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Educational Methods and Recreational Awareness for Enhancing Teachers' Attitudes Towards Individuals with Disabilities

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ABSTRACT

The aim of this study is to examine the role of educational methods and recreational awareness in enhancing teachers' attitudes towards individuals with disabilities. The study sample consists of 415 teachers from various branches working in different provinces of Türkive, selected through a simple random sampling method. In addition to a personal information form prepared by the researcher, the "Multidimensional Attitude Scale Towards Persons with Disabilities" adapted by Yelpaze and Türküm (2018) and the "Recreation Awareness Scale" developed by Ekinci and Özdilek (2019) were used for data collection. The findings revealed that teachers' attitudes—including emotional, cognitive, behavioral, and overall attitudes—towards individuals with disabilities did not differ significantly based on professional seniority or teaching branch (p>0.05). Similarly, no statistically significant differences were found in recreational awareness levels across the subdimensions of enjoyment-entertainment, social-achievement, self-improvement, and overall awareness. However, teachers who had previously taught individuals with disabilities showed significantly higher levels of recreational awareness in all subdimensions compared to those who had not (p<0.05). Furthermore, a low but statistically significant positive correlation was found between teachers' cognitive, behavioral, and overall attitude levels and their levels of recreational awareness (p<0.05). These results suggest that integrating recreational awareness with educational strategies can play a critical role in fostering more positive and inclusive attitudes among teachers towards individuals with disabilities.

Keywords: Physical Activity and Disability, Recreational Awareness, Special Needs Inclusion, Teachers.

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INTRODUCTION

Disability is the condition in which an individual is unable to fulfill the expected physical, mental, social, and cultural competencies due to a congenital or acquired impairment or injury resulting from an accident. The concept of disability has been expressed by many individuals and institutions from past to present. In the Law on Persons with Disabilities No. 5378, dated 2005, the concept of disability is defined as "an individual who is affected by attitudes and environmental conditions that restrict their full and effective participation in society on an equal basis with others due to congenital or acquired losses at various levels in their physical, mental, psychological, and sensory abilities" (Legislation, 2023). Additionally, according to the World Health Organization (WHO, 2001), disability is not merely a health condition, but results from the interaction between a person's health status and environmental and personal factors, as emphasized in the ICF model.

Beyond legal definitions, disability also affects not only the individual, but also their family, surroundings, and society at large. It reflects a broader social phenomenon shaped by societal attitudes, stereotypes, and accessibility barriers. In many contexts, disability is associated with social disadvantage, and individuals with disabilities often face negative perceptions and exclusion. As Öztabak (2017) notes, the social environment may intensify or reduce disability depending on prevailing attitudes. While inclusion is improving in some parts of the world, others still maintain exclusionary beliefs rooted in stigma and prejudice...

Attitude refers to an individual's cognitive, emotional, and behavioral orientations that emerge as a result of experience, motivation, encouragement, and acquired knowledge in various situations, either towards themselves or others (Kaysi, 2021). Attitude is not innate; rather, it is a learned behavioral pattern acquired through personal, environmental, and other influencing factors. In the context of attitudes toward individuals with disabilities, the term refers all perceptions, thoughts, and beliefs related to these individuals. Teachers, following the family, are considered central figures in identity construction and play a vital role in shaping inclusive attitudes. As role models in the educational environment, they influence students' values, social behavior, and perspectives toward diversity, including individuals with disabilities (Beauchamp & Thomas, 2009). Although the number of individuals with disabilities is substantial and cannot be overlooked, prejudiced attitudes and discriminatory behaviors towards them have been persisted throughout history. Negative attitudes towards individuals with disabilities tend to emerge particularly at an early age (Altunhan et al., 2021). Therefore, to foster positive attitudes towards individuals with disabilities, it is essential to instill a positive perspective in school-age children from an early stage. Throughout the entire educational process, from its inception to completion, the key figures responsible for shaping and fostering positive attitudes towards individuals with disabilities are educators—namely, teachers. As a matter of fact, teachers in schools, which are the most effective socialization tool after the family in terms of contributing to socialization, which gives the individual a certain self and personality structure, are the most effective role models after parents (Colak & Cetin, 2014).

With advancements in social rights and automation, recreation is defined as a fundamental and modern necessity that encompasses all activities through which individuals can organize their leisure time with various engagements (Yetim, 2011). In other words, recreation is a concept that encompasses activities in which individuals voluntarily participate during their non-working hours. Awareness is the ability of a living being to learn, comprehend, and perceive events occurring in its surroundings. It is considered a crucial resource that enables individuals to engage in activities aligned with their affective, cognitive, and psychomotor interests and abilities, ultimately enhancing their participation and productivity (Kılıçman, 2020).

Recreational awareness refers not to direct participation, but to an individual's understanding of the value of leisure activities in social and personal development (Ayyıldız Durhan et al., 2022). Having recreational awareness positively contributes to individuals in the process of choosing activities. Activities carried out with awareness of recreational awareness provide positive achievements both individually and socially (Ekinci, 2017). Thanks to these positive achievements, social environments can be shared collectively without interpersonal discrimination. Therefore, it is possible to acknowledge the impact of recreational awareness on the inclusion of individuals with disabilities in social environments. The present study aims to examine the relationship between teachers' recreational awareness, disability awareness, and their attitudes toward individuals with disabilities. This aim is grounded in the understanding that both recreational awareness and disability-related sensitivity play important roles in shaping inclusive educational environments (Avramidis & Norwich, 2002; Forlin, 2010; Devine & Parr, 2008).

The effective and equitable inclusion of individuals with disabilities in educational settings largely depends on teachers' attitudes. Therefore, the development of positive attitudes among teachers toward individuals with disabilities is considered a fundamental requirement of inclusive education. While much emphasis has been placed on enhancing teachers' cognitive and emotional competencies in inclusive education, limited attention has been paid to how recreational awareness may shape their attitudes toward individuals with disabilities (Avramidis & Norwich, 2002; Sharma et al., 2008). Although the literature includes various educational methods aimed at improving these attitudes, the dimension of recreational activities and awareness, which holds significant potential for increasing teachers' sensitivity, has been insufficiently explored. Despite the acknowledged importance of recreational awareness, specific subdimensions have been insufficiently addressed in prior research. In particular, previous studies have rarely examined how specific aspects of recreational awareness—such as self-development, social bonding through leisure, or awareness of inclusive recreational opportunities—relate to teachers' attitudes toward individuals with disabilities. This represents a critical gap, especially considering the increasing role of recreation in promoting inclusion across educational systems (Avramidis & Norwich, 2002; Sharma et al., 2008). Indeed, a study found that a 16-week recreational program reduced problem behaviors and increased social participation in individuals with intellectual disabilities. This suggests that recreational practices can be effective in supporting inclusive attitudes (Erkmen Hadi, Zengin, & Ertüzün, 2023). The role of inclusive leisure in promoting social engagement and equitable opportunities for individuals with disabilities has been emphasized in international literature. Inclusive leisure opportunities are also important for promoting participation and equity among individuals with disabilities (Devine & Parr, 2008; Darcy & Dowse, 2013). Recreation involves elements such as social interaction, empathy, and tolerance that support attitudinal development; however, how and to what extent it can be integrated into teacher education remains unclear. This indicates a need for studies that examine the impact of recreational awareness on teacher attitudes alongside educational methods. In this context, the aim of this study is to identify the educational methods used to improve teachers' attitudes toward individuals with disabilities and to examine the effect of recreational awareness within this process.

METHOD

Scope and Methodology of Research

The scope of the research consists of teachers working in public and private schools at the primary, secondary, and high school levels in Türkiye. This study examines the impact of recreational awareness on teachers' attitudes toward individuals with disabilities. This research is a quantitative study conducted using random sampling among volunteer teachers from all provinces.

Population and Sample of Research

The population of the study consists of teachers from all provinces. The sample consists of 415 teachers from various branches who teach at the primary, secondary, and high school levels in public and private schools. They were selected based on voluntary participation using a random sampling method. First, the online survey form was made accessible throughout Türkiye via various platforms, and teachers' participation was entirely based on voluntariness. Each individual's probability of being selected was considered equal. This method aimed to enhance the representativeness of the sample in reflecting the population.

Data Collection Tool

As a data collection tool, a 12-item personal information form prepared by the researcher was used to determine participants' personal information. In addition, to assess teachers' attitudes toward individuals with disabilities, the "Multidimensional Attitude Scale Toward Persons with Disabilities," adapted by Yelpaze and Türküm (2018), was utilized. Furthermore, to examine the impact of recreational awareness on teachers' attitudes toward individuals with disabilities, the "Recreational Awareness Scale (RAS)," developed by Ekinci and Özdilek (2019), was employed.

Personal Information Form: In the first section, a 12-item personal information form was used to gather information about participants. This form included questions regarding age, gender, marital status, educational background, years in the profession, teaching subject, province of employment, school level, whether they have a relative with a disability, whether they have experience teaching students with disabilities, their awareness of recreational activities, and whether they participate in recreational activities.

Multidimensional Attitude Scale Towards Persons with Disabilities: To measure teachers' attitudes toward individuals with disabilities, the "Multidimensional Attitude Scale Toward Persons with Disabilities", adapted into Turkish by Yelpaze and Türküm in 2018, was used. The Multidimensional Attitude Scale Towards Persons with Disabilities consists of 31 items and three sub-dimensions: emotion (14 items), cognition (9 items), and behavior (8 items). Participants rated the scale items using a five-point Likert scale (1 = Not at all, 5 = Very much). Recreational Awareness Scale: To examine the impact of recreational awareness on teachers' attitudes towards individuals with disabilities, the Recreational Awareness Scale, developed by Ekinci and Özdilek (2019), was used. The scale is a self-report measure consisting of 41 items and three sub-dimensions: Pleasure/Entertainment (e.g., "Participating in recreational activities is enjoyable"), Social/Achievement (e.g., "Participating in recreational activities enhances self-esteem"). Responses are rated on a five-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

Data Analysis

The data collected within the scope of the study were analyzed using SPSS 25.0 software. Initially, reliability analysis was conducted on the scale scores, and skewness and kurtosis values were examined to assess the normal distribution of the data. For comparisons based on demographic variables, One-Way ANOVA and Independent Samples T-Test were employed. To investigate relationships between scale scores, Pearson Correlation analysis was used. Furthermore, Multiple Linear Regression analysis was conducted to examine the impact of attitudes toward individuals with disabilities on recreational awareness levels.

To ensure the validity of the regression model, both autocorrelation and multicollinearity assumptions were tested. The Durbin-Watson (DW) test was applied to detect autocorrelation among the error terms, with DW values ranging from 1.927 to 2.030, indicating no autocorrelation. Variance Inflation Factor (VIF) values were used to assess multicollinearity and were found to be between 1.041 and 1.230, which are well below the acceptable threshold of 5. Additionally, the correlation coefficients among independent variables were all below 0.800, further confirming the absence of multicollinearity.

Table 1
Cronbach's Alpha, Skewness, and Kurtosis Values for Scale Scores

Scales	Cronbach's Alpha (α)	Skewness	Kurtosis
Emotion	0,91	-0,24	-0,31
Thought	0,92	-0,38	0,15
Behavior	0,93	-0,95	0,55
Overall Attitude Towards	0.00	0.01	0.20
Individuals with Disabilities	0,90	-0,01	-0,20
Pleasure-Enjoyment	0,96	-1,11	1,46
Social-Achievement	0,97	-1,43	1,45
Self-Improvement	0,98	-1,40	1,55
Total Recreational Awareness	0,99	-1,44	1,75

Upon examining the table, it is observed that the scales used in the study have a high level of reliability for analysis ($\alpha > 0.80$). When examining the skewness and kurtosis values, it is observed that they fall within the acceptable range of -2 to +2 for normal distribution, indicating that the data conform to a normal distribution.

One-Way ANOVA and Independent Samples T-Test were used to compare scale scores based on demographic questions. Pearson Correlation analysis was used to determine the relationship between scale scores, while Multiple Linear Regression analysis was applied to examine the impact of attitudes toward individuals with disabilities on recreational awareness levels.

FINDINGS

This section presents the results of the statistical analyses conducted to examine differences and relationships among the study variables. Tables 2 through 9 summarize the findings based on professional seniority, subject area, experience with students with disabilities, and dimensions of recreational awareness.

 Table 2

 Differences in Teachers' Scale Scores by Professional Seniority

Scales	Professional seniority	N	M	SD	F	p
	1-5 years	225	3,27	0,80		
	6-10 years	92	3,31	0,75		
Emotion	11-15 years	36	3,48	0,85	,593	,668
	16-20 years	16	3,35	0,84		
	20+ years	46	3,36	0,88		
	1-5 years	225	3,80	0,81	_	
	6-10 years	92	3,76	0,74		
Thought	11-15 years	36	3,97	0,67	1,521	,195
C	16-20 years	16	3,88	0,77		
	20+ years	46	3,57	0,70		
	1-5 years	225	3,99	0,74	_	
	6-10 years	92	4,15	0,61		
Behavior	11-15 years	36	4,08	0,64	1,005	,405
	16-20 years	16	3,98	0,79		
	20+ years	46	4,07	0,55		
	1-5 years	225	3,61	0,56		
Overall Attitude	6-10 years	92	3,66	0,50		
Towards Individuals	11-15 years	36	3,78	0,58	,832	,505
with Disabilities	16-20 years	16	3,67	0,54	ŕ	
	20+ years	46	3,61	0,53		
	1-5 years	225	3,98	0,68		
	6-10 years	92	3,85	0,88		
Pleasure - entertainment	11-15 years	36	4,06	0,91	,960	,429
	16-20 years	16	4,06	0,52	,	,
	20+ years	46	3,82	1,03		
	1-5 years	225	4,02	0,66	_	
	6-10 years	92	3,86	0,87		
Social - achievement	11-15 years	36	4,03	0,84	,769	,546
	16-20 years	16	4,00	0,40	ŕ	
	20+ years	46	3,92	1,05		
	1-5 years	225	4,10	0,67	_	
	6-10 years	92	3,96	0,87		
Self-improvement	11-15 years	36	4,06	0,88	,682	,605
1	16-20 years	16	4,09	0,49	,	,
	20+ years	46	3,98	1,01		
	1-5 years	225	4,04	0,64	=	
	6-10 years	92	3,89	0,85		
Total Recreational	11-15 years	36	4,05	0,85	,784	,536
Awareness	16-20 years	16	4,04	0,42). - -)- -
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When the table is examined, it is observed that the levels of emotion, thought, behavior, and overall attitude towards individuals with disabilities among the participating teachers do not differ significantly based on their professional seniority (p>0.05). Similarly, it is observed that the levels of pleasure-enjoyment, social-achievement, self-improvement, and overall

recreational awareness do not differ significantly based on the teachers' professional seniority (p>0.05).

Table 3Differences in Teachers' Scale Scores by Subject Area

Scales	Branch	N	M	SD	F	р
	Art Teacher	65	3.40	0.86		
	STEM Teacher	82	3.24	0.81		
Emotion	Verbal Subject Teacher	139	3.33	0.80	1.541	.176
EIIIOHOII	Classroom Teacher	79	3.21	0.79	1.341	.1/0
	Preschool Teacher	27	3.25	0.69		
	Special Education Teacher	23	3.68	0.74		
	Art Teacher	65	3.86	0.79		
	STEM Teacher	82	3.76	0.76		
Thought	Verbal Subject Teacher	139	3.79	0.83	.210	050
Thought	Classroom Teacher	79	3.75	0.72	.210	.958
	Preschool Teacher	27	3.75	0.76		
	Special Education Teacher	23	3.74	0.66		
	Art Teacher	65	4.03	0.61		
	STEM Teacher	82	4.17	0.59		
D 1 '	Verbal Subject Teacher	139	3.98	0.75	002	402
Behavior	Classroom Teacher	79	4.05	0.72	.883	.492
	Preschool Teacher	27	4.00	0.56		
	Special Education Teacher	23	3.99	0.79		
	Art Teacher	65	3.69	0.59		
Overall Attitude	STEM Teacher	82	3.63	0.53		
Towards	Verbal Subject Teacher	139	3.63	0.54	654	650
Individuals with	Classroom Teacher	79	3.58	0.52	.654	.659
Disabilities	Preschool Teacher	27	3.59	0.47		
	Special Education Teacher	23	3.78	0.62		
	Art Teacher	65	4.07	0.95		
	STEM Teacher	82	3.86	0.76		
Pleasure -	Verbal Subject Teacher	139	4.02	0.75	1.007	205
entertainment	Classroom Teacher	79	3.87	0.79	1.207	.305
	Preschool Teacher	27	3.85	0.58		
	Special Education Teacher	23	3.78	0.80		
	Art Teacher	65	4.05	0.96		
	STEM Teacher	82	3.95	0.75		
Social -	Verbal Subject Teacher	139	4.01	0.72	456	0.00
achievement	Classroom Teacher	79	3.96	0.79	.456	.809
	Preschool Teacher	27	3.83	0.60		
	Special Education Teacher	23	3.87	0.70		
	Art Teacher	65	4.13	0.94		
	STEM Teacher	82	4.05	0.75		
~ 101	Verbal Subject Teacher	139	4.09	0.71		
Self-improvement	Classroom Teacher	79	3.99	0.80	.510	.769
	Preschool Teacher	27	3.97	0.62		
	Special Education Teacher	23	3.91	0.78		
	Art Teacher	65	4.08	0.93		
	STEM Teacher	82	3.96	0.72		
Total recreational	Verbal Subject Teacher	139	4.04	0.72		
		137	⊤.∪⊤	0.70	615	600
	-		3 95	0.77	.615	.688
Total recreational awareness	Classroom Teacher Preschool Teacher	79 27	3.95 3.88	0.77 0.58	.013	.088

When the table is examined, it is observed that the levels of emotion, thought, behavior,

and overall attitude towards individuals with disabilities among the participating teachers do not differ significantly based on their subject area (p>0.05). Similarly, it is observed that the levels of pleasure-enjoyment, social-achievement, self-improvement, and overall recreational awareness do not differ significantly based on the teachers' subject area (p>0.05).

 Table 4

 Differences in Teachers' Scale Scores by Experience with Students with Disabilities

Scales	Teaching Status	N	M	SD	T	p	Cohen's d
Emotion	Yes	213	3,35	0,79	000	260	007
EHIOUOH	No	202	3,28	0,82	,898	,369	,087
T14	Yes	213	3,83	0,75	1 102	222	120
Tought	No	202	3,73	0,79	1,193	,233	,130
Behavior	Yes	213	4,05	0,68	271	711	020
	No	202	4,03	0,70	,371	,711	,029
Overall Attitude	Yes	213	3,67	0,54	1.210	,224	,130
Towards Individuals with Disabilities	No	202	3,60	0,54	1,219		
DI	Yes	213	4,05	0,72	2.764	,006	260
Pleasure-entertainment	No	202	3,84	0,84	2,764		,268
G ' 1 1'	Yes	213	4,09	0,68	2 212	001	214
Social achievement	No	202	3,85	0,84	3,213	,001	,314
Self-improvement	Yes	213	4,17	0,68	2 175	002	214
	No	202	3,93	0,85	3,175	,002	,314
Total Recreational	Yes	213	4,10	0,66	2.100	002	
Awareness	No	202	3,87	0,82	3,189	,002	,309

When the table is examined, it is observed that the levels of emotion, thought, behavior, and overall attitude towards individuals with disabilities do not differ significantly based on whether the participating teachers have previously taught students with disabilities (p>0.05). On the other hand, it is observed that teachers who have previously taught students with disabilities have significantly higher levels of pleasure-enjoyment, social-achievement, self-improvement, and overall recreational awareness compared to those who have not (p<0.05). It was observed that the effect size (Cohen's d) was high in the dimensions where significant differences were found pleasure-entertainment, social-achievement, self-development, and overall recreational awareness. According to Cohen (1988), η^2 values of .01, .06, and .14 are considered small, medium, and large effect sizes, respectively. In this study, η^2 values such as .027 and .040 represent small effects. Although statistically significant, they suggest limited practical implications, meaning the differences observed may not be very strong in real-world educational contexts (Cohen,1988).

Table 5Relationship Between Attitudes Toward Individuals with Disabilities and Recreational Awareness

Scales		1	2	3	4	5	6	7	8
Emotion	r	-							
Linotion	p								
Thought	r	,135	-						
Thought	p	,006							
Behavior	r	,189	,418	-					
Denavior	p	,000	,000						
Overall Attitude	r	,789	,641	,627	-				
Towards Individuals with Disabilities	p	,000	,000	,000					
Pleasure -	r	,051	,239	,134	,177	-			
entertainment	p	,303	,000	,006	,000				
Casial ashissament	r	-,026	,240	,140	,127	,886	-		
Social - achievement	p	,592	,000	,004	,009	,000			
Self-improvement	r	-,018	,245	,142	,135	,893	,933	-	
	p	,710	,000	,004	,006	,000	,000		
Total Recreational	r	-,005	,249	,143	,147	,945	,980	,974	-
Awareness	p	,921	,000	,003	,003	,000	,000	,000	

When the table is examined, it is observed that there is no statistically significant relationship between teachers' emotional attitude levels towards individuals with disabilities and their levels of pleasure-enjoyment, social-achievement, self-improvement, and overall recreational awareness (p>0.05). However, a positive and low-level statistically significant relationship is found between their cognitive, behavioral, and overall attitude levels towards individuals with disabilities and their levels of pleasure-enjoyment, social-achievement, self-improvement, and overall recreational awareness (p<0.05).

Table 6Effect of Attitudes Toward Individuals with Disabilities on the Pleasure–Enjoyment Dimension of Recreational Awareness

Variable	В	Std. Error	В	t	p	VIF
Constant	2,869	,269	-	10,648	,000	-
Emotion	,013	,048	,013	,276	,783	1,041
Thought	,226	,054	,221	4,193	,000	1,217
Behavior	,044	,061	,039	,726	,468	1,239

 $r=,243; r^2=,052; F(3,411)=8,561; p=,000$

When the table is examined, it is observed that teachers' attitudes towards individuals with disabilities have a significant impact of 5.2% on their pleasure-enjoyment awareness level in recreational awareness ($r^2 = .052$; p < 0.05). As this result, models have moderate effect on enjoyment.

Table 7Effect of Attitudes Toward Individuals with Disabilities on the Social—Achievement Dimension of Recreational Awareness

Variable	В	Std. Error	β	t	p	VIF
Constant	3,074	,263	-	11,687	,000	-
Emotion	-,065	,047	-,068	-1,392	,165	1,041
Thought	,224	,053	,225	4,274	,000	1,217
Behavior	,065	,060	,058	1,099	,273	1,239

 $r=,253; r^2=,057; F(3,411)=9,363; p=,000$

When the table is examined, it is observed that teachers' attitudes towards individuals with disabilities have a significant impact of 5.7% on their social-achievement awareness level in recreational awareness ($r^2 = .057$; p < 0.05). As this result, models have moderate effecton social achievement.

Table 8Effect of Attitudes Toward Individuals with Disabilities on the Self–Improvement Dimension of Recreational Awareness

Variable	В	Std. Error	β	t	p	VIF
Constant	3,116	,264		11,808	,000	
Emotion	-,058	,047	-,060	-1,233	,218	1,041
Thought	,229	,053	,229	4,352	,000	1,217
Behavior	,064	,060	,057	1,078	,282	1,239

r=,255; r²=,058; F (3, 411) =9,560; p=,000

When the table is examined, it is observed that teachers' attitudes towards individuals with disabilities have a significant impact of 5.8% on their self-improvement awareness level in recreational awareness ($r^2 = .058$; p < 0.05). As this result, models have moderate effect on self-improvement.

 Table 9

 Effect of Attitudes Toward Individuals with Disabilities on Overall Recreational Awareness

В	Std. Error	β	t	p	VIF
3,037	,256		11,845	,000	
-,044	,045	-,047	-,959	,338	1,041
,226	,051	,232	4,419	,000	1,217
,060	,058	,055	1,033	,302	1,239
	3,037 -,044 ,226	3,037 ,256 -,044 ,045 ,226 ,051	B Error 3,037 ,256 -,044 ,045 -,047 ,226 ,051 ,232	B Error β t 3,037 ,256 11,845 -,044 ,045 -,047 -,959 ,226 ,051 ,232 4,419	B Error β t p 3,037 ,256 11,845 ,000 -,044 ,045 -,047 -,959 ,338 ,226 ,051 ,232 4,419 ,000

r=,257; $r^2=,059$; F (3, 411) = 9,669; p=,000

When the table is examined, it is observed that teachers' attitudes towards individuals with disabilities have a significant impact of 5.9% on overall recreational awareness ($r^2 = .059$; p < 0.05). As this result, models have moderate effect on overall recreational awareness.

DISCUSSION & CONCLUSION

In this study, 415 teachers from different provinces and various disciplines were examined to determine whether there were significant differences in their attitudes toward individuals with disabilities and recreational awareness levels based on variables such as age,

gender, marital status, educational background, years in the profession, teaching subject, province of employment, school level, having a relative with a disability, experience in teaching students with disabilities, knowledge of recreational activities, and participation in recreational activities.

It is observed that the participating teachers' emotional attitudes towards individuals with disabilities are at a moderate level, while their cognitive, behavioral, and overall attitudes are above moderate level. When examining the recreational awareness levels of the participating teachers, it is observed that their pleasure-entertainment, social-achievement, self-development, and overall awareness levels are above moderate level.

According to the research findings, teachers' emotional, cognitive, behavioral, and overall attitude levels towards individuals with disabilities do not differ significantly based on their professional experience (p > 0.05). These findings align with the Theory of Planned Behavior (Aizen, 1991), which posits that individuals' attitudes significantly shape their behavioral intentions. In this context, positive attitudes of teachers toward individuals with disabilities can lead to more inclusive teaching behaviors. Furthermore, according to Social Cognitive Theory (Bandura, 2001), factors such as self-efficacy and observational learning also contribute to teachers' willingness to adopt inclusive practices especially when supported by recreational engagement. The lack of a significant difference in teachers' attitudes towards individuals with disabilities based on their professional experience suggests that the duration of time spent in the profession is not a determining factor influencing these attitudes. This suggests that years of experience alone do not drive attitude development; rather, high-quality training and ongoing professional support are crucial. In Özdemir's (2021) study investigating educators' attitudes toward individuals with disabilities, it was concluded that the professional experience of employees in special education and rehabilitation centers had no impact on their attitudes toward individuals with disabilities. Ginevra, C. M., et al. (2022), Parasuram (2006), Ünal (2010), Anil (2019), Şahan (2019), and Nurkan (2022) have also reached findings in their research that align with the results of our study. Avramidis and Norwich (2002) also pointed out that teachers' attitudes are influenced more by their training in special education and personal beliefs rather than their years of teaching experience. This finding is consistent with our study. However, in İmrak's (2009) study, teachers with 16 or more years of professional experience exhibited a significant difference in their attitudes toward individuals with disabilities compared to other teacher groups. Overall, an increase or decrease in years of professional experience does not have a positive or negative impact on attitudes toward individuals with disabilities. When examining the results related to recreational awareness based on teachers' professional seniority, no statistically significant difference was found in the pleasure-entertainment, social-achievement, self-development sub-dimensions, or in overall awareness levels (p > 0.05). This situation can be interpreted as the duration of teachers' professional experience having no impact on their perception of recreational awareness. This indicates that long service does not automatically foster high recreational awareness; structured education and awareness programs are essential. In this regard, Yılmaz (2020) conducted a study on middle school administrators and found no significant differences between the administrators' years of professional experience and the sub-dimensions of the Recreational Awareness Scale, which aligns with our study. Kara, İzci and Murathan (2011), who reached different results from our study, found a significant relationship between the recreational awareness levels of teachers and administrators and their level of participation in recreational activities and their years of service in their study on professional seniority.

It is observed that the emotional, cognitive, behavioral, and overall attitude levels of the participating teachers toward individuals with disabilities do not differ significantly based on their teaching subject (p > 0.05). This situation may be influenced by several factors, primarily the education teachers receive, as well as their professional awareness, educator spirit, and

constructive perspective towards disadvantaged individuals, given that teachers serve as the most influential role models in society. A common inclusive training curriculum across disciplines may have minimized attitude gaps among teachers. Hemmingsson and Borell (2002) revealed that teachers' attitudes play a determining role in the participation of individuals with disabilities in educational settings, and that these attitudes are shaped not by the individual's disability but by environmental arrangements. In this sense, in the study conducted by Dursun, Güler and Bozkurt (2019), who reached results in parallel with our study, no significant difference was found in the attitudes of pre-service teachers in different branches towards the disabled. There is no significant difference in the results; however, the attitudes of the prospective Special Education Teachers towards the disabled were higher than the attitudes of the prospective Classroom Teachers and Physical Education and Sports Teachers. Additionally, the attitude levels of physical education pre-service teachers were found to be higher than those of primary school pre-service teachers. Similarly, in the research conducted by Kırımoğlu, Esentürk, İlhan, Yılmaz, and Kaynak (2016), it was concluded that teachers working in special education and rehabilitation centers had higher attitude levels toward individuals with disabilities compared to teachers working in other institutions. According to Dasbas, Kesen, and Eryılmaz (2013), primary school teachers were found to have more positive attitudes toward individuals with disabilities compared to special education teachers. This result contradicts the findings of our study. When evaluating the results related to recreational awareness based on teachers' subject areas, it is observed that the pleasure-entertainment, social-achievement, self-development, and overall awareness levels do not differ significantly (p > 0.05). This underscores that subject specialization does not influence recreational awareness; all teachers should receive equal support and development opportunities. In Kabak's (2019) study examining pre-service teachers' awareness levels regarding the effects of sports on individuals with intellectual disabilities based on their subject areas, it was stated that no significant difference was found. In this regard, the results are consistent with our study. In Keles's (2021) study, results contradicting our findings were obtained, as a significant difference was identified in the awareness levels of teachers from different subject areas regarding the effects of sports. A comprehensive literature review on the subject revealed a lack of sufficient studies. In this regard, our study's findings are expected to contribute to the field.

It is observed that the emotional, cognitive, behavioral, and overall attitude levels of the participating teachers toward individuals with disabilities do not differ significantly based on their previous experience in teaching students with disabilities (p > 0.05). This situation can be interpreted as indicating that, as mentioned in other findings of our study, teachers' attitudes toward individuals with disabilities are not influenced by any specific variable. This implies that past experience alone does not guarantee attitude change, highlighting the need for continuous, structured interaction opportunities. Consistent with our study's findings, Akçay (2021) found no significant difference in the attitudes of social workers toward individuals with disabilities based on their previous experience in educating individuals with disabilities. In their study on physical education teachers, Karademir, Açak, Türkçapar, and Eroğlu (2018) obtained findings contrary to our results, identifying a significant difference across all sub-dimensions based on prior experience in educating individuals with disabilities. Teachers who have previously taught individuals with disabilities have significantly higher levels of pleasureentertainment, social-achievement, self-development, and overall recreational awareness compared to those who have not taught individuals with disabilities (p < 0.05). Forlin (2010) stated that teachers' attitudes towards inclusive education tend to improve when they gain direct experience with individuals with disabilities. However, in contrast to this expectation, our study found no significant difference in attitudes based on past teaching experience with students with disabilities. Supporting our study's findings, Keleş (2021) identified a significant difference in awareness levels regarding the effects of sports on individuals with intellectual disabilities based on whether physical education pre-service teachers had previous experience working

with individuals with intellectual disabilities. It was found that pre-service teachers who had previously worked with individuals with disabilities had significantly higher scores compared to those who had not. Teachers who have worked with individuals with disabilities in the past have a significantly higher level of awareness regarding sports. Similar results were also found by Kırımoğlu et al. (2016).

The results of the study indicate that there is no statistically significant relationship between teachers' emotional attitude levels towards individuals with disabilities and their pleasure-entertainment, social-achievement, self-development, and overall recreational awareness levels (p > 0.05). However, a positive but low-level statistically significant relationship was found between their cognitive, behavioral, and overall attitude levels towards individuals with disabilities and their pleasure-entertainment, social-achievement, self-development, and overall recreational awareness levels (p < 0.05). This suggests the emotional dimension may be less impacted by recreational activities compared to cognitive and behavioral dimensions. Similarly, Sharma et al. (2008) observed that pre-service teachers demonstrated significant improvements in their attitudes and awareness after participating in experiential programs that involved direct interaction with individuals with disabilities. These findings align with our study. This finding suggests that increasing recreational awareness among teachers may foster not only inclusive attitudes but also a deeper understanding of social equity and diversity. This is supported by Devine and Parr (2008), who argue that inclusive leisure experiences reduce social distance and enhance mutual respect.

This study offers a unique contribution to literature by examining the relationship between teachers' attitudes toward individuals with disabilities and their levels of recreational awareness in a multidimensional manner. Given the limited number of studies exploring the impact of recreational awareness on teacher attitudes, the findings of this research are particularly significant in addressing this gap. By analyzing the influence of demographic variables such as professional seniority, subject area, and prior experience working with individuals with disabilities, the study provides a comprehensive evaluation. Moreover, the finding that recreational awareness is significantly related only to the cognitive and behavioral dimensions of attitudes offers a valuable insight that can guide future research. In this respect, the study emphasizes the need to integrate recreational awareness-based content into teacher education programs and lays the groundwork for the development of educational policy recommendations.

Recommendations

- 1. Recreational awareness—based content should be integrated into both pre-service and in-service teacher training programs.
- 2. Regular recreational activity workshops and hands-on training sessions should be organized for teachers at schools.
- 3. Inclusive attitude–development training should be provided to all teacher groups regardless of subject area.
- 4. Practice-based teacher training opportunities that facilitate direct interaction with individuals with disabilities should be increased.
- 5. Teachers should be supported with disability and inclusion—themed training at every stage of their professional career.
- 6. School-based awareness campaigns should be implemented, taking into account the impact of recreational awareness on attitudes.
- 7. Success stories and best practices supporting positive attitudes toward individuals with disabilities should be shared in educational institutions.

Limitations

This study was conducted using a cross-sectional survey design. Therefore, teachers' attitudes and recreational awareness levels were assessed at a single point in time, and changes over time were not considered. The data was collected solely through quantitative measurement tools. This limits the ability to explore the underlying reasons or personal experiences behind participants' attitudes. Without qualitative support, contextual interpretation of the findings may remain limited. Although the sample included teachers from different provinces and subject areas, the imbalance in participant distribution may restrict the generalizability of the results to the entire teacher population. Additionally, the sensitivity of topics such as attitudes toward individuals with disabilities may have led participants to provide socially desirable responses, which could affect the objectivity of the data.

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REFERENCES

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T
- Akçay, M. (2021). Social workers' attitudes towards individuals with disabilities and their opinions on the role of social work in special education. Master's thesis, Yakın Doğu University, Graduate School of Education, Cyprus.
- Altunhan, A., Bayer, R., & Açak, M. Z. (2021). Investigation of Mardin Artuklu University students' attitudes towards individuals with disabilities. *Çanakkale Onsekiz Mart University Journal of Sport Sciences*, 4(1), 61–70.
- Anıl, A. (2019). An examination of employers' attitudes towards individuals with disabilities and the views of disabled employees regarding their work environment. Doctoral thesis, Necmettin Erbakan University, Konya.
- Avramidis, E., & Norwich, B. (2002). Teachers' attitudes towards integration/inclusion: A review of the literature. *European Journal of Special Needs Education*, 17(2), 129–147. https://doi.org/10.1080/08856250210129056
- Ayyıldız Durhan, T., Kayhalak, F., & Kurtipek, S. (2022). The effect of recreational awareness on recreational purchasing styles. *International Journal of Current Educational Research*, 8(2), 460–477.
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52, 1–26. https://doi.org/10.1146/annurev.psych.52.1.1
- Beauchamp, C., & Thomas, L. (2009). Understanding teacher identity: An overview of issues in the literature and implications for teacher education. *Cambridge Journal of Education*, 39(2), 175–189. https://doi.org/10.1080/03057640902902252
- Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Lawrence Erlbaum Associates.
- Çolak, M., & Çetin, C. (2014). A study on teachers' attitudes towards disability. *Dokuz Eylül University Faculty of Economics and Administrative Sciences Journal*, 29(1), 191–211.
- Çulhaoğlu İmrak, H. (2009). An examination of teachers' and parents' attitudes towards inclusive education in the preschool period and peer relationships in inclusive classrooms. Master's thesis, Çukurova University, Social Sciences Institute, Adana.
- Darcy, S., & Dowse, L. (2013). In search of a level playing field—The constraints and benefits of sport participation for people with intellectual disability. *Disability & Society, 28*(3), 393–407. https://doi.org/10.1080/09687599.2012.714258

- Daşbaş, S., Kesen, N. F., & Eryılmaz, C. (2013). Attitudes of teachers working in educational institutions towards individuals with disabilities. *Health and Society Journal*, 23(1), 35–49.
- Demir, C. (2023). A comparison of physical education teachers' professional self-esteem and their attitudes towards individuals with disabilities (The case of Bağcılar District). Master's thesis, Gelişim University, Graduate School of Education, İstanbul.
- Devine, M. A., & Parr, M. G. (2008). Social inclusion in leisure contexts: A model to guide research and practice. *Leisure Sciences*, 30(5), 391–408. https://doi.org/10.1080/01490400802353083
- Dursun, M., Güler, B., & Mutlu Bozkurt, T. (2019). Examination of pre-service teachers' attitudes towards the participation of individuals with intellectual disabilities in sports activities. *Journal of Physical Education and Sports Sciences*, 13(3), 202–209.
- Ekinci, N. E. (2017). Investigation of university students' awareness about recreational activities. Doctoral thesis, Dumlupınar University, Institute of Health Sciences, Kütahya.
- Erkmen Hadi, G., Zengin, Ö., & Ertüzün, E. (2023). Effect of recreational physical activity program on aberrant behaviors of adolescents with mild intellectual disabilities. *Journal of Education and Recreation Patterns*, 4(2), 263–274. https://doi.org/10.53016/jerp.v4i2.144
- Forlin, C. (2010). Teacher education for inclusion: Changing paradigms and innovative approaches. *International Journal of Inclusive Education*, 14(7), 649–653. https://doi.org/10.1080/13603111003778353
- Ginevra, C. M., Maggio, D. I., Valbusa, I., Santilli, S., & Nota, L. (2022). Teachers' attitudes towards students with disabilities: The role of the type of information provided in the students' profiles of children with disabilities. *European Journal of Special Needs Education*, 37(3), 357–370. https://doi.org/10.1080/08856257.2021.1878658
- Han, J. S. (2008). The relationship between young adult's leisure awareness and their depression relief leisure behaviour. *Korean Family Resource Management Association*, 12(4), 35–46.
- Hemmingsson, H., & Borell, L. (2002). Environmental barriers in mainstream schools. *Disability and Rehabilitation*, 24(1–3), 70–77. https://doi.org/10.1046/j.1365-2214.2002.00240.x
- Kabak, S. (2019). Awareness and attitude levels of teachers from different branches towards the sports activities of individuals with intellectual disabilities. Master's thesis, Gazi University, Ankara.
- Kara, A., İzci, E., & Murathan, F. (2011). Leisure time evaluation habits and learning attitudes of physical education teachers. *e-Journal of New World Sciences Academy Education Sciences*, 6(1), 958–987.
- Karademir, T., Açak, M., Türkçapar, Ü., & Eroğlu, H. (2018). Determining the attitudes of preservice physical education teachers towards individuals with intellectual disabilities. *Journal of Physical Education and Sports Sciences*, 20(3), 103–112.
- Kaysi, Ü. (2021). Pre-service physical education teachers' perceived inclusion competencies and attitudes towards the course 'Physical Education and Sports for the Disabled': An experimental study. Master's thesis, Mersin University, Mersin.
- Keleş, S. (2021). An examination of awareness levels of teachers working in the Ministry of National Education regarding the effects of sports on individuals with intellectual disabilities: The case of Adıyaman/Çelikhan. Master's thesis, İnönü University, Malatya.
- Kılıçman, İ. (2020). An investigation into the effects of recreational awareness and social media addiction on life satisfaction: A study on university students. Master's thesis, Karamanoğlu Mehmet Bey University, Karaman.

- Kırımoğlu, H., Esentürk, O., İlhan, E. L., Yılmaz, A., & Kaynak, K. (2016). Examining the awareness levels of primary school, special education and rehabilitation center teachers and physical education pre-service teachers on the effects of physical exercise participation in individuals with intellectual disabilities. *Manas Journal of Social Studies*, 5(4), 231–244.
- Kırımoğlu, H., Yılmaz, A., Soyer, F., Beyleroğlu, M., & İlhan, E. L. (2016). Awareness of the effects of sports on individuals with intellectual disabilities: A study on pre-service physical education teachers. *Niğde University Journal of Physical Education and Sports Sciences*, 10(1), 83.
- Mevzuat Bilgi Sistemi. (2023). *Kanun No: 5378 Engelliler Hakkında Kanun*. https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=5378&MevzuatTur=1&MevzuatTertip=5 (Accessed July 20, 2025).
- Nurkan, İ. (2022). Self-efficacy perceptions of psychological counselors and guidance teachers regarding counseling and guidance in special education and their attitudes towards individuals with special needs. Master's thesis, Medeniyet University, İstanbul.
- Özdemir, S. D. (2021). An examination of the attitudes of educators working in special education and rehabilitation centers towards individuals with disabilities (The case of Beylikdüzü, Istanbul). Master's thesis, Gelişim University, İstanbul.
- Öztabak, M. Ü. (2017). An examination of the life expectations of individuals with disabilities. *FSM Journal of Humanities and Social Sciences*, (9), 355–375. https://doi.org/10.16947/fsmia.323388
- Parasuram, K. (2006). Variables that affect teachers' attitudes towards disability and inclusive education in Mumbai, India. *Disability & Society*, 21(3), 231–242. https://doi.org/10.1080/09687590600617352
- Şahan, S. (2019). A comparison of guidance counselors' self-efficacy perceptions regarding special education and their attitudes towards inclusive education. Master's thesis, Necmettin Erbakan University, Konya.
- Sharma, U., Forlin, C., Loreman, T., & Earle, C. (2008). Impact of training on pre-service teachers' attitudes and concerns about inclusive education and sentiments about persons with disabilities. *Disability & Society*, 23(7), 773–785. https://doi.org/10.1080/09687590802469271
- Ünal, F. (2010). Attitudes of teachers, parents of typically developing students, and parents of students with disabilities towards inclusion in inclusive classrooms. Master's thesis, Çukurova University, Adana.
- World Health Organization. (2001). *International classification of functioning, disability and health (ICF)*. Geneva: WHO.
- Yetim, A. (2011). Sociology and sport. Berikan Publishing.
- Yılmaz, U. C. (2020). An examination of recreational awareness perception levels of secondary school administrators (The case of Batman Province). Master's thesis, Batman University, Institute of Social Sciences.

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