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An investigation of the psychological effects of participating in tower Pilates on women

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Abstract

Aim: The aim of this research was to explore qualitatively the motivations for participation in tower Pilates among females practicing it, psychological meanings of this activity, as well as its psychological, physical and daily life related outcomes. **Method:** In this study, 26 women attending tower Pilates courses at private and chain fitness clubs in Ankara, Turkey were selected as a sample. The average age of participants varied from 20 to 55 with a mean age of 32.27. Purposive sampling procedure was utilized in this study. The research data were gathered via open ended and semi structured interview questions developed by the researcher. Inductive thematic analysis technique was chosen as a method of data analysis. Within this framework, initially all answers were analyzed several times; then significant statements about participants' experiences of tower Pilates were identified, coded and categorized depending on similarities between their codes. **Results:** As for the results of this study, it was found out that females had various motivations for engaging in tower Pilates. These included health, postural improvement, pain management, shaping body, flexibility training, need for movement, psychological well-being, spending time on themselves, as well as environmental factors. Furthermore, it became evident that females considered tower Pilates as an activity related to managing stress, relaxing mind, developing body awareness, feeling physically competent, increasing self confidence, feeling accomplished, gaining more energy, as well as improving daily life organization. **Conclusion:** It should be concluded that tower Pilates gives a chance to women to take part not only in physical activity, but in multidimensional physical leisure activity connected with psychological relaxation and self-care.

Introduction

Regular physical activity is widely recognized as a multidimensional health behavior associated not only with physical fitness but also with psychological well-being. Previous studies have shown that regular exercise is related to reduced stress, anxiety, depressive symptoms, and improved mood, self-esteem, quality of life, and life satisfaction across different populations (Eather et al., 2023; Mahindru et al., 2023; Singh et al., 2023; Myśliwiec et al., 2025). These results can usually be accounted for by way of interacting processes from biology, psychology, and society. According to psychologists, the theories of Social Cognitive and Self-Determination have stressed self-efficacy, perceived competence, autonomy, relatedness, motivation, and coping as determinants of psychological functioning and adherence in physical activity (Chan et al., 2019; Li et al., 2024; Yan et al., 2024; Viveiros et al., 2025).

Within this broader context, there has been increased interest in mind-body exercise programs such as Pilates, yoga, tai chi, and qigong since they combine movement, breath work, concentration, and self-regulation. Whereas conventional exercise paradigms are concerned with fitness alone, mind-body exercises have been investigated from the perspective of self-care approaches that have the potential to facilitate relaxation, stress management, emotion regulation, and quality of life (Payne & Crane-Godreau, 2013; Zou et al., 2018; Weber et al., 2020; Vergeer et al., 2021). Such rising interest might have some links with modern necessities like stress management, sedentary behavior, chronic illnesses, healthy aging, and search for more holistic exercise approaches.

Pilates, originally called Contrology, is arguably among the most prominent mind-body exercise techniques. Pilates draws its principles from areas such as breathing, centering, concentration, control, precision, and flow. Pilates emphasizes qualities including movement, postural alignment, core stability, flexibility, and control of the body (Wells et al., 2012; Fleming & Herring, 2018; Parveen et al., 2023). The qualities mentioned above give rise to theoretical

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grounds to view Pilates not only as an exercise technique but also as an intervention that could impact psychological processes. There are studies indicating reduced levels of stress, anxiety, depression, and somatization among other benefits such as greater body awareness, relaxation, positive emotions, self-esteem, and proprioception (Kim et al., 2019; Zafeiroudi & Kouthouris, 2022; Guidotti et al., 2025; Chhabra et al., 2025).

Tower Pilates may be viewed as one particular example of equipment-based Pilates, using a vertical machine and resistance springs. Although having the same principles as regular Pilates performed without any equipment, tower Pilates differs by means of external resistance, varying levels of assistance, guidance during exercise execution, and individual progress potential (Cruz-Díaz et al., 2017; Sarıtaş & Pişirici, 2024). In contrast to mat Pilates that is primarily dependent on the participant's own body weight, resistance, range of motion, complexity of movements, and postural assistance can be modified according to the person's capabilities and fitness training needs in cases of apparatus Pilates such as reformer and tower Pilates (Da Luz et al., 2014; Geweniger & Bohlander, 2014; Mueller et al., 2021; Yilmaz et al., 2025).

Although both tower Pilates and Reformer Pilates belong to the category of apparatus-based Pilates methods, they differ in terms of equipment structure and movement execution. Reformer Pilates is performed on a movable carriage system that slides along rails and provides resistance through springs, whereas tower Pilates is conducted on a fixed platform equipped with a vertical tower frame and adjustable spring attachments. Due to its stationary structure, tower Pilates places greater emphasis on postural alignment, stabilization, and controlled movement patterns. In contrast, Reformer Pilates allows for more dynamic movement sequences involving carriage displacement and greater whole-body coordination. These structural differences may influence participants' exercise experiences and their perceptions of both physical and psychological outcomes (Cruz-Díaz et al., 2017; Geweniger & Bohlander, 2014).

It is possible that the psychological effects of tower Pilates can be explained by the fact that it is a disciplined practice that requires guidance by an instructor and involves the body directly. With the help of breathing techniques, proper alignment, resistance training, and constant repetition, people practicing tower Pilates can achieve mental relaxation, decrease in stress levels, increased awareness of their own bodies, confidence in their abilities, self-assurance, and a feeling of accomplishment. Furthermore, the atmosphere within the studio, the instructors, and continuity of participation may help individuals maintain their motivation, feel psychologically safe, and find social connections. As a result, tower Pilates cannot be assessed solely based on physical results.

In the current research, the focus has been made on the female respondents since all information was collected from the women who practiced tower Pilates. In this way, the choice of this particular sample corresponds with the existing trend in studying Pilates exercises and, in particular, the fact that women tend to be involved in such studies more often than men. The involvement of women in Pilates and other forms of physical activity can be explained by various factors including improvement of health status, body awareness, aesthetic preferences, postures, flexibility, stress relief, self-care, etc. As a result, analyzing the perspectives of women who practice tower Pilates can help identify peculiarities of this form of physical activity both physically and psychologically. At the same time, this female sample is to be viewed as a limitation of the research.

Although Pilates has been widely examined in relation to physical fitness, flexibility, balance, posture, pain, body awareness, and psychological well-being, the existing literature has primarily focused on general Pilates practices, mat Pilates, or apparatus-based Pilates as a broad category. Studies specifically addressing tower Pilates remain limited, particularly in terms of participants' subjective psychological experiences. Moreover, the psychological outcomes of Pilates are often examined through quantitative designs, while fewer studies explore how participants interpret Pilates-related experiences in their own words. Therefore, there is a need for qualitative research that examines tower Pilates not only as a physical exercise modality but also as a meaningful recreational practice associated with stress relief, body awareness, self-confidence, perceived competence, self-care, and daily life regulation.

The qualitative methodology is suitable for such a study since the psychological consequences of tower Pilates cannot be completely explained using only predefined variables. Participants' open responses help reveal their experience, interpretation, and understanding of tower Pilates regarding their emotions, perceptions of their body, motivation,

interaction with the teacher, and their intentions to continue practicing. It is therefore worth noting that the study makes its contribution to the body of knowledge in terms of examining the women's experience of tower Pilates and the meaning associated with tower Pilates from various perspectives.

This research will focus on the exploration of the psychological, physical, and everyday experiences of the women who practice tower Pilates. It means that this study will try to figure out the reasons why the subjects chose tower Pilates; the psychological consequences; the changes in perception of the own body and body competence; influence of instructor and training environment; and factors of intention to participate further.

In line with this aim, the study seeks answers to the following research questions:

- What are the main motivations of women for starting tower Pilates?
- How do women describe their tower Pilates experience from a psychological perspective?
- How does tower Pilates contribute to participants' stress relief, mental relaxation, mood, and self-care experiences?
- How do participants perceive the effects of tower Pilates on body awareness, body image, and perceived physical competence?
- How do instructor support, exercise environment, and social interaction shape the tower Pilates experience?
- What factors strengthen or weaken participants' intention to continue tower Pilates?
- How do participants make sense of tower Pilates through metaphors and personal meanings?

Methods

The study was conducted in a qualitative descriptive research design. It was deemed appropriate to conduct qualitative descriptive research as the purpose of the current study was to understand women's perceptions about tower Pilates without being detached from their own language (Sandelowski, 2000). Qualitative descriptive research is suitable when a researcher seeks to provide an accurate depiction of the participants' point of view regarding a certain issue or phenomenon. The present study focused on tower Pilates as a recreational physical activity experience that involved aspects of psychological well-being, body awareness, perceived competence, interactions with instructors, daily life regulation, and continuation intention.

Participants

The participants of the study were 26 females, who already had an experience in taking tower Pilates classes. Their age ranged from 20 to 55, and their average age was 32.27 years old. All participants agreed voluntarily to participate in the research. Marital status distribution showed that 12 participants were married, 9 participants were single, 4 were dating and 1 participant was divorced. As for the education level of participants, it is necessary to state that the majority of them graduated from college having a bachelor degree. Tower Pilates practice experience of participants differed, yet the majority practiced less than 6 months. Mostly, participants attended classes twice a week.

In the research, a purposive sampling technique was employed. The inclusion criteria included having prior experience of tower Pilates that could be articulated in an open response format. In view of the objective of the study, which was to provide a descriptive account of participants' experience and not generalize findings statistically, it was felt that the sample used would meet the research requirements.

Procedure

In the study, data were collected using questionnaires containing semi-structured questions devised by the researcher. Prior to data collection, the necessary consent was obtained from participants after they had been informed. Only participants who confirmed their willingness to participate were included in the analysis. The online form enabled participants to answer the questions independently and in written form. No identifying personal information was used in the reporting process. After data collection, the responses were transferred to a spreadsheet file and prepared for qualitative analysis.

Participants were coded as P1, P2, P3, and so forth in order to ensure anonymity. This coding procedure was used both to protect participant confidentiality and to enable the presentation of direct quotations in the findings section.

Prior to data collection, ethical approval for the study was obtained from the relevant Institutional Ethics Committee (Approval No: 2026/06/03; Date: 21.04.2026). All participants provided informed consent before participation, and the study was conducted in accordance with the ethical principles outlined in the Declaration of Helsinki."

Measurements

Data were collected through an online form consisting of demographic questions and open-ended questions. The demographic section included questions about age, gender, marital status, educational status, employment status, perceived welfare level, type of sport center, tower Pilates experience duration, and weekly session frequency. The open-ended section was developed by the researchers to reveal participants' motivations for starting tower Pilates, perceived psychological outcomes, body-related perceptions, instructor and participant interactions, sense of achievement, daily life effects, negative experiences, intention to continue, and metaphorical meanings attributed to tower Pilates.

Data Analyses

The data were analyzed using inductive thematic analysis (Braun & Clarke, 2006). First, all responses were read repeatedly to gain familiarity with the data. Then, meaningful expressions related to the participants' tower Pilates experiences were identified and coded. Codes were generated directly from the data rather than being imposed through a predetermined theoretical framework. Similar codes were grouped under subthemes, and broader themes were developed to represent the central patterns in the data.

The analysis process followed these stages: familiarization with the data through repeated reading, identification of meaningful expressions, initial coding of participant statements, grouping similar codes under subthemes, development of broader themes, review and refinement of themes, selection of representative participant quotations, and interpretation of the themes in relation to the purpose of the study.

A number of steps were taken to improve reliability of the analysis. Data were analyzed several times in order to become familiarized with them and consistent in the coding process. Themes were created inductively through participants' feedback so that the results could stay closer to the data. Quotations were directly presented in the results section to provide credibility. Coding, development of themes and making other analytical decisions were accounted for in order to increase reliability. Moreover, the results of the study were based on participants' words instead of researchers' suppositions so that confirmability of the results could be improved.

Results

The following section will outline the findings that result from the thematic analysis of the participants' open-ended answers.

The first theme reflects the main factors that led participants to start tower Pilates (Table 1). Participants' responses indicated that their motivations were shaped by health-related expectations, body shaping and appearance concerns, posture and pain-related needs, flexibility and movement demands, psychological well-being, self-care, and environmental or social facilitators such as instructor reputation, proximity, and friend recommendation.

Table 1
Categories, codes, and findings regarding participants' responses on the theme of motivations for starting tower Pilates.

Category	Initial Codes	Participants	Representative Quotation
Health and bodily well-being	Healthy body, feeling better physically, general health, physical and mental health	P1, P2, P4, P14, P19, P21, P26	"I started to improve my health." (P26)
Posture, pain, and functional body needs	Posture improvement, spine health, back pain, body fatigue, pain related to aging	P1, P4, P6, P16, P17	"My decision to start Pilates became clear when I noticed fatigue in my body and posture problems." (P17)
Body shaping, toning, and appearance-related expectations	Body shaping, toning, fit body, supporting diet process, appearance improvement	P1, P6, P7, P10, P16, P23, P24	"I wanted my body to become more toned and to support my diet process." (P23)
Vitality, flexibility, and movement need	Feeling energetic, stretching, regular exercise, need for physical activity, movement need with aging	P5, P11, P12, P13, P15, P18	"I wanted to start in order to feel more energetic." (P5)
Psychological well-being and self-care	Taking time for oneself, mental health, calm and conscious exercise, coping with intense tempo and stress	P8, P14, P17	"Under intense tempo and stress, I needed a calmer and more conscious exercise that would be good for me." (P17)
Social and environmental facilitators	Friend recommendation, friend support, proximity to home, reputation of the studio	P3, P7, P9, P22, P25	"I wanted to try it when I heard that the studio was well known and learned that it was close to my home." (P7)

Participants' motivations for starting tower Pilates were shaped by both intrinsic and contextual factors. Health, posture, pain reduction, body shaping, flexibility, and movement needs emerged as the most visible motivation areas. Moreover, some participants mentioned psychological well-being, self-care, and the need for less stressful exercise environment, which revealed that tower Pilates was considered not only as a physical activity. Social and environmental facilitators, such as recommendations from friends, proximity to the home, and the reputation of the studio itself, influenced people's decision to begin tower Pilates exercise program.

The participants' responses highlighted the multiple dimensions involved in tower Pilates as a mechanism for coping with everyday stressors and difficulties (Table 2). The predominant theme was that of mental relaxation and stress coping, as numerous participants stressed the calming nature of tower Pilates, along with its ability to relax the mind and make it feel refreshed. A number of participants also mentioned tower Pilates as an opportunity for disconnecting from everyday problems by focusing on movements, breathing, and instructor's directions while exercising. Besides, several participants identified tower Pilates as a means of self-care and self-time, implying that exercising offered them the opportunity of spending some quality personal time. Finally, bodily relaxation was seen by the participants as a way of coping with stress through reducing tension in the neck, back, and all over the body.

Based on the participants' responses, one can conclude that the perceived consequences of practicing tower Pilates were focused on the effects related to posture, body toning, physical abilities, pain relieving, and positive body awareness (Table 3). The most frequently mentioned category was related to the changes in appearance, specifically, to body toning, shaping, and visible firmness. Apart from appearance, some participants mentioned their improvements regarding posture, control of movements, flexibility, strength, and ease of moving. Another bodily consequence that was important for the participants is the reduction of pain, namely back pain, neck pain, low back pain, and pain resulting from injuries. There was another category of responses mentioning that the practice of tower Pilates improved the participants' body awareness, making their connection with body positive.

Table 2
Categories, codes, and findings regarding participants' responses on the theme of the role of tower Pilates in coping with daily stress and challenges.

Category	Initial Codes	Participants	Representative Quotation
Mental relaxation and stress relief	Relaxation, relief from stress, feeling mentally refreshed, calming effect, reduced tension	P3, P4, P5, P6, P8, P10, P11, P14, P17, P19, P25, P26	"After the session, I feel mentally cleared and physically lighter." (P5)
Mental distancing and focusing on the present moment	Escaping from daily life, focusing only on exercise, not thinking during Pilates, moving away from negative thoughts	P3, P4, P7, P13, P14, P26	"When I go with a full mind, I focus only on the exercise at that moment and other problems leave my mind." (P7)
Self-care and personal time	Taking time for oneself, being alone with oneself, feeling personally valued, motivation to attend exercise	P1, P15, P21, P22	"Tower Pilates is not only exercise for me, but also a space where I can be alone with myself." (P1)
Bodily relaxation and relief from physical discomfort	Physical relaxation, body lightness, relief from neck and back tension, reduced pain, bodily release	P5, P9, P17, P20, P24, P25, P26	"Breath-focused and controlled movements reduce mental intensity and relieve lower back and back tension." (P17)
Emotional regulation and resilience	Not giving up, feeling balanced, positive outlook, reduced stress response, feeling better after exercise	P2, P4, P8, P17, P19, P26	"It reduces stress, so I look at everything around me more positively." (P8)
Supportive interaction and feeling valued	Feeling special, positive dialogue with instructors, psychosocial support	P12	"The dialogue with my instructors makes me feel special." (P12)

Table 3
Categories, codes, and findings regarding participants' responses on the theme of changes in body perception, appearance, and perceived physical competence after starting tower Pilates.

Category	Initial Codes	Participants	Representative Quotation
Posture improvement and functional body awareness	Improved posture, standing more upright, controlled movement, balanced movement, functional awareness	P1, P6, P12, P17	"I noticed that my posture improved and that I moved in a more balanced and controlled way." (P17)
Body toning and appearance-related change	Body toning, body shaping, abdominal slimming, visible firmness, appearance improvement	P4, P5, P6, P8, P9, P10, P11, P14, P16, P19, P22, P24, P25, P26	"I feel that my body has become stronger and more toned." (P25)
Strength, flexibility, and physical capacity	Increased strength, improved flexibility, easier movement, faster movement, feeling physically stronger	P1, P4, P8, P12, P13, P18, P21, P25	"I became stronger, more toned, and my flexibility increased." (P4)
Pain reduction and bodily relief	Reduced back pain, reduced bone pain, relief from neck and lower back pain, reduced injury-related discomfort	P4, P13, P16, P20, P26	"My back pain disappeared, my movements became faster, and my tiredness decreased." (P13)
Positive body awareness and self-confidence	Knowing the body, increased body awareness, positive body perception, feeling more self-confident	P4, P17, P26	"I got to know my body and I can say that my awareness increased." (P4)

Table 4
Categories, codes, and findings regarding participants' responses on the theme of instructor and participant interactions during tower Pilates sessions.

Category	Initial Codes	Participants	Representative Quotation
Instructor warmth, support, and motivation	Warm communication, supportive attitude, positive tone, motivation, friendly instructor	P2, P3, P6, P7, P8, P9, P10, P11, P13, P15, P16, P19, P20, P23	"The instructor's positive and smiling attitude makes me feel good, and I attend the sessions willingly." (P15)
Psychological safety and correct guidance	Feeling safe, being correctly guided, trusting the instructor, confidence during movement	P1, P17, P18, P25	"My interaction with the instructor makes me feel safe and correctly guided." (P17)
Individual attention and feeling valued	Individual correction, personal attention, feeling cared for, feeling valued	P17, P19, P26	"The fact that she gives individual attention makes me feel valued and helps me feel at peace with myself." (P26)
Body awareness and learning through instruction	Awareness of bodily limits, understanding what to do, instructor commands, efficient lesson flow	P4	"The instructor's commands during the session make the lesson more fluent and productive, and they make me feel mentally engaged." (P4)
Peer harmony and supportive social atmosphere	Sharing, support, harmony, friendship, enjoyable group interaction	P1, P7, P13, P16, P21	"Interactions with other participants create a sense of sharing and support; struggling and progressing together makes the process more enjoyable and motivating." (P1)
Instructor relationship as a factor in continued participation	Liking the instructor, good communication, instructor as a reason for continuation, commitment to sessions	P8, P22, P23, P26	"Getting along well with my Pilates instructor enables me to continue attending the sessions." (P22)
Communication-related discomfort	Preference for calmer tone, need for more distant communication, instructor-related discomfort	P24	"Unlike Pilates itself, my instructor tires me; I would prefer a calmer tone of voice and a more distant communication style." (P24)

The answers provided by the participants suggested that interactions with an instructor was among the most influential aspects of the tower Pilates (Table 4). Almost all the participants used words such as warm, supportive, friendly, motivating, and professionally guiding to describe their instructors. Interaction with an instructor had to do with feeling psychologically safe, doing the movements correctly, being motivated and having intention to continue participating. Personalized interactions and corrections were especially important since they made participants feel valued and safe while doing the exercises. Even though there were fewer comments on peer interactions than those of interactions with an instructor, some participants mentioned that the presence of other participants provided them with a feeling of sharing, harmony, and enjoyable social environment. The voice and personal distance of an instructor affected the psychological aspect of the tower Pilates experience for one participant.

The responses obtained from participants indicate that learning new movements of tower Pilates and successful performance thereof resulted in strong feelings of accomplishment, self-confidence, and good emotions (Table 5). Most of the participants were able to describe such feelings in terms of pride, happiness, motivation, and satisfaction. Successful execution of a movement which one could not execute before seems to lead to an increased feeling of competence and self-efficacy among the participants. Moreover, some participants pointed out the fact that they found challenging movements less hard with time, indicating that tower Pilates enabled them to feel progressively better at something. Participants further noted that this experience allowed them to gain better awareness about their own body, to see how much improvement had been made in their strength and flexibility, and to develop greater confidence regarding their body.

As can be seen in Table 6, participants' answers revealed that there were some tower Pilates reflections on everyday life in terms of energy levels, physical comfort, posture, mood, and lifestyle regulation. The reflection most talked about by participants concerned the increase of energy levels, as many of them reported having felt more energetic and revitalized throughout their days. Some of the participants mentioned experiencing lower amounts of pain, fatigue, and physical issues such as back pain, shoulder pain, and postural problems. What is more important is the fact that the awareness that participants got from tower Pilates practice was also brought to everyday life activities in the form of sitting straighter, breathing properly, having proper neck posture, and doing stretching exercises while being at home or at work. Also, participants expressed that they felt calmer, happier, and more disciplined after practicing tower Pilates, along with an increased awareness of living healthy lifestyles.

Table 5
Categories, codes, and findings regarding participants' responses on the theme of emotional and self-perceptual experiences when learning and performing new tower Pilates movements.

Category	Initial Codes	Participants	Representative Quotation
Sense of achievement and pride	Achievement, pride, success, satisfaction, feeling rewarded	P1, P2, P7, P12, P19, P24, P26	"When I can perform movements that I could not do before, I feel proud of myself and feel that I have succeeded." (P19)
Increased self-confidence and self-efficacy	Self-confidence, belief in one's ability, confidence in the body, perceived competence	P1, P3, P6, P8, P15, P17, P23, P25, P26	"I never thought I could do these movements, so it affects me positively." (P15)
Positive emotions and motivation	Happiness, enjoyment, feeling good, motivation, positive affect	P2, P5, P7, P14, P18, P20, P21, P25	"Being able to do it makes me feel stronger and happier." (P25)
Progressive mastery through challenge	Initial difficulty, gradual learning, improvement over time, persistence, adaptation	P10, P11, P13, P16, P22	"At first I struggle, but as I progress, I relax and learn." (P10)
Awareness of bodily limits and development	Recognizing limits, bodily awareness, strength, flexibility, progress, movement capacity	P4, P9, P12, P13, P17, P18	"Every movement is like a new journey for me because I learn my limits." (P4)

Table 6
Categories, codes, and findings regarding participants' responses on the theme of reflections of tower Pilates on life satisfaction, energy level, and daily life practices.

Category	Initial Codes	Participants	Representative Quotation
Increased energy and vitality	Increased energy, feeling more awake, feeling lively, starting the day energetically, feeling refreshed after exercise	P1, P5, P8, P14, P15, P17, P19, P20, P23, P25, P26	"I feel more energetic during the day, and especially in the mornings, I get out of bed more easily." (P17)
Reduction in pain, fatigue, and physical complaints	Reduced shoulder and leg pain, reduced back pain, less fatigue, standing for longer without pain, fewer physical complaints	P2, P6, P8, P13, P25, P26	"I can now stand for a long time without experiencing pain." (P6)
Postural awareness and integration into daily habits	Sitting upright, correcting posture, conscious breathing, attention to neck position, applying stretching exercises at home or work	P1, P4, P11, P17	"When I notice myself slouching, I hear my instructor's voice saying 'sit upright' and feel the urge to correct myself." (P4)
Positive mood, calmness, and life satisfaction	Feeling happier, calmer, more peaceful, more positive, satisfaction from doing something for oneself	P8, P19, P20, P22, P23, P25	"It gave energy to my daily life and made me feel that I was doing something for myself." (P23)
Discipline and healthier lifestyle awareness	Feeling disciplined, regular attendance, attention to nutrition, protecting body form, healthier habits	P15, P21, P24	"Attending the sessions made me more disciplined, and I also paid more attention to my nutrition." (P24)
Motivation and continuity in exercise participation	Willingness to attend sessions, enjoyment of exercise, desire to continue, feeling the effect of exercise on non-training days	P7, P12	"Unlike other gyms, I willingly come to Pilates, even leaving my work unfinished to attend." (P12)

Table 7
Categories, codes, and findings regarding participants' responses on the theme of challenging, uncomfortable, or negative aspects of tower Pilates participation.

Category	Initial Codes	Participants	Representative Quotation
Physical challenge during movements	Difficulty in performing some movements, recognizing bodily limits, frustration when unable to perform	P1, P4	"Sometimes some movements can be physically challenging; however, this helps me recognize my limits rather than creating a permanent negative experience." (P1)
Facility-related discomfort	Small changing rooms, unpleasant smell, crowded studio environment, preference for previous branch	P9, P22, P24	"The small size of the changing room and the instructor's tone and language disturb me." (P24)
Pricing and membership policy concerns	Increasing prices, discounts not applying to all branches, make-up session policy	P13, P16	"The only challenging issue has been the increasing pricing policy." (P13)
Perceived lack of exercise efficiency	Not getting enough benefit from some sessions, not feeling as if exercise was performed	P21	"In some sessions, I do not get enough efficiency and do not feel as if I have exercised." (P21)
Instructor communication and professionalism issues	Instructor tone, inappropriate disclosure about other members, lack of punctuality, lack of notification, reduced trust	P24	"The instructor talking about problems with other members without considering their privacy created distrust toward both the instructor and the studio." (P24)
Negative verbal atmosphere and excessive talking	Negative conversations, complaints during sessions, excessive chatting among participants	P25, P26	"I think sessions would be more effective if there were positive conversations instead of negative talk and complaints." (P25)

While participants' negative or problematic experiences seemed to be relatively scarce when compared with the positive meanings associated with tower Pilates (see Table 7), most of the participants did not report negative aspects of participation at all. However, in those few cases when participants experienced challenges, a number of problems became evident. First, there was a problem related to physical challenges associated with particular movements; yet in some cases this challenge was used as a chance to become aware of one's physical limitations. As for facility-related problems, those included small changing rooms, unpleasant smell, and crowdiness inside the studio. Also, there were some negative meanings associated with pricing policies and the use of discounts and make-up lessons by participants. Finally, only in a

few cases did participants associate negative meanings with session efficiency, instructor communication, professionalism, privacy issues, punctuality, or the verbal atmosphere in classes. In general, negative meanings were not associated with tower Pilates as a physical activity.

Participants' responses showed that continuation intentions were rather high among those who practiced tower Pilates, but were influenced by both supporting and constraining Factors (Table 8). The main arguments that explained continuation intention were related to physiological and psychological aspects that involved getting better, healthier and feeling full of energy. Some respondents associated their continuation with the changes in the appearance of their bodies and further observation of the development process. Instructor satisfaction and the good exercising atmosphere were named as other influential elements. Moreover, some participants referred to tower Pilates as a routine exercise or a lifestyle practice. At the same time, the continuation intentions were not absolute among participants. Such barriers that could make people stop doing tower Pilates included pricing policy, price changes, discounts, personal schedule limitations, problems associated with the gym, instructors or the course itself. Therefore, it can be stated that continuation intention was positively influenced by benefits and relational satisfaction, whereas economic, context and communication-related aspects were regarded as barriers.

The metaphors expressed by participants suggest that tower Pilates was not considered as an exercise practice, but through a variety of experiential meanings (Table 9). The most prevalent of such meanings included balancing, therapy, healing, relaxing, energizing, bodily awareness, and gradual achievement. A number of participants described tower Pilates as a relaxing and regulating process that was beneficial for their body and soul. Another group of participants referred to the practice as therapy, treatment, and relaxing session. Thus, it is possible to say that this exercise practice is viewed by participants as an activity that can provide them with psychological comfort. A set of metaphors such as ladder and mountain climbing refer to gradual achievement, effort, challenge, and success in tower Pilates. At the same time, metaphors such as home, vacation place, breath, and rainbow imply that tower Pilates is experienced as something pleasant and vitalizing.

Table 8
Categories, codes, and findings regarding participants' responses on the theme of intention to continue tower Pilates.

Category	Initial Codes	Participants	Representative Quotation
Physical and psychological benefits as reasons for continuation	Feeling physically better, feeling mentally better, health benefits, vitality, well-being, positive bodily effects	P1, P6, P14, P18, P20, P25	"I intend to continue tower Pilates because I clearly feel that it is good for me both physically and mentally in my daily life." (P1)
Body-related change and visible progress	Observing bodily changes, body transformation, expectation of further physical change, visible progress	P11, P22	"I may continue by looking at the changes in my body." (P11)
Progression and skill development	Improving level, developing further, progression in practice	P21	"I want to continue in order to improve my level." (P21)
Instructor satisfaction and positive exercise environment	Satisfaction with instructor, liking the instructor, warm environment, positive instructor, enjoyable atmosphere	P8, P13, P15, P23	"I intend to continue because I am satisfied with my instructor." (P8)
Continuity as a habit and lifestyle orientation	Long-term habit, not wanting to quit, strong commitment, exercise as lifestyle	P4, P26	"It has become a beautiful habit that I do not want to quit throughout my life." (P4)
Pricing and financial conditions affecting continuity	Price increase, expensive fees, discounts, campaigns, membership affordability, price policy	P7, P9, P12, P13, P16	"I want to continue, but a 75% price increase within one month after registration reduces the likelihood of my attendance." (P7)
Personal schedule and contextual barriers	Difficulty arranging personal schedule, continuation depending on personal circumstances	P17	"If I do not continue, it would be completely personal, due to not being able to arrange my own schedule." (P17)
Instructor-related discontinuation intention	Intention not to continue if the same instructor remains, instructor-related dissatisfaction	P24	"If our Pilates instructor remains the same, I do not intend to continue because of the reasons I mentioned above." (P24)

Table 9
Categories, codes, and findings regarding participants' responses on the theme of metaphorical meanings attributed to tower Pilates.

Category	Initial Codes	Participants	Representative Quotation
Balance, mental calmness, and self-regulation	Balance, calming the mind, body-mind regulation, slowing down stress	P1, P17	"Tower Pilates is like a balance tool because it strengthens my body while calming my mind." (P1)
Therapy, healing, and relaxation	Therapy, healing, relaxation, stress release, feeling better	P10, P12, P15, P21	"Tower Pilates is like therapy because it is a place where I can relax." (P12)
Progressive strengthening and achievement	Step-by-step progress, strengthening, challenge, reaching the summit, sense of accomplishment	P6, P25	"Tower Pilates is like a ladder because it strengthens you step by step as you move." (P6)
Enjoyable challenge and post-exercise pleasure	Painful but enjoyable process, effort, pleasure after challenge, emotional reward	P2, P7, P25	"Tower Pilates is like a lover because even though I suffer inside, I leave happy." (P7)
Energy, vitality, and positive mood	Renewed energy, happiness, motivation, feeling colorful, vitality	P5, P14, P20, P26	"Tower Pilates colors my life because I feel more colorful, energetic, almost like a rainbow." (P26)
Body awareness and listening to the body	Body listening, bodily awareness, understanding bodily limits, conscious movement	P18	"Tower Pilates is like the art of listening to the body because in every movement I understand how my body can or cannot move." (P18)
Safe, familiar, and desirable place	Home, trust, vacation place, desire to return, familiar environment	P4, P13, P22, P23	"Tower Pilates is like home because I feel as if I am at home." (P13)
Flow and temporal absorption	Flow, passing of time, immersion in the session	P8	"It is like water; time flows." (P8)
Necessity and life-supporting resource	Breath, indispensability, life-supporting need	P19	"Tower Pilates is like breath because you cannot live without breathing." (P19)

Discussion

The purpose of the current research was to analyze women's experience of tower Pilates practice in terms of reasons for participation, psychological consequences, body-related outcomes, instructors' and environment-related experiences, reflections concerning their daily lives, intention to persist, and metaphors associated with the practice. The findings revealed that tower Pilates is perceived as much more than an exercise form aimed at developing physical strength, flexibility, posture improvement, and body shaping. Instead, the women reported that tower Pilates was experienced as a multilevel recreation through physical activity linked with relaxation, stress management, care about one's self, body awareness, sense of competence, confidence, social, and educational support as well as daily life regulation. In other words, the results indicate that tower Pilates is a body-mind practice whose physical, psychological, and experiential aspects cannot be separated from each other. From the perspective of this pattern, it becomes clear how it is possible to analyze women's experience of tower Pilates beyond its exercise structure per se and discuss it as a phenomenon of psychological well-being and recreation.

The results on the motivations behind the beginning of the tower Pilates practice (Table 1) indicated that the first contact with the exercise practice had been influenced by health, posture improvement, pain alleviation, body shaping, flexibility, psychological wellness, self-care, and facilitators. Such multi-faceted nature is in agreement with the existing literature as it demonstrates that Pilates and other mind-body exercises are usually selected by people due to the intersection of various expectations instead of one reason alone. According to Borges et al. (2021), stress management, health, and aesthetics were among the purposes of exercise practice among participants. Parveen et al. (2023) also stated that Pilates can contribute to physical and psychosocial wellness of women by means of flexibility, strength, posture, and pain reduction. Similarly, Denham-Jones et al. (2022) showed that Pilates can improve pain, physical function, and quality of life in older adults with chronic musculoskeletal conditions. Participants' references to mental health, self-care, and taking time for oneself also align with Kim et al. (2019), who associated Pilates with positive emotion, psychological well-being, participation satisfaction, and sustainable participation intention. This view is further substantiated by Aksoy and Kılıçarslan (2024), where they point out that the motivations to engage in leisure time activities are directly associated with negotiating leisure constraints. This implies that motives of participation in leisure must be considered in conjunction with leisure barriers. In addition, social and environmental factors such as friend recommendation, accessibility, location, and exercise setting are consistent with women's physical

activity literature, which identifies social support and contextual conditions as important determinants of participation (Hanlon et al., 2019; Peng et al., 2023). Therefore, women's motivation to start tower Pilates can be interpreted as a holistic structure in which health-oriented, appearance-related, psychological, social, and environmental factors operate together.

The findings also showed that tower Pilates was experienced as a coping resource for daily stress and psychological tension (Table 2). Participants frequently described the sessions as a space for mental relaxation, distancing from daily problems, focusing on the present moment, bodily release, and taking time for oneself. This finding is consistent with previous evidence suggesting that Pilates may support psychological well-being by reducing anxiety, depressive symptoms, fatigue, and perceived stress while increasing energy and quality of life (Fleming & Herring, 2018; Aibar-Almazán et al., 2019). The mechanism underlying this experience may be related to the mind-body structure of Pilates, in which breathing, concentration, controlled movement, and body awareness direct attention away from external stressors and toward embodied self-regulation. In this regard, Adams et al. (2012) showed that Pilates classes may promote mindfulness, body awareness, confidence, and stress management, which parallels the participants' descriptions of focusing only on the exercise and mentally withdrawing from daily concerns. Similarly, Guidotti et al. (2025) reported that Pilates practitioners displayed lower levels of anxiety, depression, somatization, and stress-related risk behaviors compared with non-active controls. Therefore, the present findings suggest that tower Pilates may function not only as a physical training method but also as a structured self-care practice that enables psychological recovery through movement, attention, breathing, and bodily awareness.

Another important finding of the study was that participants associated tower Pilates with improvements in body perception, perceived physical competence, posture, flexibility, strength, pain reduction, and self-confidence (Table 3). These findings are consistent with previous evidence showing that Pilates may improve women's physical and psychosocial health, particularly through flexibility, strength, posture, pain reduction, physical function, and quality of life (Parveen et al., 2023). Similarly, Cruz-Ferreira et al. (2011) reported that Pilates-based exercise improved women's life satisfaction, physical self-concept, perceived physical appearance, functionality, and perceived health status, which supports the present finding that bodily changes were also interpreted through psychological and self-perceptual meanings. This interpretation is also supported by Kılıçarslan et al. (2023), who found a positive and significant relationship between body appreciation and general self-efficacy among individuals exercising in fitness centers, suggesting that body-related self-perception and perceived competence may reinforce each other in exercise contexts. The participants' emphasis on posture, body control, and appearance-related confidence is also compatible with recent evidence showing that reformer Pilates may improve postural alignment and body appreciation while reducing social appearance anxiety among sedentary office workers (Taştan et al., 2025). Moreover, the pain-related findings of the present study are supported by evidence indicating that Pilates can improve pain intensity and physical function in chronic low back pain, partly through reductions in pain catastrophising and kinesiophobia (Wood et al., 2023). Therefore, the above results indicate that any effects related to the body resulting from doing tower Pilates cannot be viewed only in terms of physical appearance. Rather, such effects have to do with the interaction between posture, movement control, decreased pain levels, self-efficacy, and self-perception.

The results of interactions between the instructor and participants in tower Pilates classes (Table 4) show that instructor support, appropriate guidance, individual attention, peer harmony, and supportive communication affected the psychological aspect of the practice. Participants linked the instructor's positive attitude towards them that was warm, supportive, professional, and encouraging of the participants' feelings of safety, motivation, appreciation, and confidence in themselves during the sessions. This result corresponds with Morrison et al.'s (2023) study findings that stated that instructors in group physical activity settings may be social support providers for their clients because they can promote autonomy orientation, caring relations, trust, and inclusive environment. Additionally, Rodrigues et al. (2018) found that interpersonal autonomy support from fitness professionals may contribute to the fulfillment of individuals' basic psychological needs and their exercise behavior. Correspondingly, Moreno-Murcia et al. (2017) demonstrated that autonomy support from exercise professionals together with social agents had positive influence on psychological needs satisfaction, intrinsic motivation to participate in physical activities, regular physical activities, and life satisfaction among women. Moreover, the results concerning peer

harmony and a supportive group climate reflect previous research results that show how exercise group membership correlates with social support, exercise identity, and increased levels of physical activity (Golaszewski et al., 2022). Thus, in light of the above discussion, it can be stated that the relational climate of tower Pilates practice should be viewed as an important part of its psychological aspect.

These results suggested that acquiring a new tower Pilates routine led to achievement, pride, motivation, self-confidence, and competence in a psychological way (Table 5). Participants did not understand the process of gaining new movement as technical success but rather as their body being able to change and overcome their own limitations. Such theoretical explanation for such result can be found in the exercise and self-esteem theory, which states that exercise experience might have an effect on self-esteem mediated by task-specific self-efficacy and physical competence (Sonstroem et al., 1991). It is also supported by evidence showing that Pilates and similar mind-body practices can improve self-efficacy and mood (Caldwell et al., 2009), and that Pilates-based participation may enhance women's physical self-concept, perceived functionality, and life satisfaction over time (Cruz-Ferreira et al., 2011). In terms of the qualitative approach, Gaskell & Williams (2019) found out that patients suffering from chronic musculoskeletal illnesses perceived Pilates as allowing them to function and manage themselves independently in a way consistent with the experience of the present participants who were aware of their limits and had noticed gradual improvement. Moreover, the latest exercise psychology literature reveals that physical activity might contribute to achieving the motivational goal via self-efficacy and life satisfaction (Cao et al., 2025). Accordingly, it can be suggested that mastering movement in tower Pilates can play the key psychological role in gaining self-efficacy, confidence, and motivation.

The findings on reflections of tower Pilates on life satisfaction, energy level, and daily life practices (Table 6) showed that the effects of the practice extended beyond the exercise session and were integrated into participants' everyday routines. Participants felt energized, less physically tired, disciplined, and conscious of their posture, breathing, and routines. This result can be compared to other studies that have indicated that Pilates training has the potential to affect mental health benefits, vitality, and quality of life (Fleming & Herring, 2018). Likewise, Lim and Hyun (2021) found that Pilates and yoga interventions enhanced participants' health promotion practices and subjective health conditions. These results are consistent with those obtained from the tower Pilates program in this study. From a qualitative perspective, Gaskell and Williams (2019) found that Pilates participation promoted physical function, active lifestyle, psychological benefits, and motivation to maintain healthier behaviors. Therefore, the present findings suggest that tower Pilates may operate as a daily life-oriented self-care practice through which participants transfer bodily awareness, vitality, discipline, and health-oriented behaviors from the exercise session into everyday life.

The findings on challenging, uncomfortable, or negative aspects of tower Pilates participation (Table 7) showed that participants' negative experiences were mostly related to contextual, organizational, communicative, and environmental conditions rather than tower Pilates as an exercise modality itself. Although some participants referred to physical difficulty during certain movements, most concerns were associated with facility conditions, changing room size, unpleasant smell, crowded settings, pricing policies, make-up session arrangements, session efficiency, instructor communication style, professionalism, privacy, and negative verbal atmosphere during sessions. This pattern is consistent with women's physical activity literature showing that participation barriers are shaped by environmental conditions, facility access, safety, social climate, and body-related concerns (Peng et al., 2023). Similarly, studies on fitness center service quality indicate that customer satisfaction is influenced by facility quality, price, staff quality, supporting services, assurance, and customer relations (Ferreira-Barbosa, 2023), while physical environment and equipment quality are strongly associated with perceived service quality among gym users (Polyakova & Ramchandani, 2020). The instructor-related discomfort reported in the present study also aligns with evidence showing that instructors' communication style and interpersonal behaviors influence satisfaction, motivation, and exercise participation (Ntoumanis et al., 2017; Rodrigues et al., 2019). Therefore, the negative experiences identified in this study should be interpreted less as limitations of tower Pilates itself and more as service-quality and relational-climate issues that may reduce psychological safety, perceived value, and participant satisfaction in supervised exercise settings.

The findings on intention to continue tower Pilates (Table 8) indicated that continuation was strengthened by perceived physical and psychological benefits, visible body-related progress, instructor satisfaction, enjoyable exercise environment, progression in practice, and habit formation, whereas pricing, personal scheduling, and instructor-related dissatisfaction weakened this intention. This pattern is consistent with exercise adherence literature showing that enjoyment, autonomous motivation, instructor support, and positive exercise experiences are central predictors of intention to continue and long-term persistence (Rodrigues et al., 2020). Similarly, Huberty et al. (2008) found that women's long-term adherence after a structured exercise program was shaped by self-worth, self-regulation, body image, enjoyment, and the prioritization of physical activity. These findings support the present result that participants were more willing to continue tower Pilates when they perceived it as beneficial, meaningful, enjoyable, and compatible with their self-care goals. However, continuation was not unconditional. Economic costs, perceived barriers, poor communication, lack of access, and provider- or system-level issues have all been noted as significant barriers to adherence to exercise regimens (Mahmood et al., 2023; Hwang & Yi, 2025). Consequently, it is reasonable to deduce that adherence to tower Pilates depends on the relationship between potential benefits and context-specific barriers. From this perspective, tower Pilates can promote sustainable participation by making participants feel healthier and psychologically happier, by having great relationships with their instructors, noticing positive changes, and developing habits, but not if barriers make this less worthwhile.

The interpretive meanings related to tower Pilates at Table 9 contributed to gaining insight regarding the ways in which individuals conceptualized the exercise beyond its physical framework. Examples of metaphors like "therapy," "balance," "breath," "home," "ladder," "rainbow," and "the art of listening to the body" indicated that the practice was perceived as an avenue for psychological recovery, protection, vitality, growth, regulation, and embodiment. In line with Orhan et al.'s findings (2023), the above metaphors indicated that the women practicing Pilates considered the exercise in relation to positive metaphors related to physical and psychological well-being. Regarding methodology, the use of metaphors in qualitative inquiry is particularly helpful since metaphors assist researchers in bringing forward implicit meanings that participants would fail to convey using direct descriptions and provide the latter with means to translate abstract experiences into tangible symbols (Larsen et al., 2025). In turn, the current study demonstrates that metaphors related to tower Pilates also corroborate the idea that exercise cannot be confined to the domain of medicine or engineering; instead, it should be seen as a recreational practice that has the potential to improve well-being, generate personal meaning, and contribute to life quality (Smith, 2016). Hence, metaphors used by participants suggested that tower Pilates can be viewed not only as an exercise regimen but also as a significant bodymind practice that helps women construct experiences of healing, balance, confidence, continuity, and self-care.

Conclusion

The findings of this study showed that women's tower Pilates experiences were shaped by multiple and interrelated dimensions. First, women's tower Pilates experiences were found to be influenced by a number of interrelated factors. In particular, women began practicing tower Pilates due to health, improvement of posture, relief of pain, body-shaping purposes, need for flexibility, need to move, mental relaxation, personal care practices, social and environmental factors. Practicing tower Pilates was associated with stress relief, relaxation of mind and body, emotional regulation, release of emotions and relaxation. Moreover, positive changes in perceptions of the body, posture, flexibility, strength, pain reduction, physical competence, confidence in oneself, body awareness were also noted by women. Instructor support, appropriate guidance, individual attention, harmonious relationships between peers and good communication were seen as key components of the experience, whereas negative aspects included poor facilities, price policy of the facility, session efficiency, instructor communication skills, privacy, and verbal atmosphere. Women practicing tower Pilates were also found to reflect this practice in daily life through increased energy levels, decrease of fatigue, improved postures, discipline, self-care practices and healthy lifestyles awareness. Intentions of the women participants to continue tower Pilates depended on physical and psychological benefits achieved from it, obvious progress, instructor satisfaction, pleasant environment, habit formation as well as on economic, schedule-related, and interpersonal factors limiting these intentions. Finally, the metaphors used in describing tower Pilates indicated the perception of the practice as therapy, balance, breathing exercises, home, developmental

practice, energy, bodily awareness and recovery on the psychological level.

From a practical perspective, Pilates instructors should strive to create supportive, respectful, and psychologically safe exercise environments that encourage participant engagement and long-term adherence. Providing individualized feedback, positive communication, and appropriate guidance may strengthen participants' motivation, self-confidence, and overall exercise experience. In addition, fitness center managers should consider improving facility conditions and maintaining accessible pricing policies to support sustained participation. The findings also suggest that tower Pilates may be used not only as a physical training method but also as a strategy for promoting psychological well-being, stress management, body awareness, and self-care among women.

There are a number of methodological limitations of this study. First, the data collected for this research was gathered using open-ended questionnaire questions rather than face-to-face interview and other forms of interviewing. Therefore, the researcher did not have an opportunity to ask follow-up questions, clarify some statements, etc. Second, the sample of the study included women only. As such, the results cannot be generalized and transferred to men and mixed groups of tower Pilates participants. Third, women had relatively little experience in tower Pilates and this aspect should be considered in interpreting the data obtained. Nevertheless, these limitations notwithstanding, the data collected are still quite informative.

Author Contributions

Writing – Review & Editing, Visualization, Supervision, and Project Administration: KK. The author has read and approved the final version of the manuscript.

Ethical Approval

The study was approved by the Ahi Evran University of Ethics Committee for the Social and Human Sciences (FR-586) and it was carried out in accordance with the Code of Ethics of the World Medical Association also known as a declaration of Helsinki.

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Conflict of interest

The authors hereby declare that there was no conflict of interest in conducting this research.

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