

Understanding Women's Empowerment through Exercise: Insights from a Study on Physical Activity and Self-Efficacy

Compreendendo o empoderamento das mulheres por meio do exercício: Percepções de um estudo sobre atividade física e autoeficácia

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Abstract. Within this mixed-methods study, researchers in Padang, West Sumatra, Indonesia, investigated women's feelings about their capacity to exercise, the frequency with which they exercised, and the overall sense of empowerment they experienced. The researchers used a sequential explanatory design and interviewed 11 qualitative interviewees and 298 quantitative survey respondents. According to the quantitative data, the participants' physical activity and exercise self-efficacy were rather high. According to qualitative research findings, resistance training and activities with a cultural significance are empowering, gender-centric hurdles are significant, and enjoyment and social support are essential. A complex dynamic was created by interacting several factors, including individual experiences, societal variables, and perceptions of empowerment gained via physical activity. The findings of this study emphasize the significance of gender-specific barriers in exercise settings and the need for tailored and inclusive programs that may assist women in overcoming these barriers via exercise. The implications of this for community organizations, medical professionals, and legislators are the primary focus of the discussion.

Keywords: Physical activity, Empowerment, Self-efficacy, Gender barriers, Cultural significance, Inclusive programming

Resumen. Neste estudo de métodos mistos, investigadores em Padang, Sumatra Ocidental, na Indonésia, investigaram os sentimentos das mulheres sobre a sua capacidade de exercício, a frequência com que se exercitavam e a sensação geral de empoderamento que experienciavam. Os pesquisadores utilizaram um desenho explicativo sequencial e entrevistaram 11 entrevistados qualitativos e 298 respondentes de pesquisas quantitativas. De acordo com os dados quantitativos, a atividade física e a autoeficácia do exercício dos participantes foram bastante elevadas. De acordo com os resultados da investigação qualitativa, o treino de resistência e as atividades com significado cultural são fortalecedoras, os obstáculos centrados no gênero são significativos e o prazer e o apoio social são essenciais. Uma dinâmica complexa foi criada pela interação de vários fatores, incluindo experiências individuais, variáveis sociais e percepções de empoderamento adquiridas através da atividade física. As conclusões deste estudo enfatizam a importância das barreiras específicas de gênero em ambientes de exercício e a necessidade de programas personalizados e inclusivos que possam ajudar as mulheres a ultrapassar estas barreiras através do exercício. As implicações disto para as organizações comunitárias, profissionais médicos e legisladores são o foco principal da discussão.

Palabras clave: Atividade física, Empoderamento, Autoeficácia, Barreiras de gênero, Significado cultural, Programação inclusiva

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Introduction

In recent years, there has been a growing recognition of the importance of promoting women's empowerment through physical activities globally. The United Nations Entity for Gender Equality and the Empowerment of Women (UN Women, 2020) highlights that women's empowerment is pivotal for achieving sustainable development goals. Empowerment is characterized by autonomy, control, and the ability to make choices that positively influence women's lives. Globally, women's participation in physical activities is recognized not only for its health benefits but also for its potential to empower women socially and economically. However, significant disparities exist in women's access to and participation in physical activities due to cultural, economic, and infrastructural barriers.

According to the World Health Organization (WHO), physical inactivity is one of the leading risk factors for global mortality, and women are generally less active than men (WHO, 2020). This inactivity is even more pronounced in

developing regions where societal norms and limited resources further restrict women's opportunities for engaging in physical activities. In Southeast Asia, only 15% of women meet the recommended levels of physical activity, compared to 22% of men (WHO, 2020). These statistics highlight a critical need for interventions that promote physical activity among women to enhance their health and empowerment.

Empowerment is a multifaceted construct that includes dimensions such as economic independence, social participation, and personal autonomy. The theoretical foundation of empowerment can be traced back to the work of Perkins and Zimmerman (1995), who defined psychological empowerment as a process by which individuals gain control over their lives, fostering a critical understanding of their environment and their ability to act upon it. In this context, empowerment is not merely an outcome but a dynamic process involving cognitive, emotional, and behavioral aspects. The Empowerment Theory developed by Perkins and Zimmerman (1995) serves as a framework to analyze

the study's results. The individual, the interpersonal, and the communal are the three levels brought to light by this theory, which emphasizes the complex nature of empowerment on each level. Even when quantitative statistics show that participants are normally active, qualitative insights show that women continue to face gender-centric hurdles that prevent them from being empowered and enjoying exercise. These obstacles prevent this from happening. As a result of these impediments, they cannot engage in physical activity. According to Zimmerman's Empowerment Theory (2000), it is of the highest significance to overcome these barriers by implementing tailored treatments that promote women's agency and self-efficacy in physical exercise. These interventions are designed to facilitate women's participation in physical activity (Bobo-Arce et al., 2024; Pranoto et al., 2024).

In Padang, West Sumatra, Indonesia, cultural norms and expectations significantly influence gender roles and behaviors, making it a pertinent region to study women's empowerment through physical activities. The Minangkabau people of West Sumatra possess a rich tradition of wisdom that can shed light on strategies for protecting and empowering women. Revita et al. (2019) highlighted four critical elements of Minangkabau traditional knowledge—wisdom, unity, cooperation, and attention—that are instrumental in reducing the incidence of women's trafficking. These values not only reflect the region's cultural heritage but also form the basis for initiatives aimed at empowering women.

Chinta et al. (2024) offer some clarification on how different kinds of physical activity contribute to the well-being and contentment of Padang women. This study aimed to investigate the relationship between aerobic exercise, Vinyasa yoga, and the reduction of body fat in female fitness center users. Exercising regularly might improve one's physical health. The findings clearly show that there is a pressing need to provide a wide range of individualized exercise programs to cater to the requirements and preferences of women in the community.

When it comes to using accessible sports facilities, a significant number of women in Padang continue to encounter significant challenges, particularly those who have disabilities. According to the findings of Fitri et al. (2022), who conducted a study of the accessibility of sports facilities for training and competition in Malaysia and Indonesia, there are disparities in terms of accessibility during matches, accessibility inside the facilities themselves, and accessibility during training sessions. We must eliminate these barriers if we want women of all abilities to have equal access to sports and other types of physical exercise (Gil-Ares & Álvarez, 2022; Melero & Ortega, 2023; Waty et al., 2024).

This study attempts to expand on these results by exploring how women in Padang, West Sumatra, feel about their abilities to exercise, how engaged they are in physical

activity, and how empowered they are to make decisions beneficial to their health and lifestyle. By acquiring a better understanding of the factors that influence women's participation in physical activities and the challenges they face, it may be possible to enable the development of targeted therapies that aim to empower women and improve their overall well-being.

The value of physical exercise in improving women's health and empowering them is becoming increasingly widely recognized, and the purpose of this study is to investigate the following research questions:

1. What main elements motivate women to exercise in Padang, West Sumatra?
2. How might traditional beliefs and knowledge from the area help women in the area become more physically strong?
3. In Padang, what are the most significant challenges that women, especially those with disabilities, encounter when trying to use inclusive sports facilities?
4. How might targeted interventions be created to empower women and increase their engagement in physical activities in Padang, West Sumatra?

Materials and Methods

Using an explanatory sequential mixed-methods methodology, this study explored the relationship between exercise involvement, self-efficacy, and physical activity empowerment among adult women in Padang, West Sumatra. This was done from the perspective of the researcher.

Study Design

The research began with the collection of quantitative data via the use of online questionnaires and then proceeded to the collection of qualitative data through the use of in-person interviews. Using this sequential strategy allowed for a greater understanding of the phenomenon that was being investigated.

Participants

A snowball sampling strategy was used to recruit participants. This technique began with the initial stage of locating and enrolling early volunteers. The next phase included constructing a network of participants via the recommendation of other individuals who met the necessary qualifications. The objective of the snowball sampling method was to get the names of women who would be difficult to reach using more traditional sampling methods. Only female volunteers between the ages of 18 and 65 from the Padang region of West Sumatra were eligible to take part in the study. In addition, women with impairments were actively included in the study to ensure that they were all included in the comprehensive investigation of the empowerment, self-efficacy, and engagement associated with physical exercise. The participants' sociodemographic information, including age, education level, and employment status, was summarized in Table 1.

Table 1.
Demographic information of participants

Characteristic	Quantitative Data (N = 298)	Percentage	Interview Data (N = 11)	Percentage
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Age Range	- 18-25 years	75	25.2%	3	27.3%
	- 26-35 years	120	40.3%	5	45.5%
	- 36-45 years	60	20.1%	2	18.2%
	- 46-55 years	30	10.1%	1	9.1%
	- 56-65 years	13	4.4%	0	0%
Job	- Employed	209	70.1%	8	72.7%
	- Unemployed	89	29.9%	3	27.3%
Education	- High School	59	19.8%	2	18.2%
	- Bachelor's Degree	178	59.7%	6	54.5%
	- Master's Degree	59	19.8%	3	27.3%
	- Ph.D. or equivalent	2	0.7%	0	0%

The table shows the demographic information acquired from 298 people who participated in the quantitative survey and 11 personally interviewed. It provides a split of the participants according to variables such as age, profession, and degree of education, all essential. Notable characteristics include the fact that most respondents were between 26 and 35. This was the case for 45.3% of those who participated in the survey and 50.5% of those interviewed. Both data sets show high employment rates, with 72.7% of people interviewed and 70.1% of those who participated in the survey being employed. It was found that most people had at least a bachelor's degree, with 59.7 percent of respondents in the survey and 54.5 percent in the interviews. By looking at this table, which illustrates significant demographic patterns among participants, one can better understand the composition of the study group.

Survey Procedures

This study aimed to collect quantitative data on exercise self-efficacy, engagement, and empowerment in physical activity. To this end, an online survey was sent to adult women in Padang, West Sumatra, and they were urged to participate. Throughout the phases of the survey process, including the introduction and the informed consent stage, participants were provided with extensive information on the objectives and procedures of the research. In order to proceed with the process, they needed to grant informed permission, and they were assured that their responses would be kept confidential. The next step was to request that they fill out some fundamental demographic information, including their age, education level, career, and marital status. As part of this step, the objective was to shed light on the participants' characteristics and contextualize the survey responses.

After completing the previous phase of the categorization process, participants were required to self-report their height and weight to calculate their body mass index (BMI). On the other hand, height was measured in feet and inches, which were then converted to inches for calculation. Weight was recorded in pounds, while height was measured in feet and inches. After that, respondents filled out the Godin-Shephard Leisure-Time Physical Activity Questionnaire (GSLTPAQ) to measure their current physical activity levels during their leisure time (Godin, 2011). This study aimed to determine the frequency with which individuals participated in various types of exercise that lasted more than fifteen minutes during their leisure time over a typical week. The respondents were asked to categorize the workouts as moderately challenging, light, or harsh.

In addition, participants were asked to complete a questionnaire called the Self-Efficacy for Exercise Questionnaire, which assessed the degree to which they felt confident in their capacity to exercise despite the common challenges they faced (Wilcox et al., 2005). They rated their level of assurance in nine different scenarios using a scale that ranged from 0 to 10. Furthermore, respondents were asked to assess the degree of empowerment they felt about one to five various physical activities, with the greatest rating being the most empowering and the lowest rating being the least empowering (Craig et al., 2003; Tannoubi et al., 2023). The range of possible ratings was from one to five.

Participants can contribute additional qualitative information by responding to an optional open-ended question about their experiences with physical exercise and feelings of empowerment. This will help flesh out the quantitative survey findings from the previous section. Finally, participants were allowed to decide whether or not they would want to participate in a one-on-one interview to discuss their views and emotions around the concept of being empowered and engaged in physical activity. To provide the participants with the most convenience possible, we ensured the survey was conducted online. This allowed the participants to access it whenever it was most convenient.

Survey Measurements

Participants in the survey were asked to score their levels of physical activity, their confidence in their abilities to exercise, and the degree to which they felt empowered. We used the participants' self-reported height and weight to calculate their Body Mass Index (BMI), measuring their total body composition. This was done to determine how the participants' bodies were composed. A measurement of the individual's height in feet and inches, as well as their weight in pounds, was collected.

In order to get the body mass index (BMI), we used the standard formula, which is the weight in pounds divided by the height in inches squared multiplied by 703. The calculated body mass index (BMI) values were categorized into traditional categories such as underweight, normal weight, overweight, and obese to understand people's weight status. The Godin-Shephard Leisure-Time Physical Activity Questionnaire (GSLTPAQ) was used to determine the quantity of physical activity individuals participated in during their leisure time over a normal seven-day period. This study recorded the frequency with which individuals participated in moderate, mild, and strenuous exercise for more than fifteen minutes.

Individuals were also asked to complete the Self-Efficacy for Exercise Questionnaire, designed to determine how

confident they are in their capacity to overcome the common challenges associated with physical exercise. In the survey, participants were asked to rate their confidence on a scale ranging from 0 to 10 for each of the nine scenarios they were being questioned about. This provided information about how they believed they could exercise despite their challenges.

A further point to consider is that individuals were asked to evaluate their level of agency regarding up to five distinct sorts of physical activities that they engage in during their leisure time. Participants were assessed on a scale ranging from most to least empowering to enhance their ability to explain how different activities subjectively influenced their sense of empowerment. When everything is considered, the responses to these survey questions give insight into the levels of physical activity the participants engage in, their confidence in their talents, and their feeling of agency. This technique made it possible to investigate the relationships between these characteristics among adult women living in Padang, located in West Sumatra.

Individual Interview Procedures

An effort was made to contact individuals who expressed interest in doing in-person interviews at a time and location that was convenient for them. The participants were allowed to express their informed consent at the beginning of each interview, followed by a comprehensive study description. By going through the process of obtaining informed permission, we ensured that all of the individuals who participated in the interview were aware of the purpose of the interview, that their participation was entirely voluntary, and that their responses would be kept confidential.

Semi-structured interviews were administered with the help of eight fundamental and exploratory questions designed in advance. The objective of this survey was to gather in-depth qualitative information from participants on their exercise habits when they had spare time, their feelings of agency, and the factors that encouraged them to begin moving. For your convenience, the interview questions are included in the table below:

Table 2.
Interview Questions for Qualitative Data Collection

Interview Questions	Description
Involvement in Leisure-Time Physical Activities.	Participants describe their current involvement in leisure-time physical activities, including sports, exercise, and recreational walking.
Motivations for Engagement.	Participants explain why they engage in specific types of physical activity or activities.
Preference for Solo or Group Participation.	Participants discuss whether they prefer to participate in physical activities alone or with others, exploring their social preferences in physical activity settings.
Emotional Impact of Physical Activity.	Participants describe how participating in physical activity makes them feel emotionally and psychologically.
Effect on Daily Life.	Participants discuss how their physical activity influences other daily life and routines.
Motivational Factors.	Participants explain what factors motivate them to continue participating in regular physical activity.
Perceptions of Empowerment.	Participants shared their thoughts on whether physical activity contributes to their sense of empowerment and identified which types of physical activity they find most empowering.
Relationship Between Enjoyment and Empowerment.	Participants discuss how their enjoyment of physical activity relates to their sense of empowerment.

Because the interviews were conducted conversationally, the participants were strongly encouraged to express themselves freely. We made sure to get the participants' consent before recording each interview so that we could ensure accurate transcription and analysis of the data. Each interview was planned to take around thirty minutes. Once the transcription process has been completed, participants can verify the accuracy of the transcripts by comparing them to their own experiences.

Statistical Analysis

To analyze the data for this research, we used IBM SPSS version 27. Body mass index (BMI), degree of physical activity involvement, and exercise self-efficacy were among the variables subjected to statistical analysis, and their respective means and standard deviations were calculated. We used independent sample t-tests to investigate whether there were any differences between the groups. These studies aimed to investigate the differences in body mass index (BMI), physical activity engagement (PA) levels, and exercise self-efficacy among the participants.

All statistical tests were run with a significance threshold of $p < 0.05$ to demonstrate statistical significance at the level of statistical significance. An analysis of the data was performed to understand better the links between exercise

self-efficacy, engagement, and empowerment among adult women in Padang, West Sumatra, and to determine whether or not there were any significant differences between the groups.

Qualitative Analysis

To conclude, interview transcripts were subjected to thematic analysis. The data were examined using thematic analysis, an approach that is both iterative and inductive, so that themes and categories may be identified. The researchers performed a second coding process on the transcripts, searching for certain words and phrases that contributed to explaining the purpose of the study.

At regular intervals, researchers returned to previously examined data to apply new codes that were pertinent when they became available. When the researchers had finished coding each tape, they came together to discuss the meanings of the codes and combine any duplicate codes into a single set of unique codes. Next, we classified the codes based on their common features and devised themes to represent each class. Using a negative case analysis, the themes chosen were subjected to a second round of reliability and consistency checks. This in-depth qualitative research shed light on the participants' viewpoints, feelings, and objectives regarding the empowerment of physical exercise,

providing useful insights into the participants' experiences with physical activity.

Procedures and Ethical Considerations

The survey instruments were tested for clarity and reliability by conducting a pilot study with 20 participants. Changes were implemented following input from the initial test run. The privacy and confidentiality of all participants were rigorously upheld during the research project. The data was made anonymous, and participants were guaranteed that their involvement was voluntary and they could opt out without facing any repercussions.

Results

The 298 people who participated in the survey were representative of the population intended to be surveyed; the vast majority were residents of Padang, West Sumatra (86.4%). A small percentage of people identify with other ethnic groups (4.1%), but most people are Minangkabau (91.2%), which is reflective of the combination of people who live in the area. In Padang, educational attainment varied from a bachelor's degree or above, possessed by 44.2% of the population, to 37.4% with certain college degrees. This range of educational achievement reflects the educational diversity that exists in Padang.

Survey Findings

Table 3.
Participant Characteristics (N = 298)

Characteristic	Mean	Standard Deviation
Height (cm)	152.5	5.3
Weight (kg)	47.8	11.2
BMI (kg/m ²)	21.4	3.3
Total Physical Activity Score (GSLTPAQ)	63.5	26.2
Moderate-to-Vigorous Physical Activity Score (GSLTPAQ)	42.1	25.7
Self-Efficacy for Exercise Score	50.7	19.6

Table 1, which includes the survey data, presents the physical characteristics, exercise levels, and self-efficacy of Padang women. Table 1 also provides the response rates. While the participants' mean height was 152.5 centimeters (standard deviation = 5.3), their average weight was 47.8 kg (standard deviation = 11.2). A significant proportion of people, 43.5%, fell within the normal weight range, which resulted in an average Body Mass Index (BMI) of 21.4 kg/m² (standard deviation = 3.3). Using the Godin-Shephard Leisure-Time Physical Activity Questionnaire (GSLTPAQ), the participants reported engaging in physical activity for an average of 63.5 units (standard deviation = 26.2) during the day. For women from Padang, the average score for moderate-to-vigorous physical activity is 42.1 units, with a standard deviation of 25.7. This indicates that their lifestyles are relatively active.

Table 4
Physical Activity Levels

Physical Activity Level	Frequency (N = 298)	Percentage
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Low	65	21.8%
Moderate	150	50.3%
High	83	27.9%

The majority of participants reported engaging in moderate levels of physical activity, which aligns with the aim of understanding how different activity levels impact self-efficacy and empowerment.

Table 5
Self-Efficacy Scores by Age Group

Age Group	Mean ± SD
18-25 years	3.5 ± 0.7
26-35 years	3.8 ± 0.6
36-45 years	3.7 ± 0.5
46-55 years	3.4 ± 0.8
56-65 years	3.2 ± 0.9

Self-efficacy scores varied slightly by age group, with the highest mean score observed in the 26-35 years group. The differences in self-efficacy scores were analyzed using t-tests to identify significant differences between age groups.

Individuals had rather high levels of self-efficacy when asked to complete the Self-Efficacy for Exercise Questionnaire, with an average score of 50.7 (standard deviation = 19.6). This demonstrates that Padang women have a high level of self-assurance in their capacity to engage in regular physical activity, even when confronted with challenges.

Open-Ended Empowerment Question Analysis

Depending on their impact on the cardiovascular system, several forms of physical activity may be distinguished. Examples of exercises under cardiorespiratory training include rowing, swimming, brisk walking, and running. Workouts using resistance bands, weightlifting, and exercises using just one's body weight are all examples of resistance training. Training for the neuromuscular system comprises functional fitness training as well as other programs of a similar kind. Practicing yoga and stretching activities are both components of flexibility training. In conclusion, further programs include non-traditional forms of physical activity, such as gardening and dance. As can be seen in Table 2, descriptive data were analyzed by the activities that were performed. The descriptive statistics in Table 4 for the most empowering activity categories pertain to the mean plus the standard deviation ($M \pm SD$). These data are divided by type of exercise.

Table 6
Descriptive Statistics for Categories of Most Empowering Activity by Exercise Type (N = 298)

Variable	t-value	p-value
BMI	2.23	0.65
Total Physical Activity	2.14	0.12
Moderate-to-Vigorous Physical Activity	2.32	0.06
Self-Efficacy for Exercise	0.76	0.09

Independent t-tests were used to compare the cardiorespiratory and resistance training-empowered groups. This was done since the samples from the other groups were insufficient to allow statistical comparisons. There was no significant difference between the groups about any of the

following measurements: body mass index (BMI) ($t(297) = 2.23, p = 0.65$), total physical activity ($t(297) = 2.14, p = 0.12$), moderate-to-vigorous physical activity ($t(297) = 2.32, p = 0.06$), and exercise self-efficacy ($t(297) = 0.76, p = 0.09$).

Individual Interview Findings

Four overarching themes emerged from a thematic analysis of eleven individual interviews. These topics provided insight into women's experiences with physical exercise. During the discussion, several participants brought up particular obstacles women encounter while attempting to exercise. These obstacles include cultural norms, commitments to family, and societal expectations. Participants emphasized the positive impact of exercise on their mental health and their capacity to create meaningful connections with others, in addition to the apparent benefits of exercise on their physical health. Many people have expressed their belief that weightlifting and yoga are two types of exercise that give them better control over their bodies and thoughts than other forms of exercise. Importantly, respondents underlined the significant connection between empowerment and enjoyment in physical exercise, demonstrating that feeling empowered enhances the experience overall. This is an important finding indicating that the whole experience is improved. The interplay between societal determinants, individual experiences, and the perceived empowerment acquired from participating in physical activity was brought to light by these topics, which provided valuable insight into the complex relationship between gender, empowerment, and exercise pleasure.

Empowerment Through Sport: Insights from Padang Women

A story full of tenacity and ambition was revealed via the participant interviews, which presented a rich tapestry of insights into the lives of Padang women in connection to physical activity. All of these insights were disclosed through the interviews. One emotionally charged participant said, "Engaging in physical activity isn't just about exercise; it's about reclaiming our space and asserting our presence in a society that often marginalizes us." This is a paraphrasing of what the participant said. This statement encapsulates the greater struggle for gender equality in Padang's fitness and sports, a matter of great importance.

According to the interviews, participants experienced a sense of empowerment that was palpable when they participated in physical activities that went against the cultural norms and expectations that they were exposed to. By participating in sports, such as traditional Minangkabau martial arts, many women could find a method to express themselves and discover their cultural identity. Additionally, these activities helped them maintain their physical health. "When I'm practicing pencak silat, I feel a sense of connection to my heritage and ancestors," a participant stated. "It's a form of resistance against the constraints placed upon us as women."

The interviews provide information on the prevalent cul-

tural norms but also shed light on the numerous impediments prohibiting women from engaging in sports and other physical activities. Padang women face several obstacles in their pursuit of athletic success. These obstacles range from long-standing gender conventions to more practical concerns such as a lack of facilities and financial resources. One participant said, "It's a really depressing idea that women should put household responsibilities ahead of athletics."

Despite these challenges, the interviews revealed that the Padang women are resolute in their determination to challenge the established norm and establish themselves as leaders in sports. "We will not be silenced or sidelined, no matter what," stated another participant. They would say no. "Our voices matter, and our presence in sports is non-negotiable."

When everything is considered, the interviews provide a clear picture of the difficult and gratifying route the Padang women have walked to attain empowerment via sports. By providing a forum where women may discuss their narratives and experiences, this study aims to bring about a change in the sports sector. This endeavor aims to provide a more equitable and inviting environment where women may realize their full potential.

Embracing Holistic Wellness: Exploring the Multifaceted Benefits of Physical Activity Among Padang Women

Women from Padang who were physically active kindly expressed their one-of-a-kind insights on the many benefits of physical fitness, which extend well beyond simple health improvement. By reading about their experiences, one may better understand a holistic perspective on health, which considers an individual's mental, emotional, and physiological condition. They placed a high value on the development of strength and stamina via physical exercise since, in their opinion, this was the most essential factor in living a long and healthy life. People who participate in physical exercise often feel more confident in themselves and their abilities. They credit this feeling to the empowerment and strength they experience due to their participation in physical exercise. An eloquent participant expressed their sentiments: "I find joy in feeling strong and capable like I can take on whatever challenges come my way."

Many individuals expressed their strong belief that physical activity has a significant impact not just on their physical health but also on their mental and emotional well-being. They discussed how physical activity made them feel better emotionally and how it assisted them in overcoming stress and anxiety. Others shared their experiences of how engaging in regular physical activity provided them with the mental and emotional strength to confront the challenges that life presented to them head-on. One participant referred to it as "therapy for my mind" when they were experiencing feelings of anxiety or being overwhelmed. It helps restore perspective and reset the viewpoint.

People also reported feeling better about themselves and their bodies after physical activity. Several participants

noted how their fitness journey had altered their relationship with their bodies, inspiring them to better regard and accept their bodies. "Exercise has taught me to see my body as a source of strength and resilience rather than focusing solely on appearance," one participant remarked. "It's given me the confidence to embrace who I am, flaws and all."

Physical exercise appeared to be an important method of coping for managing stress and maintaining the emotional well-being of the participants. The participants said that regular physical activity provided them with a haven from the pressures of daily life, enabling them to contemplate and discover a sense of tranquility. The phrase "it's like the outside world fades away and all that matters is the present moment" was spoken by a participant who was exercising or going for a run after they had experienced.

In essence, the tales the omens of Padang transmitted brought to light the significance of concurrently focusing on one's mental, emotional, and physical well-being. The anecdotes shed light on how physical activity may enhance one's health and help one confront hardship with bravery and resolve.

Unveiling Empowerment through Physical Activity: Exploring the Dynamics of Empowerment Across Diferent Exercise Modalities among Padang Women

The experiences of Padang women provide light on the intricate relationship between physical activity and empowerment, demonstrating that various types of physical activity have distinct but complementary benefits for individuals. After engaging in resistance training activities such as lifting weights and other types of exercise, the participants reported feeling an incredible surge of strength, supported by the survey findings. One of the most important aspects of this empowerment was the physical sensation of strength and achievement that resulted from pushing oneself to one's limits via resistance training. People who participated in the exercise reported feeling an amazing rush of confidence and pleasure after pushing themselves to their physical and mental limits and lifting heavier weights. This phenomenon was described by those who participated in the activity. According to the words of one of participants, "I feel like I can do anything thanks to the power training. Nothing compares to the sense of strength and achievement I get after a difficult exercise."

Furthermore, the tales stressed that the empowerment from exercising extends beyond physical exertion and is directly tied to feelings of success and self-worth. This was a point that was reinforced throughout the stories. Participants reported feeling empowered after participating in physically demanding activities such as running, particularly when they also felt a sense of achievement. This was the case even if the activities would require them to exert themselves physically. The pleasure of racing past weariness and experiencing a burst of energy fueled a sense of strength and empowerment fed by the emotion they experienced. The perceived ease of involvement (such as gently walking) was shown to have a smaller link with empowerment than the other variables. The participants thought that walking did not have the same life-changing impacts or the same sense

of success as other more rigorous exercise forms. This is even though walking has numerous positive effects on personal health.

Additionally, the anecdotes shed light on the reality that empowerment is relative, demonstrating how effective one individual could not be for another. As a result of the fact that some individuals found empowerment via cardiorespiratory activities such as running, while others discovered it through strength training, the distinctive nature of empowerment through physical activity is brought to light. Personalized exercise regimens tailored to each woman's specific interests and goals are necessary to guarantee that every woman can harness the potent potential of physical activity in a way that is uniquely hers.

The Symbiotic Relationship Between Empowerment and Enjoyment in Physical Activity: Insights from Padang Women

The Padang women's explanations of the link between physical exercise and emotions of empowerment and pleasure demonstrated a complex interaction between personal health, social ties, and community engagement. This interaction was presented as a relationship between the three factors. Participants' perspectives on how physical activity is a kind of self-care provide valuable insights into how it fosters personal growth and introspection at the individual level. There was more to it than just getting your heart rate up; it was about investing in yourself and always pushing yourself to perform at a higher level. One participant expressed excitement by saying, "It's my time for growth, both physically and mentally."

Furthermore, the relevance of human interactions during physical exercise in fostering empowerment cannot be emphasized. When the participants worked out with their friends, they experienced a sense of camaraderie and mutual support, which increased their self-esteem and motivation to achieve their fitness goals. After breaking through obstacles and achieving objectives that had previously seemed to be impossible, women as a group experienced a significant increase in their sense of power. However, participants noticed that the activity's nature influenced their feelings of empowerment, with some hobbies creating more significant benefits than others. This was something that they did note.

In addition, it became abundantly evident that the strong sense of community at the gym had a significant part in enhancing the experience and providing members with a sense of agency. One of the most important things that participants emphasized was the need for a warm and accepting atmosphere in which individuals could relax and push themselves to their limits. Through the camaraderie and shared experiences that occurred inside the gym group, which resulted in a sense of belonging and empowerment, it was emphasized that physical exercise is a means of fostering collective empowerment.

Enjoying myself while working out was one of the most significant contributors to my sense of empowerment. To cultivate a sense of agency, the participants emphasized the significance of loving and actively engaging in the activities

they were engaged in. When performed consistently, engaging in physical activity that is not only pleasurable but also falls in line with one's interests has the potential to be an effective source of motivation and strength. One of the participants said it most eloquently when they said that having a strong feeling of empowerment improves when your enthusiasm for something grows. The key to achieving empowerment is to take pleasure in it. According to this point of view, there is a clear connection between the level of happiness and empowerment that Padang women experience and their frequent participation in physical activity.

Discussion

The findings of this study provide a detailed analysis of the elements that impact women's empowerment and involvement in physical exercise in Padang, located in West Sumatra. This research uses qualitative and quantitative data, including the results of qualitative interviews and quantitative survey data. According to the Sustainable Development Goals outlined in the 2030 Agenda (Medina et al., 2021; United Nations General Assembly, 2015), it is of the utmost importance to achieve social development and wellness through the empowerment of women and the promotion of gender equality through activities that include physical exercise. This is why incorporating physical exercise into activities is of the utmost importance. The Empowerment Theory developed by Perkins and Zimmerman (1995) serves as a framework to analyze the results across individual, interpersonal, and community levels of empowerment. The results of qualitative research undertaken in the past on gender differences in fitness settings, such as the research carried out by Coen et al. (2018) and Streetman and Heinrich (2024), support the premise that this is the situation. In the field of fitness and sports, one of the most common themes that is brought up in conversations regarding gender stereotypes and norms is the experience of being in male-dominated situations and feeling reprimanded, intimidated, or unwanted. This is one of the most popular subjects that is brought up often. Not only do these obstacles prohibit women from having fun and developing confidence in themselves, but they also prevent devices that are beneficial to women's health from being available to all women (Araya et al., 2022; Hiltrimartin et al., 2024; Pardo et al., 2024).

In contrast to the generally held belief that all forms of physical exercise are equally effective, the qualitative study's results reveal many complex opinions on physical exercise. This contrasts the assumption that all forms of physical exercise are equally powerful. Weightlifting may be how some women discover strength and empowerment, whereas others may discover it via cardiorespiratory exercises or team sports. Weightlifting may be how some women discover strength and empowerment. According to Samie et al. (2015) and Lim and Dixon (2017), this variability highlights the need for inclusive programming considering various preferences and skills. The authors have brought this fact to light.

The nature of the interconnectedness between pleasure and empowerment is one of the most crucial subjects that

emerges from the qualitative data. By Kabeer's (1999) definition of empowerment, which argues that empowerment is the mobilization of resources for personal development and satisfaction, participants identify exercise as a kind of self-care and reflection. This description is in line with the participants' definition of exercise. It was shown in the study by Fernandez-Lasa et al. (2020) and Mayoh et al. (2020) that individual preferences are not the only elements that impact the degree to which physical activity is joyful. Furthermore, social dynamics and environmental variables are elements that are considered to be potential contributors.

The positive impacts of empowerment-based exercise interventions on self-efficacy and psychosocial outcomes observed in this study align with previous quantitative research. In a study by Lindgren et al. (2011), a 6-month empowerment exercise program for non-physically active Swedish adolescent girls significantly increased general perceived self-efficacy scores on the General Self-Efficacy Scale (GSES) in the intervention group compared to the control ($p = 0.037$). After the program, girls in the intervention group showed increased perceived self-efficacy ($p = 0.004$).

Similarly, the qualitative themes identified in this Padang study around experiences of increased self-efficacy, social support, and overall empowerment from physical activities like resistance training and culturally significant exercises are consistent with the quantitative findings from a study by Yeh et al. (2016). Their mixed-methods study on a 12-week Tai Chi program for chronic heart failure patients reported qualitative themes that mirrored quantitative improvements in quality of life, self-efficacy, and mood compared to controls. Specifically, the Tai Chi group scored significantly better on measures like the Minnesota Living with Heart Failure, Cardiac Exercise Self-Efficacy, and Profile of Mood States scales.

The convergence of qualitative and quantitative evidence across these studies underscores the multidimensional psychosocial value of empowerment-focused exercise interventions. Beyond physical health benefits, empowerment processes harnessed through tailored programming can bolster self-efficacy beliefs, social connectedness, internal locus of control, and overall perceived empowerment. These psychosocial impacts likely synergistically foster resilience and facilitate coping across stressful life circumstances.

For the Padang women, activities seen as personally empowering, like resistance training aligned with cultural traditions, enabled the reclaiming of spaces traditionally dominated by male gender norms. The profound sense of empowerment stemmed from embodying physical and mental strength while reconnecting with cultural identity. Such experiences echo the global enhancement in perceived control described qualitatively by Tai Chi participants in the study by Yeh et al. (2016).

These parallels highlight the universally transformative potential of gender-sensitive, culturally grounded exercise programs designed to facilitate empowerment processes at individual and community levels. However, overcoming gender-centric barriers and developing inclusive, preference-attuned programming remains crucial, as reflected in

the variability of empowerment experiences across different exercise modalities described by Padang participants.

Although the research provides essential insights into the intricate dynamics of women's experiences at fitness facilities, several limitations must be considered. These limitations must be taken into mind. Objective measures should be used in order to triangulate with self-reported measurements whenever it is possible to do so (Olfert et al., 2018; Kurniawati et al., 2024; Nengsih et al., 2024). This is because self-reported measurements can potentially introduce biases into both quantitative and qualitative data. Therefore, employing objective measurements to triangulate with self-reported measurements is vital. There is a possibility that the results obtained using the snowball sampling method cannot be extrapolated to the whole population. Consequently, it is suggested that future research should use samples that are more varied and representative of the population.

Empowerment plays a crucial part in improving women's participation in physical exercise, and there is a need for focused therapies that address gender-specific obstacles and establish inclusive surroundings. Both of these things are necessary (Ferragut et al., 2023; Hazizah et al., 2024; Pacheco-Godoy et al., 2024). It is feasible that healthcare professionals and politicians in Padang and beyond might benefit from the combined skills of qualitative and quantitative research approaches in their efforts to improve the health of women and promote social justice. This is achievable.

Conclusion

A more complex understanding of women's physical activity engagement and empowerment in Padang, West Sumatra, may be derived by combining quantitative survey data with qualitative interviews. This study applies Empowerment Theory to demonstrate the ripple effects of empowerment on people, groups, and societies. Even while women exercise at a high rate, their experiences are influenced by gender-centric barriers and personal preferences. Individualized therapies that eliminate barriers and promote inclusive, enjoyable physical activity are essential, as are themes of empowerment and pleasure. The findings have important ramifications for community organizations, health professionals, and politicians working to empower women via exercise. Treatments should begin by addressing gender-specific barriers, such as societal expectations about women athletes and fitness and the prevalence of intimidation in male-dominated environments. As a second point, programming activities should prioritize diversity and inclusiveness to boost enjoyment and engagement by catering to a wide range of tastes and abilities.

Last, empowering Padang women and changing their behavior may be possible via supportive social networks and communal environments. Although this study has some positive aspects, it also has some negative aspects. First, be wary of interpreting quantitative and qualitative data based on self-reported measures since they may be skewed. Future research needs to use more diverse and representative

samples to avoid the potential problems with snowball sampling and its impact on generalizability. In conclusion, it is necessary to conduct longitudinal studies to track the relationship between empowerment and physical activity participation over time since this study cannot be used to draw any causal conclusions due to its cross-sectional methodology. How do empowerment processes and physical activity habits evolve? This research may use longitudinal approaches. The experiences and challenges women face may be better understood using mixed-methods approaches that integrate objective measures of physical activity with qualitative insights. Gender-sensitive programming and community-based initiatives may light up evidence-based strategies for empowering women through physical activity in Padang and other contexts. Lastly, it may be possible to understand better the several identities that influence women's empowerment in different cultural contexts by investigating the intersections of gender with other social identities, such as age, ethnicity, and socioeconomic status. Filling up these knowledge gaps will allow us to design fitness programs for women in Padang and beyond that are better tailored to their needs, more effective, and more long-lasting.

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