times a day). The 2 items correlated at $r = .59$ ($P < .001$); their mean score was computed so that a higher total score represented eating habits that include more essential nutrients.

Social support[30] was measured by 6 items, including the following questions: "How many close friends do you have?" and "To what extent do you feel appreciated by society?" Internal consistency was $\alpha = .68$, with higher scores (ranging from 1 to 5) representing greater social support.

Data Analyses. Background characteristics were described by group, with frequencies and percentages, means and SDs, and compared with *t* tests and *Z* tests. Internal consistencies (Cronbach α) were calculated for the study variables, and the variables were compared with item means. The study variables were described with means and SDs, and Pearson correlations were calculated between them. Correlations and *t* tests were calculated for the study variables to identify background variables that must be controlled for in further analyses. Analyses of covariance were calculated for the study variables by group, controlling for age and economic status. Multiple logistic regression calculations were performed for group membership (MCL/nonparticipants) with the background variables and study variables. All statistical analyses were performed using the statistical software package IBM SPSS Statistics (version 26.0).

Qualitative Study

Following the quantitative data collection, 30 semistructured, in-depth interviews were conducted with a sample of the MCL participants. Participants were recruited through WhatsApp messages sent to the 96 MCL participants; ultimately 30 agreed to be interviewed. The interviews were conducted by an experienced qualitative researcher in Arabic following a topic guide that covered research goals, consent, and anonymity. The interviews included closed sociodemographic questions and open-ended questions related to the study's research aim to shed light on the reasons Arab women participate in the MCL and continue their engagement in PA. Additional questions emerged through the dialogue. Interviews were conducted for 40 to 60 minutes.

In the qualitative portion, 2 independent researchers used a thematic approach.[31,32] to review and analyze the transcriptions. They identified areas of interest, noted potential themes, and discussed their codes. Once a framework was agreed upon, it was applied to all interview transcripts. The analysis continued until no new themes emerged.[32,33] Our analysis identified 3 main themes related to the experience of MCL participation. The first theme, *improved physical and mental health due to participation in MCL*, was expressed in the following 2 subcategories: better mental health status and enjoyment of life. The second theme, the *MCL community as a source of social support*, relates to the social network that was created as a by-product of the team sport activity, expressed in the following subcategories: mutual commitment within the group and uniqueness vis-à-vis the community. The third theme relates to the *role of MCL in promoting healthy behaviors*; the women discussed the role of the MCL regarding PA and healthy eating behaviors.

Mixed-Methods Integration

Integration of quantitative and qualitative data can serve several research goals, such as expanding the study of related phenomena, initiating new questions, or developing new research tools, and complementary research findings.[31,32] Qualitative research often serves as a complementary component in health research. For example, in research on mental health services, the qualitative method adds further description that in turn provides deeper understanding of the phenomenon.[32,33] In our case, we were interested in assessing differences between MCL participants and nonparticipants and measuring health maintenance characteristics among participants. Furthermore, qualitative research and mixed-methods integration were conducted to reveal additional aspects regarding the impact of MCL participation on the interviewees. Understanding their perspective enabled the examination of motivating factors related to participation as well as the identification of gaps in the existing program.

Results

Quantitative Results

Participants in this study included 177 Israeli Arab women: 96 participated in the MCL and 81 did not participate in the league. Women were 25–59 years old; those who participated in the MCL were on the average older than those who did not participate. Women in the MCL had more children than women in the comparison group. Approximately half of the women resided in urban areas and almost all were married. About 40% of the total sample population reported an average or above average economic status; in the MCL group, 50% reported average or above average economic status. The average BMI of women in both samples was about 27, with no significant group difference (Table 1).

Mean psychosomatic symptoms were moderate-low and mean SRH was high. Means for water consumption, healthy eating habits, and social support were moderate-high for both groups: intervention and control (Table 2). Positive correlations were found generally between SRH, water consumption, healthy eating habits, and social support. They were negatively related to psychosomatic symptoms.

Correlations between the study variables and the women's ages were significant and negative for psychosomatic symptoms ($r = .20$; $P = .006$), positive for healthy eating habits ($r = .30$; $P < .001$), and positive for social support ($r = .28$; $P < .001$). Significant differences were found in economic status. Women reporting average or above average economic status also reported healthier eating habits (mean = 4.90; SD = 1.49; n = 71) compared with women reporting below average economic status (mean = 4.12; SD = 1.44; n = 106) ($t_{175} = 3.48$; $P < .001$). Furthermore, women who reported average or above average economic status

Table 1 Background Characteristics by Group (N = 177)

		Total	MCL participants (n = 96)	Nonparticipants (n = 81)	$t(175)$ (P)
Age, mean (SD)	Range 25–59	37.68 (6.48)	39.85 (6.81)	35.11 (4.99)	$t(171.85) = 5.33$ ($P < .001$)
Number of children, mean (SD)	Range 1–6	2.90 (0.91)	3.21 (0.93)	2.60 (0.79)	$t(175) = 4.41$ ($P < .001$)
BMI, mean (SD)	Range 17.6–41.6	27.25 (4.92)	27.68 (4.30)	26.76 (5.54)	$t(175) = 1.23$ ($P = .219$)
Residence, n (%)	Urban	91 (52.9)	52 (57.1)	39 (48.1)	$Z = 1.18$ ($P = .238$)
Family status, n (%)	Married, in a relationship	159 (91.9)	86 (93.5)	73 (90.1)	—
Education, n (%)	Academic	77 (43.5)	31 (32.3)	46 (56.8)	$Z = 3.27$ ($P = .001$)
Family income, n (%)	Average, above average	71 (40.1)	48 (50.0)	23 (28.4)	$Z = 2.92$ ($P = .003$)

Abbreviations: BMI, body mass index; MCL, Mamanet Cachibol League.

Table 2 Means, SDs, and Correlations for the Study Variables (N = 177)

	Mean (SD)	1.	2.	3.	4.	5.	6.
1. Psychosomatic symptoms (1–5)	2.35 (0.82)						
2. Self-reported health (1–6)	5.03 (1.01)	−.43***					
3. Water consumption (1–4)	2.76 (1.00)	−.19**	.11				
4. Healthy eating habits (1–7)	4.43 (1.51)	−.19**	.18*	.30***			
5. Social support (1–5)	3.83 (0.74)	−.21**	.20**	.09	.18*		

*$P < .05$. **$P < .01$. ***$P < .001$.

reported higher social support (mean = 4.02; SD = 0.70; n = 71), more so than women who reported a below average economic status (mean = 3.70; SD = 0.74; n = 106) ($t_{175} = 2.87$; $P = .005$). No relationships were found for BMI ($P = .300$ to $P = .979$). The women's age was highly correlated with number of children ($r = .47$; $P < .001$) and average or above average economic status was correlated with academic education ($r = .40$; $P < .001$). The study hypotheses were examined while controlling for age and economic status (0—below average, 1—average or above average economic status).

Analyses of covariance were calculated to assess differences in the study variables by group, controlling for age and economic status. There were significant group differences in most variables. Participants in the MCL had lower psychosomatic symptoms than those in the comparison nonparticipants group, and also reported better health. The MCL participants reported drinking more water per day and healthier eating habits. They further reported higher social support levels (Table 3).

A logistic multiple regression was performed to assess the extent to which the women's background and the study variables were related to the likelihood of participating in the MCL (Table 4). Results revealed that the regression model was significant and explained about 41% of the variance in group belonging. Above and beyond the background variables, psychosomatic symptoms, eating habits, and social support were significant as such, fewer psychosomatic symptoms, healthier eating habits, and higher social support were related to a higher likelihood of participating in the MCL.

Qualitative Results

In the qualitative study, the interviews revealed several key points regarding participation in the MCL and its impact on women. The qualitative analysis provided complementary findings for the relationship between participation in the MCL, lower psychosomatic symptoms, and higher social support.

Improved Physical and Mental Health due to Participation in the MCL

The qualitative findings further explain the relationship of participation in the MCL to subjective health status, which may be related to the findings on psychosomatic symptoms. All participants indicated an improvement in their health status after joining the MCL. Some of them engaged in other sports to improve fitness and cardiopulmonary endurance, but participation in the MCL was regarded as contributing to both physical and mental health. Moreover, participants shared that participation in the MCL enhanced mental health and contributed to life enjoyment and well-being.

Enhanced Physical and Mental Health. Participants note the contribution of MCL to both physical and mental health.

> Now I feel that my mental and physical health is better than before I started with Mamanet (MCL), thanks to the women who participate in the league with me who always talk about healthy lifestyle habits. (HM, 37)

> . . . my health is not so good, and sports helped me to be healthier and feel good mentally and physically. Now I never miss a training session. (LD, 40)

Enjoyment of Life. Participants described having fun and enjoying themselves while engaging in the MCL. According to some women, enjoyment is an integral part of MCL participation. Some reported that the league made it possible for the participants to meet other women outside the family and from diverse cultural backgrounds.

Table 3 Means, SDs, and *F* Values for Group Differences in the Study Variables (N = 177)

	Total, mean (SD)	MCL participants, mean (SD) (n = 96)	Nonparticipants, mean (SD) (n = 81)	F_{group} (1, 173) (*P*) (η^2)
Psychosomatic symptoms (1–5)	2.35 (0.82)	2.05 (0.59)	2.70 (0.90)	23.68 ($P < .001$) ($\eta^2 = .120$)
Self-reported health (1–6)	5.03 (1.01)	5.18 (0.85)	4.85 (1.16)	4.86 ($P = .029$) ($\eta^2 = .028$)
Water consumption (1–4)	2.76 (1.00)	2.93 (1.01)	2.56 (0.95)	4.30 ($P = .040$) ($\eta^2 = .025$)
Healthy eating habits (1–7)	4.43 (1.51)	4.88 (1.44)	3.91 (1.42)	7.79 ($P = .006$) ($\eta^2 = .043$)
Social support (1–5)	3.83 (0.74)	4.02 (0.68)	3.60 (0.75)	5.25 ($P = .023$) ($\eta^2 = .029$)

Table 4 Logistic Regression Coefficients for Groups, With Background Variables and the Study Variables (N = 177)

	B (SE)	OR	95% CI	*P*
Age	0.08 (0.03)	1.08	1.01–1.16	.020
Economic status	0.41 (0.40)	1.51	0.70–3.29	.296
Psychosomatic symptoms	−1.02 (0.30)	0.36	0.20–0.66	<.001
Self-reported health	0.16 (0.18)	1.30	0.90–1.89	.168
Water consumption	0.16 (0.20)	1.18	0.79–1.75	.428
Healthy eating habits	0.34 (0.15)	1.40	1.05–1.86	.021
Social support	0.58 (0.29)	1.79	1.01–3.15	.045

Note: $\chi^2(8) = 61.40$, $P < .001$, Nagelkerke's $R^2 = .41$.

> Mamanet (MCL) makes it more fun than regular sports. It's sports and fun together . . . to train in a group, laugh and be together . . . get out of the household routine, see other people, exercise with other women, have fun, talk even just a while. To play, to gossip, it creates a connection between people in the village. (RS, 43)

> I have been in Mamanet (MCL) for a year so far. I can say that this is the most beautiful year of my life, and I lived a wonderful experience full of beautiful memories with the participants who are now the closest friends to my heart, and I am very proud of myself and happy that I participated in the Mamanet League. (DL, 41)

Participants described a change in their mood and joy of life following participation in the MCL. They noted the change before and after with joy, an increase in their self-confidence, and in reducing nervousness and anger:

> Yes, I feel more confident in front of people and am very proud of myself compared with the past; I am very satisfied and proud of myself, and it makes me feel good, and also improves my mood without nervousness or anger and I always have a positive opinion about the future and I love life. (SH, 39)

MCL Community as a Source of Social Support

Regarding higher social support, first, all the women interviewed expressed a strong sense of belonging to the group that they described as having a transformative effect on their lives. This sense of belonging stimulated their social abilities and made them more positive and energetic in their personal and professional lives. They also expressed a high level of commitment to the group and noted the group's reciprocal commitment to them, which gave them a sense of empowerment and satisfaction. Second, the women described the MCL as a unique community where everyone is equal, regardless of appearance, economic status, or athletic ability. They reported feeling special and proud of their involvement in the group, which garnered them respect and admiration from others in their community. Third, the women noted that their participation in the group had a positive effect on their families, which gave them legitimacy to participate despite the time commitment. They described feeling more fulfilled and relaxed since joining the group, which allowed them to better manage their various roles in life.

Social Network. All the women interviewed described a strong sense of belonging to a group. Some stated that the group changed the course and quality of their lives. The group activity partly stimulated social abilities they said were not previously present in their lives :"It was difficult for me to maintain good relationships, but now I have met a lot of friends from different regions of the country . . . . Now I am a more social woman, love life, full of energy, more positive at home and at work" (HM, 37).

Mutual Commitment Within the Group. Being a player in the MCL was described as being a part of a social network and became a high priority for those involved. Participants felt that they were important to the team and also felt a sense of commitment from the group. This feeling gave them a sense of empowerment and great satisfaction even when faced with physical difficulty in the game. As one of the players put it: "The group is my family, my best friends. They understand me best, what I need, and I know what they need from me" (TS, 42).

Uniqueness Vis-à-Vis the Community. The MCL is an inclusive group where all are equal regardless of appearance, economic status, or athletic ability. Participants described a feeling of being special within the community in which they live, a positive, powerful experience regarding visibility within their nuclear and extended family. Some of them pointed out that the community is proud of them, which gives them a sense of pride.

> I see that people, not all of them, but some of them, look at women involved in sports with respect and admiration and feel that these women are civilized and modern, as if they think about their bodies and their pleasure and their minds, and this encourages them. (RT, 47)

Role of the MCL in Promoting Healthy Behaviors

The MCL participants shared the community's value that promoting PA and team sports contributes to both physical and mental health as described above. Regarding healthy eating behaviors, a gap was identified. Although MCL participation is correlated with higher healthy eating habits compared with the comparison group of nonparticipants, the participants voiced a need for additional programming to support healthy nutrition within the MCL community. For example:

> I would be happy if there were lectures and workshops in the field of sports nutrition so that we would know what to eat before training. (KA, 50)

The results of both the qualitative and quantitative stages of the study illustrate the potential of participation in the MCL to influence physical and mental health, social support, and health behaviors of women.

Discussion

The findings of this study indicate that involvement in the MCL might be associated with benefits for Arab women, including enhanced well-being and improved eating habits. Participants who actively took part in the MCL reported higher levels of self-perceived health and lower occurrences of psychosomatic symptoms in comparison to those who did not participate. The disparities in well-being between MCL participants and nonparticipants suggest that MCL involvement may have contributed positively to the health of Arab women. This finding is consistent with recent literature highlighting the impact of reduced PA on mental and physical health outcomes.[2,10,34,35] A decrease in regular sports activities, particularly due to lockdown measures imposed during the initial year of the COVID-19 pandemic, has been associated with an increased likelihood of experiencing mental and physical health issues.[36] Limited access to sports facilities and reduced social interactions presented challenges for individuals adapting to a more sedentary lifestyle, ultimately contributing to poorer mental and physical well-being. According to Baron-Epel et al[6] and Paldi et al,[2] women who participated in the MCL reported better well-being, including improved self-rated health and reduced psychosomatic and depressive symptoms, compared to women who did not participate.[2,6,18] This finding suggests that women who are already physically and mentally healthier may be more likely to engage in this type of sport due to its physical and collaborative aspects.

Furthermore, our study revealed a positive correlation between healthier eating habits and participation in the MCL. This finding aligns with previous research that emphasizes the importance of proper nutrition for athletes, both individually and within a team setting, as a key factor influencing their performance.[7,8] In the qualitative phase, the MCL participants indicated a need for further guidance regarding healthy eating. This reported gap serves as critical feedback to the MCL program and indicates the importance of including tailored guidance in nutrition for participants in sports activities.[17,21,23]

Our study also revealed a positive correlation between social support and participation in the MCL. Findings indicated that engagement in sports, particularly team sports, is associated with various aspects of social capital, including expansion of social networks, enhanced social trust, increased social engagement, greater social support, and heightened social involvement. Baron-Epel et al[6] and Paldi el al[2] highlighted that involvement in sports groups fosters social support.

Our study employed a mixed-methods approach, quantitative research followed by qualitative expansion, to comprehensively examine the impact of women's participation in the MCL and gain deeper insights into their motivations for engaging in sports. Through the qualitative component of the study, we were able to uncover additional information about the factors influencing the likelihood of participating in the MCL and gain a deeper understanding of how social support initiatives can positively impact Arab women and mothers and contribute to the overall well-being of communities.

In addition to the previously mentioned benefits, lower psychosomatic symptoms, healthier eating habits, and higher levels of social support, our qualitative findings highlighted the significance of belonging to a social network and the personal empowerment derived from being part of a team. These factors play a crucial role in the context of PA.[1,5,7,10] It is important to note that improvements in physical well-being by participation in sports requires consistent training over time and are not achieved immediately.[10,13] Therefore, the presence of factors, such as a sense of belonging, and personal empowerment, increases the likelihood that a woman will persist in her training and not give up before experiencing improvements in her health.[5,6,18] By shedding light on these motivational factors, our study underscores the importance of fostering a supportive and empowering environment within the MCL. By cultivating a sense of belonging and empowering participants, the MCL can effectively encourage women to persist in their training and reap the long-term health benefits associated with regular PA.

Social support plays a crucial role in fostering mental health and promoting overall well-being, as it helps individuals feel a sense of belonging and connection within their communities.[2,6,37–39] It encompasses various types of assistance, emotional comfort, and resources offered by individuals, groups, or organizations to those facing difficult circumstances.[38,39] In recent years, the significance of social support has been recognized and integrated into innovative initiatives that seek to empower specific populations such as mothers.[5,18] A framework such as the Mamanet program offers women, particularly mothers, the opportunity to engage in sports while receiving social support. It offers a unique combination of PA and the formation of a supportive community for mothers. Through the MCL, mothers can engage in regular PA while also building connections, forming friendships, and receiving emotional support from fellow participants.

The Arab community has witnessed changes with respect to women gaining strength in terms of employment and financial independence, leading to increased participation in sports activities.[11,17] This shift is reflected in greater involvement in sports, breaking traditional gender norms.[23] These changes have numerous benefits, including improved physical well-being, enhanced mental health, and the formation of supportive social networks.[36] Arab women participating in sports inspires others and challenges societal norms. However, cultural and societal barriers still exist. Advocacy for gender equality and inclusive environments remains crucial.[5–7]

Our findings therefore underscore the importance of both healthy eating habits and social support in the context of participation in the MCL. By promoting these factors, the MCL can potentially contribute to the overall well-being and health of Arab women, providing them with a platform that combines PA, social interactions, and support networks.[2,5,6]

Several limitations of this study should be acknowledged. First, the cross-sectional design limits the ability to establish causality between the different health behaviors. Longitudinal studies are designed to track individuals or groups of people over an extended period, allowing researchers to observe changes and patterns of behavior and provide a more robust understanding of the changes over time. Prima facie, longitudinal studies can provide stronger evidence regarding causality than cross-sectional research. These types of studies are particularly valuable in the field of mental health and are important for assessing the impact of food consumption habits, PA, and participation in sports activities (individually or in groups) on mental health conditions.[14,18,35–39]

The relatively low participation rate of Arab women in the MCL is a notable limitation. The sample of Arab MCL participants represents less than 5% of total MCL participants, despite Arabs comprising nearly 21% of the general Israeli population. This discrepancy suggests that the sample of Arab MCL participants from a limited number of teams may not fully represent the diversity of the Arab population. An additional limitation is the lack of random assignment to comparison and intervention groups. It is possible that the women who participated in the MCL are older and already had a predisposition towards social participation and higher levels of social capital, which could have influenced the results.

Conclusions

The findings, based on participation in the MCL community-based model, suggest that team sports may serve as an effective tool for promoting the health and well-being of Arab women and fostering positive relationships within communities. The study findings suggest a potential association between participation in an amateur team sports league and higher levels of well-being alongside healthier eating habits among Arab women. In addition to the physical health benefits, the sense of belonging and personal empowerment derived from being part of a sports team may contribute to positive mental health outcomes. Future research using a longitudinal design is necessary to explore changes in well-being and eating habits over time to obtain a comprehensive understanding of the potential benefits and impact of team sports participation on the health and well-being of Arab women.

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