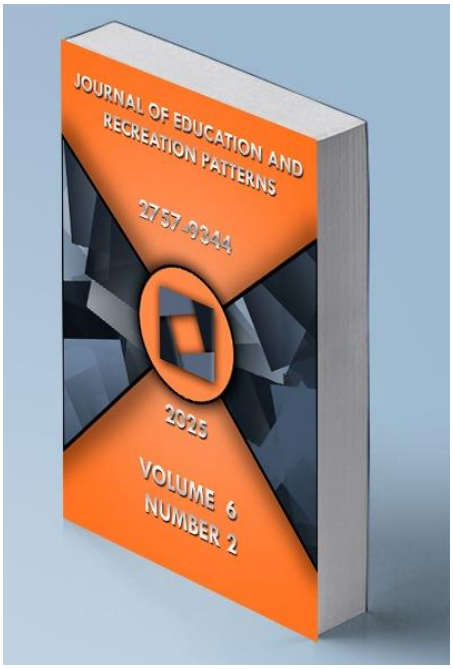

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Investigation of Perfectionist Thinking, Dispositional Flow State, and Leisure Satisfaction Among Exercise Participants

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Investigation of Perfectionist Thinking, Dispositional Flow State, and Leisure Satisfaction Among Exercise Participants

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ABSTRACT

This study aimed to investigate the relationship between perfectionist thinking, flow state, and leisure satisfaction levels among exercise participants. The scores related to these variables were analyzed based on gender and gym membership status. The sample consisted of 238 exercise participants, including 139 women (age=27.08±8.79) and 99 men (age=25.79±6.82), determined using a convenience sampling method. Participants engaged in fitness, pilates, swimming, zumba, fencing, football, and running activities. Data was collected using a personal information form, the Perfectionist Thinking Scale, the Dispositional Flow State Scale, and the Leisure Satisfaction Scale. For data analysis, descriptive statistical analyses were conducted, followed by Pearson's product-moment correlation to reveal relationships between variables, and independent samples t-tests to examine differences based on gender and gym membership status. The results indicated a significant relationship between perfectionist thinking, flow state, and leisure satisfaction ($r=.627$, $p<.01$). A moderate positive relationship was found between perfectionist thinking and flow state ($r=.307$, $p<.01$), and a low positive relationship between perfectionist thinking and leisure satisfaction ($r=.297$, $p<.01$). Gender differences were observed in perfectionist thinking ($t=-2.006$, $p<.05$) and flow state ($t=-2.664$, $p<.05$), while no significant difference was found in leisure satisfaction ($t=.013$, $p>.05$). Gym membership status did not result in significant differences in perfectionist thinking scores ($t=-.462$, $p>.05$), but significant differences were found in flow state ($t=2.258$, $p<.05$) and leisure satisfaction ($t=1.999$, $p<.05$). Overall, the findings demonstrate that perfectionist thinking is associated with somewhat more positive exercise-related experiences, mainly through a moderate relationship with flow state and a weaker relationship with leisure satisfaction.

Keywords: Leisure Satisfaction, Flow State, Perfectionist Thinking.

INTRODUCTION

In today's context, exercise is frequently emphasized as having significant potential to enhance individuals' quality of life, given its physical and psychological effects. Therefore, understanding the various factors that may influence exercise, either positively or negatively, is essential for promoting behavior change, developing interventions, and recognizing beneficial behavioral patterns (Deck et al., 2019). Research has demonstrated how enjoyment and boredom can impact or predict exercise behavior. While enjoyment derived from exercise has been associated with increased participation, boredom has been linked to shorter exercise durations (Hagberg et al., 2009; Salmon, Owen, Crawford, Bauman, & Sallis, 2003). Experiencing positive emotional states is believed to play a critical role in enabling exercise participants to sustain their engagement with intrinsic, autotelic motivation. Petosa and Holtz (2013) indicated that the flow state theory is highly useful in promoting physical activity adherence among young adults. A study conducted with fitness center members demonstrates that more frequent participation in physical activity is positively associated with higher levels of leisure participation, flow experience, and life satisfaction (Doğan & Ünal, 2024). Flow state, as defined, is a holistic feeling experienced when individuals are fully immersed in an activity. It represents a positive psychological state achieved when abilities and demands of the activity are balanced (Csíkszentmihályi, 1990). Moreover, it is a harmonious and subjective experience where the mind and body work effortlessly together, leaving individuals with a sense of something special (Csíkszentmihályi, 1990). Flow occurs when individuals challenge their own limits but perceive their resources as proportionate to the task demands. This results in a psychological state characterized by intense concentration, automaticity, and a sense of control (Csíkszentmihályi, 2002).

According to Csíkszentmihályi et al. (2005), this emotional state is described as a desirable outcome, as it serves as a powerful motivator for individuals and represents a pleasurable experience within the exercise environment. One dimension of the flow state, the autotelic experience, defined as an intrinsic reward, plays a crucial role in fostering adherence to physical activity. Previous studies indicate that the satisfaction individuals derive from their leisure activities is closely linked to their experience of positive emotional states and that leisure satisfaction is a necessary concept for sustaining these positive emotions. The definition of leisure satisfaction reflects the extent to which individuals are satisfied with their leisure time and the quality they experience while engaging in leisure activities (Kovacs, 2007). Leisure satisfaction is defined as the positive satisfaction individuals achieve, gain, and attain because of participating in leisure activities. In other words, it refers to the positive feelings individuals acquire by fulfilling their personal needs through participation in leisure activities (Seigenthaler, 1997). Participation in leisure activities can enhance leisure satisfaction through the experience of flow state (Wu & Liang, 2011). Positive emotional states may play a role in individuals' stages of engaging in activities and forming habits to sustain them. This study aims to provide a perspective on the relationship between positive exercise experiences, satisfaction levels, and perfectionist thinking in ensuring the continuity exercise participation. Positive emotional states, which are believed to have a strong relationship with exercise, and the potential impact of individuals' perfectionist thinking on exercise behavior are considered worthy of further investigation.

Perfectionism can be considered either a positive or negative source of energy, depending on an individual's level of self-awareness. Feelings of inadequacy in meeting standards set by oneself or others may lead to performance below expectations. Although there are differing views on whether perfectionism has positive or negative effects, researchers agree that the pursuit of flawless performance lies at the core of the concept of perfectionism (Flett & Hewitt, 2002). Perfectionism can lead to extraordinary creative achievements and an intense struggle (flow experience) that pushes a person beyond the limits of their abilities. Perfectionists, when

freed from external judgments or time constraints, can experience elevated emotions and enter a complete state of flow, transforming the activity itself into a reward (Silverman, 1999). For this reason, perfectionism can be said to play a significant role in the cognition, emotions, and behaviors of exercise participants and athletes.

Studies investigating the reflections of high levels of perfectionism among athletes across various cognitive, affective, and behavioral dimensions (Hall et al., 1998; Gould et al., 1996; Hasse, Prapavessis, & Owens, 2002) reveal that perfectionism is also associated with cognitive and behavioral patterns reflecting fear of failure in adhering to exercise, anxiety about inability to exercise, and avoidance of physical activity (Martin et al., 2006). Existing research highlights perfectionism as a prevalent personality trait that extends to individuals' perceptions of leisure, an important component of life (Blatt, 1995; Slaney & Ashby, 1996). When examining the relationship between the flow state and perfectionism, it has been argued that socially prescribed perfectionism, characterized by fear of failure, hypersensitivity to mistakes, setting high standards, and critical self-evaluation (Flett & Hewitt, 2002; Frost et al., 1990), may negatively impact the flow state. Conversely, it is suggested that individuals can experience a high sense of control during the flow state without worrying about making mistakes, and that self-oriented perfectionism may positively influence the flow state (Schüler & Bruner, 2009). Anshel and Seipel (2006), in their study with university students, found that maintaining an exercise regimen was positively and significantly associated with dimensions of perfectionism, such as organization. For both male and female university students, organization, which is positively linked to personal perfectionism standards, predicts the continuation of an exercise regimen.

When the flow experience is considered an important psychological process that contributes to leisure time satisfaction and life satisfaction when an individual engages in meaningful activities requiring focus and conceptual integrity during their leisure time, it can be said that perfectionism, if it is adaptive and directed toward the individual's internal standards, plays a contributing role in this process. Slaney and Ashby (1996) noted a potential connection between perfectionism and emotions or attitudes toward leisure. Interviews conducted with individuals in their study revealed that participants reported having high personal standards in interpersonal relationships and work environments. Many also indicated that having such high standards was often problematic for them, occasionally hindering their ability to engage in and derive enjoyment from leisure activities. The findings of this study reveal that perfectionists may experience difficulties in effectively using their leisure time to improve their quality of life. For example, while the findings indicated that perfectionists place greater value on leisure and hold more positive beliefs about leisure than non-perfectionists, they also showed that perfectionists experience less freedom, enjoyment, and engagement in leisure activities than their non-perfectionist counterparts. As perfectionists tend to have high personal standards, they may possess an exaggerated perception of the risks associated with certain leisure activities and an undervalued perception of their own competencies (Ashby, Kottman, & DeGraaf, 1999). In other words, if an individual is critical, anxious, and stressed, the maladaptive aspect of perfectionism can overshadow the benefits of the flow experience or leisure time satisfaction.

Maintaining enjoyment and intrinsic motivation during regular exercise participation is a key goal. Given the significant functions of exercise, regular participation and the ability to sustain it with enjoyment are considered critical for ultimately improving individuals' quality of life. It is well established that the satisfaction levels and positive emotional states derived from exercise play a role in helping individuals achieve a higher quality of life. Perfectionism is also recognized as a psychological concept that impacts the quality of life. In this context, this study aimed to examine the relationship between perfectionist thinking, flow state, and leisure satisfaction among exercise participants. Additionally, the scores for these variables

were analyzed based on gender and gym membership status. The hypotheses for the study were determined as follows:

H1: There are significant positive correlations among the perfectionist thinking, flow state, and leisure satisfaction of exercise participants.

H2: There are statistically significant differences in the perfectionist thinking, flow state, and leisure satisfaction of exercise participants based on gender and gym membership status.

METHOD

Research Design

This study adopted a relational survey design aimed at examining perfectionist thinking, flow state, and leisure satisfaction among exercise participants and revealing the relationships between these variables.

Research Population and Sample

The study population consists of exercise participants who engage in regular exercise. The sample was determined using a nonprobability sampling method, specifically the convenience sampling method. The sample included 238 exercise participants, comprising 139 women (mean age = 27.08 ± 8.79) and 99 men (mean age = 25.79 ± 6.82). Participants regularly engaged in various activities such as fitness, pilates, swimming, Zumba and fencing, football, running, yoga, cycling, basketball, and taekwondo. The reported reasons for exercise participation included maintaining physical health (38.2%), maintaining psychological health (13%), feeling that they use their leisure time productively (11.3%), deriving satisfaction from exercise (10.5%), achieving a physically appealing appearance (10.1%), allocating time for themselves (8.8%), and socializing (8%). Table 1 presents the participants' gym membership durations, the length of time they have been engaging in regular exercise, and the frequency of their weekly exercise sessions based on their gym membership status.

Table 1

Mean and Standard Deviation Values of Participants

Variables	Gender	Mean	SD
Gym membership duration (months)	Female (n= 51)	24.82	11.87
	Male (n= 38)	25.90	14.96
Exercise duration (months)	Female (n= 139)	31.08	10.11
	Male (n= 99)	34.26	13.94
Exercise frequency (number of days)	Female (n= 139)	3.08	1.97
	Male (n= 99)	3.84	1.24

Data Collection Instruments

In this study, data were collected using a Personal Information Form, the Perfectionist Automatic Thoughts Inventory, the Dispositional Flow State-2 Scale, and the Leisure Satisfaction Scale.

***Personal Information Form*:** The form, prepared by the researcher, was designed to gather information about participants' gender, age, weight, height, marital status, gym membership status, gym membership duration, types and durations of activities participated in, preferences for participating in activities, and reasons for participation.

Perfectionist Automatic Thoughts Inventory (PATI): Developed by Flett et al. (1998), this scale measures perfectionist cognitions by focusing on automatic thoughts associated with perfectionism. It consists of 25 items evaluated on a four-point Likert scale and is assessed as a single dimension. Aydın and Yerin Güneri (2018) adapted the scale into Turkish. Higher scores on the scale indicate a greater presence of perfectionist thoughts. Scores on the scale range from 0 to 100. The reliability of the scale was calculated as 0.95 (Flett et al., 1998), and the internal consistency coefficient (Cronbach's alpha) for this study was 0.92.

Dispositional Flow State-2 Scale (DFSS): Developed by Jackson and Eklund (2004), this scale assesses individuals' flow experiences related to a specific activity. It consists of 36 items and 9 subdimensions, each subdimension comprising 4 items. The subdimensions are: balance between challenge and skill, merging of action and awareness, clear goals, unambiguous feedback, concentration on the task, sense of control, loss of self-consciousness, transformation of time, and autotelic (intrinsic) experience. Licensed usage permission for the scale was obtained from Mind Garden. Aşçı et al. (2007) conducted the Turkish validity and reliability study. The internal consistency coefficients for the nine subdimensions ranged from 0.49 to 0.88. In this study, the overall Cronbach's alpha for the scale was 0.94.

Leisure Satisfaction Scale (LSS): Beard and Ragheb (1980) developed the original form of the scale. In 2002, it was revised into a short form with 24 items by Idyl Arbor Inc. Gökçe and Orhan (2011) adapted the scale into Turkish. The scale is in a five-point Likert format, scoring between 5 (Almost always true) and 1 (Almost never true). The subdimensions of the scale are psychological, educational, social, relaxation, physical, and esthetic satisfaction. In this study, the internal consistency coefficients for the 6 subdimensions ranged between 0.67 and 0.79, while the overall Cronbach's alpha was 0.94.

Data Collection Process

Approval for data collection was obtained from the Research Ethics Committee of Selçuk University Faculty of Sports Sciences (No: 04/10/2022-40990478-050.99-379112/138). Before the scale form, including the data collection tools, was distributed to participants, brief information about the study was provided. Voluntary consent was obtained from the participants after completing their exercises at sports centers or during their leisure time via an online form. Completion time was approximately 10–12 minutes.

Data Analysis

In this study, preliminary analyses (assumption testing and descriptive statistical analysis) were conducted first. Pearson’s product-moment correlation coefficients were analyzed to examine the relationships between perfectionist thoughts, flow state, and leisure satisfaction. Additionally, independent samples t-test analysis was used to assess participants’ perfectionist thoughts, flow state, and leisure satisfaction based on demographic variables such as gender, gym membership status, and reasons for exercise participation. All analyses were conducted using IBM SPSS Statistics (Version 22.0).

FINDINGS

The relationship between exercise participants' levels of perfectionist thoughts, flow state, and leisure satisfaction was examined, and significant positive correlations were identified among these variables (Table 2).

Table 2

Pearson Product-Moment Correlation Analysis Results for PATI, DFS, and LSS Scores

Variables	PATI	DFS	LSS
PATI	-		
DFS	.307**	-	
LSS	.297**	.627**	-

A moderate positive correlation was found between participants' perfectionist thought scores and flow state scores (r=.307, p<.01). A low positive correlation was identified between perfectionist thought scores and leisure satisfaction scores (r=.297, p<.01). Additionally, a strong positive correlation was observed between participants' flow state scores and leisure satisfaction scores (r=.627, p<.01), whereas a moderate positive correlation was found between perfectionist thought scores and flow state scores (r=.307, p<.01).

The results of the t-test analysis conducted to examine the perfectionist thoughts, flow state, and leisure satisfaction levels of exercise participants based on the gender variable are presented in Table 3.

Table 3

Independent Samples t-Test Analysis Results of Participants PATI, DFSS, and LSS Scores based on Gender and Gym Membership Status

	Gender	**Mean**	**SD**	**t**	**p**
PATI	Female (n=139)	75.34	16.64	-2.006	**.046***
	Male (n=99)	79.99	18.94		
DFS	Female (n=139)	126.12	18.74	-2.664	**.008***
	Male (n=99)	132.76	19.21		
LSS	Female (n=139)	89.96	13.88	.013	.990
	Male (n=99)	89.94	15.60		

According to the results of the independent samples t-test analysis, the perfectionist thought scores of exercise participants significantly differed based on gender (t=-2.006, p<.05) (Table 3). Male participants had higher perfectionist thought scores than female participants. When examining flow state scores, a significant difference was found based on gender (t=-2.664, p<.05), with male participants scoring higher than female participants. However, no significant difference was observed in the mean scores of leisure satisfaction based on gender (t=.013, p>.05).

The results of the t-test analysis conducted to examine the perfectionist thoughts, flow state, and leisure satisfaction levels of exercise participants based on the gym membership variable are presented in Table 4.

Table 4

Independent Samples t-Test Analysis Results of Participants PATI, DFSS, and LSS Scores based on Gender and Gym Membership Status

	Membership	Mean	SD	t	p
PATI	No (n= 149)	76.58	19.13	-.462	.644
	Yes (n= 89)	77.68	16.92		
DFSS	No (n= 149)	132.48	18.32	-2.258	**.025***
	Yes (n= 89)	126.73	19.42		
LSS	No (n= 149)	92.34	13.78	1.999	**.047***
	Yes (n= 89)	88.53	14.91		

When the perfectionist thought scores of exercise participants were examined based on their gym membership status, no significant difference was found (t=-0.462, p>.05) (Table 4). Perfectionist thought scores were similar between participants with and without gym memberships. However, flow state scores significantly differed based on gym membership status (t=-2.258, p<.05), participants without gym memberships reported higher leisure satisfaction than those with memberships. Additionally, leisure satisfaction scores showed a significant difference based on gym membership status (t=1.999, p<.05). Participants without gym memberships had higher leisure satisfaction scores than those with gym memberships.

DISCUSSION

This study, conducted to examine the relationships between perfectionist thoughts, flow state, and leisure satisfaction levels among individuals engaging in exercise, revealed significant correlations among these variables. Furthermore, perfectionist thought and flow state scores significantly differed based on the gender variable, whereas no significant difference was found in leisure satisfaction scores. Although no significant difference was observed in perfectionist thought scores based on gym membership status, significant differences were identified in flow state and leisure satisfaction scores.

The findings revealed low yet significant positive correlations between perfectionist thoughts, flow state, and leisure satisfaction. Accordingly, the theoretical framework of this study rests on a multi-layered structure that explains the interaction between perfectionism, motivational processes, flow experience, and leisure time satisfaction. This integrated approach facilitates the conceptual positioning of the relationships between variables and provides a strong theoretical framework for discussing the findings. Research consistently indicates that dispositional flow experienced during leisure activities contributes to higher levels of leisure satisfaction (Wu & Liang, 2011). When individuals enter a state of flow in their free-time pursuits, they tend to feel more satisfied because the activity captures their full attention and involvement (Ahn & Song, 2024; Lee et al., 2019). Similarly, a study focusing on recreational sports participants (Erkmen Hadi et al., 2021) reported that dispositional flow was positively associated with leisure satisfaction, reinforcing the notion that deeper engagement enhances the overall quality of the leisure experience. Longbottom, Grove, and Dimmock (2012) demonstrated that perfectionism dimensions have a positive relationship with aerobic exercise through autonomy and self-presentation. The positive and indirect effect of self-oriented perfectionism on exercise behavior, mediated by autonomy and self-presentation, highlights the beneficial aspects of perfectionism dimensions in the context of exercise behavior. In Erkmen's (2015) study, self-oriented perfectionism was found to significantly and positively predict continuous flow states. Perfectionism can be perceived as either a positive or negative source of energy, depending on an individual's level of awareness. Gözmen and Aşçı (2016) revealed that self-oriented perfectionism significantly predicts the flow state among athletes. Athletes

who strive for perfection, set high standards for themselves, and aim to achieve excellence immersed themselves in the activity, becoming fully engaged and deriving intrinsic satisfaction. Silverman (1999) proposed that under favorable conditions, perfectionists can fully experience the flow state. Additionally, perfectionism is seen as an inspiration leading to extraordinary creative achievements, such as the flow state. In this study, the positive aspects of perfectionism appear to be emphasized. Within the study context, it can be inferred that exercise participants experienced the positive side of perfectionism, leading to better and more fulfilling experiences. This result partially aligns with the literature indicating that increased participation in recreational activities is associated with higher perceived life satisfaction and lower levels of automatic thoughts (Çolak et al., 2023). When evaluated within the framework of Csikszentmihalyi's (1990) flow theory, it can be said that perfectionist individuals' tendencies toward setting high standards and intense task orientation allow them to more easily achieve a skill-challenge balance; this, in turn, increases their cognitive and affective readiness for the flow experience. In this context, the fact that perfectionist thinking supports the flow tendency can be explained through processes such as focus, perceived competence, goal orientation, and self-discipline, which are necessary for flow. This finding is consistent with previous studies in the literature that emphasize the positive effects of adaptive perfectionism on performance and motivation processes.

Studies on multidimensional perfectionism show mixed findings regarding gender differences. Some studies report no significant differences based on gender (Doğan & Ünal, 2024; Flett, Blankstein, Hewitt, & Koledin, 1992; Hassan, Abd-El-Fattah, Abd-El-Maugoud, & Badary, 2012; Jonge & Waller, 2003), while others identify significant differences (Çağlar, Bilgili, Karaca, Ayaz, & Aşçı, 2010; Erkmen & Hadi, 2015). In the reviewed studies, self-oriented and socially prescribed perfectionism scores differed significantly by gender, with male participants scoring higher than females. Similarly, in this study, male participants were found to have higher perfectionist thought scores than female participants. Exercise participants draw on perfectionist thoughts while achieving their goals. Male exercise participants may perceive the exercise environment as more competitive than females and adopt perfectionist standards during the completion of exercises.

A review of the literature on flow state reveals mixed findings regarding gender differences. Some studies suggest no significant gender differences (Altıntaş, Aşçı, & Çağlar, 2010; Csíkszentmihályi, 1990; Murcia et al., 2008; Russell, 2001; Stavrou et al., 2007), while others indicate the presence of such differences (Erkmen & Hadi, 2015; Han, 1992; Sharp et al., 2007). In this study, male participants were found to have higher flow state scores than female participants. Similarly, Erkmen Hadi and Denktaş (2023) reported that male participants had higher flow state scores than females. This finding shows that male participants derive greater enjoyment and happiness from their exercise experiences, resulting in higher flow experience scores. Furthermore, the reasons for continuing regular exercise may differ between male and female participants in terms of intrinsic motivation, potentially contributing to differences in experiencing autotelic states.

Studies examining leisure satisfaction based on the gender variable reveal mixed findings. Some studies indicate no significant differences between men and women (Ardahan & Yerlisu Lapa, 2010; Berg et al., 2001; Lu & Hu, 2005; Yerlisu Lapa, 2013), while others suggest that leisure satisfaction may vary by gender (Çakır, 2017; Gökçe, 2008; Serdar & Ay, 2016; Vong Tze, 2005). Our study concluded that gender is not a determining factor for differences in participants' leisure satisfaction levels. When the mean scores of male and female participants are examined, it is seen that both groups have high levels of leisure satisfaction. From this perspective, regular exercise plays a role in maintaining high levels of leisure satisfaction for both male and female participants.

It was hypothesized that various elements likely to trigger perfectionist concerns and influence perfectionist standards could be present in gym environments, and that the gym atmosphere might positively or negatively affect individuals' perfectionist thoughts. Research indicates that adaptive perfectionism, which reflects the positive aspects of perfectionism, is associated with motivational states related to exercise, such as enjoyment, well-being, embracing challenges, and a positive understanding of health (Duda & Treasure, 2021; Vincent et al., 2021). Conversely, maladaptive perfectionism, highlighting the negative aspects of perfectionism, has been linked to experiences such as lack of motivation, greater barriers to exercise participation, body image concerns, exercise dropout, and disengagement (Brannan, Petrie, Greenleaf, Reel, & Carter, 2009; Jowett, Mallinson, & Hill, 2016; Petrie, Greenleaf, Reel, & Carter, 2009; Taranis & Meyer, 2010; Madigan, Stoeber, & Passfield, 2017). From this perspective, the exercise environment may be associated with either positive or negative experiences depending on individuals' perfectionist thought patterns.

Contrary to the findings of this study, it was expected that gym membership status would create differences in participants' levels of perfectionist thinking. Although no studies specifically addressing the relationship between gym membership and perfectionist thoughts were identified, this study found no significant difference in perfectionist thought levels based on gym membership status. When participants' flow state and leisure satisfaction levels were examined based on gym membership status, it was found that individuals without gym memberships had higher levels of flow state and leisure satisfaction than those with memberships. Positive subjective experiences, such as flow state and leisure satisfaction, are experienced in various suitable environments (Csikszentmihalyi, 1990). The intrinsic motivation to persist in exercise, enjoyment derived from fully focusing on the activity, and positive feedbacks received are thought to increase the likelihood of experiencing such positive emotional states. Engaging in an enjoyable activity is also believed to enhance the experience of leisure satisfaction. Therefore, the findings indicate that gym membership is not a prerequisite for individuals who engage in regular exercise to experience flow state and leisure satisfaction. Individuals can experience enjoyable subjective states in an unlimited range of settings where they perceive their competence positively, feel a sense of pleasure in participating in exercise, and engage fully in the activity.

Conclusion

The findings of this study contribute to a deeper theoretical understanding of how perfectionist thinking operates within exercise-based leisure contexts. The observed associations between perfectionist thinking, flow state, and leisure satisfaction provide evidence that cognitive evaluation processes—traditionally viewed as potentially maladaptive—may under certain conditions function as motivationally activating mechanisms that facilitate more engaged and meaningful exercise experiences. This aligns with emerging theoretical perspectives that view balanced and focused perfectionist cognitions as contributors to intrinsic motivation and sustained participation. From a flow theory standpoint, the results indicate that individuals with higher levels of perfectionist thinking may be more likely to experience the attentional absorption and performance-focused engagement characteristics of flow states. This relationship offers a theoretical contribution by positioning perfectionist cognition as a potential cognitive precursor to flow, thereby enriching current models of flow experience in leisure and exercise settings. Similarly, the link between perfectionist thinking and leisure satisfaction adds nuance to existing leisure satisfaction frameworks, highlighting the subtle but meaningful role of cognitive dispositions in shaping the quality of leisure participation.

Beyond its conceptual implications, the study also offers practical insights for exercise promotion. Encouraging individuals to set challenging yet attainable goals may help translate

perfectionist tendencies into adaptive motivational patterns that support regular exercise engagement. Positive aspects of perfectionist thinking can be used to encourage exercise participation and sustain continuity. Setting high standards and striving for excellence may increase participation in exercise and transform this into a positive intrinsic motivation, contributing to regular exercise habits. Achieving positive experiences and ensuring exercise continuity could be facilitated by setting challenging yet attainable, realistic, and balanced goals for exercise participation. Furthermore, raising awareness that individuals can enjoy a variety of exercise experiences without the necessity of gym memberships could support the development of a mindset that promotes regular exercise as a lifestyle. Emphasizing the importance of participating in exercise and fostering regular exercise awareness is essential. The effective use of leisure time and the satisfaction derived from it are believed to contribute to enhancing participants' quality of life. Encouraging exercise participants to use effective time management skills to balance their exercise participation with leisure, socialization, and rest may play a significant role in maintaining exercise continuity and satisfaction. Leisure satisfaction gained through exercise not only provides individual fulfillment but may also serve a moderating role by enhancing the effect of social relationships on happiness (Yalçın, Altındöker, & Yıldız, 2025). This perspective highlights the importance of integrating exercise into daily life to improve overall well-being.

Limitations and Recommendation

This study has several limitations. First, it is a cross-sectional study conducted solely on exercise participants who voluntarily participated and were included using a convenience sampling method. Therefore, its generalizability and applicability to the research topic are limited. While relational findings concerning the study variables can be expressed, no causality can be determined. The sample was selected using a nonprobability convenience sampling method. The sample size and limited range of exercise types present disadvantages for generalizing the findings. The study variables were assessed based on total scores. The DFSS comprises nine subdimensions, and the LSS comprises of six subdimensions. Including subdimensions in future studies could provide more detailed insights. Additionally, due to the unequal distribution of participants across different exercise types, it was not possible to examine whether the type of exercise made a difference in participants' experiences. Considering participants' reasons for engaging in exercise could provide valuable perspectives for interpreting the results.

Acknowledgements or Notes

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