



ORJİNAL MAKALE / ORIGINAL ARTICLE

Balıkesir Sağlık Bilimleri Dergisi / BAUN Sağ Bil Derg
Balıkesir Health Sciences Journal / BAUN Health Sci J
ISSN: 2146-9601- e ISSN: 2147-2238
Doi: <https://doi.org/10.53424/balikesirsbd.1638735>



Correlation of PE Teachers' Emotions, Attitudes, Anxiety, and Competence in Inclusive Education

Zeynep AKYÜREK ¹, Ahmet Haktan SIVRIKAYA ², Serhat TURAN ³,
Laurentiu-Gabriel TALAGHIR ⁴

¹ Balıkesir University, Institute of Health Sciences, Department of Physical Education and Sports

² Balıkesir University, Faculty of Sports Science, Department of Physical Education and Sports

³ Balıkesir University, Faculty of Sports Science, Department of Sports Management

⁴ Dunarea de Jos University of Galati, Faculty of Physical Education and Sport

Geliş Tarihi / Received: 11.02.2025, Kabul Tarihi / Accepted: 19.03.2025

ABSTRACT

Objective: This research aims to investigate the relationships between physical education teachers' emotions, attitudes, anxieties, and perceived competence towards inclusive education practices. **Materials and Methods:** The study group comprises 256 participants, consisting of 152 (59.4%) female and 104 (40.6%) male teachers working in Balıkesir province during the fall semester of the 2024-2025 academic year. The research employed a relational survey model. Data collection instruments included a personal information form, the Emotions, Attitudes, and Anxieties Scale Regarding Inclusive Education, and the Teacher Competency Scale in Inclusive Practices. Descriptive statistics, Independent Samples T-Test, One-Way ANOVA, Pearson Correlation, and Regression tests were used for data analysis. **Results:** Analyses based on graduation status revealed no significant differences in emotion, attitude, anxiety, and competence levels. Furthermore, the attitude variable was found to have a decisive role in teacher competence and explained 11% of the variance in competence levels. **Conclusion:** The research findings indicate a moderate positive correlation between Attitude and competence, while no significant relationship was found between Emotion and Anxiety variables and competence. Additionally, a significant difference was observed in participants' anxiety levels based on gender. Teachers who knew, were related to, or had a student with special needs showed no significant difference in terms of emotion and attitude scores, but their anxiety and competence scores were higher.

Keywords: Inclusion, Physical Education, Attitude, Competence.

Beden Eğitimi Öğretmenlerinin Kaynaştırma Eğitiminde Duygu, Tutum, Kaygı ve Yeterlilik İlişkisi

ÖZ

Amacı: Bu araştırmanın amacı beden eğitimi öğretmenlerinin kapsayıcı eğitim uygulamalarına yönelik duygu, tutum, kaygı ve algılanan yeterlilikleri arasındaki ilişkileri incelemektir. **Gereç ve Yöntem:** Çalışma grubu, 2024-2025 eğitim-öğretim yılı güz döneminde Balıkesir ilinde görev yapan 152 (%59.4) kadın ve 104 (%40.6) erkek öğretmen olmak üzere toplam 256 katılımcıdan oluşmaktadır. Araştırma ilişkisel tarama modelindedir. Veri toplama araçları; Kişisel Bilgi Formu, Kaynaştırma Eğitime İlişkin Duygu, Tutum ve Kaygılar Ölçeği ve Kaynaştırma Uygulamalarda Öğretmen Yeterlilik Ölçeği'dir. Verilerin analizinde betimsel istatistikler, Bağımsız Örneklem T Testi, ANOVA, Pearson Korelasyon ve Regresyon testleri kullanılmıştır. **Bulgular:** Mezuniyet durumuna göre yapılan analizlerde duygu, tutum, kaygı ve yeterlilik düzeylerinde anlamlı bir farklılık ortaya çıkmamıştır. Ayrıca tutum değişkeninin öğretmen yeterliliğinde belirleyici bir role sahip olduğu ve yeterlilik düzeylerindeki varyansın %11'ini açıkladığı bulunmuştur. **Sonuç:** Araştırma bulguları, Tutum ve yeterlilik arasında orta düzeyde pozitif bir korelasyon olduğunu gösterirken, Duygu ve Kaygı değişkenleri ile yeterlilik arasında anlamlı bir ilişki bulunamadı. Ek olarak, katılımcıların kaygı düzeylerinde cinsiyete göre anlamlı bir fark gözlemlendi. Özel gereksinimli bir öğrenciyi tanıyan, onunla akraba olan veya özel gereksinimli bir öğrenciyeye sahip olan öğretmenler, duygu ve tutum puanları açısından anlamlı bir fark göstermedi, ancak kaygı ve yeterlilik puanları daha yüksekti.

Anahtar Kelimeler: Kaynaştırma, Beden Eğitimi, Tutum, Yeterlilik.

Sorumlu Yazar / Corresponding Author: Serhat TURAN, Balıkesir University, Faculty of Sports Science, Department of Sports Management, Balıkesir, Türkiye.

E-mail: serhat.turan@balikesir.edu.tr

Bu makaleye atıf yapmak için / Cite this article: Akyürek, Z., Sivrikaya, A. H., Turan, S., Talaghir, L-G. (2025). Correlation of PE teachers' emotions, attitudes, anxiety, and competence in inclusive education. *BAUN Health Sci J*, 14(1), 210-219. <https://doi.org/10.53424/balikesirsbd.1638735>



BAUN Health Sci J, OPEN ACCESS <https://dergipark.org.tr/tr/pub/balikesirsbd>

This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License

INTRODUCTION

The Universal Declaration of Human Rights emphasizes that everyone has the right to education. In this context, providing equal educational opportunities, regardless of individual differences, is recognized as a fundamental right for all students. In line with this right, students with special needs also have the same educational rights as their typically developing peers (Ismailos et al., 2022). The importance of education for individuals with special needs in schools is increasingly recognized. Inclusive education practices have been implemented to ensure that these students benefit from equal educational opportunities with their typically developing peers (Yılmaz & Melekoğlu, 2018). Inclusive education aims to bring together children with special needs and typically developing children in both academic and social domains through individualized educational programs (Singh, 2016).

Inclusive education is a process where individuals with special needs receive education alongside their typically developing peers, and teachers play a crucial role in this process (Akçamete, 2010). Teachers should be aware of their responsibilities, legal obligations, intervention methods, and assessment strategies related to individuals with special needs and develop instructional plans accordingly (Yetiştirme ve Özel Eğitim Müdürlüğü, 2006). Moreover, teachers have a vital role in understanding the individual needs of students with special needs and creating effective educational strategies to address these needs (Danyoli, 2019). Teachers' knowledge and experience in this area are critical to the successful implementation of inclusive practices. Physical education teachers are responsible not only for creating individualized educational plans to develop the skills of individuals with special needs but also for fostering an inclusive environment. This requires teachers to offer effective and accessible sports activities that consider the physical, social, and emotional needs of students with special needs (Roth & Kearny, 2017). Physical education teachers must contribute to inclusive education by organizing activities suited to students' interests and abilities. Sports education not only enhances individuals' physical abilities but also improves social skills, helping them adapt to group dynamics. In this regard, physical education and sports teachers must design appropriate sports programs to enable students with special needs to participate with their peers in the classroom environment effectively (Fitzgerald & Stride, 2012).

Physical education and sports represent one of the most effective ways for integrated students to engage in physical, psychological, and social interaction with society (Akdenk et al., 1997). The significance of physical education and sports for individuals with special needs suggests that, within the context of inclusive education in our country, the emotions, attitudes, and anxieties of physical education teachers

regarding inclusion practices can influence the effective implementation of this process. Furthermore, teachers' perceived competence in this area is a crucial factor in determining the quality of inclusive education practices (Avramidis & Norwich, 2002).

It can be argued that the emotions, attitudes, anxieties, and competence levels of physical education and sports teachers in inclusion practices directly impact the success of education. The cognitive, social, emotional, and motor skills of physical education and sports teachers play a decisive role in the inclusion process (Lindsay, 2007). In particular, the development of strategies by teachers that promote social harmony and create an inclusive classroom environment is of paramount importance. Teachers' positive perceptions of competence, attitudes, emotional states, and anxieties regarding inclusion practices are among the essential factors that enhance the success of these practices (Avramidis & Norwich, 2002).

Research indicates that the anxieties experienced by teachers during inclusive education processes often center on classroom management, meeting the needs of students with special needs, and implementing effective teaching methods (Sharma et al., 2011). Additionally, it has been determined that teachers' attitudes significantly influence the pedagogical approaches they adopt when working with students with special needs. Inclusive education, particularly for physical education teachers, can present various challenges in promoting participation in physical activities and increasing social interactions (Hutzler & Zach, 2013). Therefore, teachers' perceptions of competence and their knowledge base in this field are among the factors that directly affect the effectiveness of the process (Erbaş, 2019).

In this context, the aim of this study is to examine the relationships between physical education teachers' emotions, attitudes, anxieties, and perceptions of competence towards inclusive education practices. Based on existing findings in literature, it can be stated that a better understanding of the relationships between these factors is crucial for the success of inclusive education.

MATERIALS AND METHODS

Research model

In this study, the "relational survey model," a quantitative research method, was employed to examine the relationship between emotions, attitudes, anxieties, and competencies of Physical Education and sports teachers. This model is an approach where relationships between variables are evaluated without exposure to external influences (Büyükoztürk et al., 2015).

Research group

The research universe comprised 520 physical education teachers working in Balıkesir province during the fall semester of the 2024-2025 academic

year, with a sample consisting of 152 female and 104 male participants. The average age of the participants was found to be 34.73 ± 6.38 . Their educational backgrounds included 218 with undergraduate degrees and equivalents, 30 with master's degrees, and 8 with doctoral degrees. Furthermore, 55.5% of the participants reported having meaningful/significant interaction with an individual needing special education, while 44.5% did not. For efficiency in time and resource utilization, the sample selection was based on the principle of easy accessibility.

Data collection instruments

The data collection instruments used in the study were a Personal Information Form, a Scale of Emotions, Attitudes, and Anxieties Related to Inclusive Education, and a Teacher Competency Scale for Inclusion Practices.

Personal information form

Personal Information Form: Created by the researchers, it was designed to gather information on participants' gender, whether they had a close acquaintance/relative/student with special needs, and their educational background.

Feelings, Attitudes, and Concerns Regarding Inclusive Education Scale

The "Feelings, Attitudes, and Concerns Regarding Inclusive Education Scale (FACIES)," developed by Forlin et al. (2011), was adapted into Turkish by Bayar et al. (2015). This scale consists of a total of 15 items and is designed with a 4-point Likert-type structure. Total scores obtainable from the scale range from 15 to 60. Higher scores indicate that the individual has higher levels of feelings, attitudes, and concerns regarding inclusive education. The scale comprises three subscales, each containing five items. The total scores attainable from these subscales vary between 5 and 20. Since the items in the feelings subscale contain negative statements, these items were reverse-coded in statistical calculations. As a result of this coding process, negative total values in the feelings subscale indicate positive feelings regarding inclusion. Following the Turkish adaptation by Bayar et al. (2015), the Cronbach's Alpha reliability coefficient of this scale was determined to be 0.88. In the present study, as a result of the reliability analysis, the overall Cronbach's Alpha value of the scale was found to be .78.

Teacher Competency Scale in Inclusive Practices

The "Teacher Competency Scale in Inclusive Practices (TCSIP)," developed by Umesh Sharma et al. (2011), comprises 18 items. This scale is designed with a 6-point Likert-type structure. The rating options are: "Strongly Disagree" (1), "Disagree" (2), "Partially Disagree" (3), "Partially Agree" (4), "Agree" (5), and "Strongly Agree" (6). The Turkish adaptation by Bayar (2015) aims to determine the competencies of teachers in inclusive practices. As a result of exploratory factor analysis, the scale exhibited a three-dimensional structure. These

dimensions were defined as "Teaching Competency" as the first dimension, "Collaboration Competency" as the second dimension, and "Classroom Management Competency" as the third dimension. The reliability study of the Turkish adaptation was conducted using Cronbach's Alpha test, and the internal consistency coefficient was determined to be 0.89. In this study, the reliability of the scale was also analyzed using Cronbach's Alpha test, and the internal consistency coefficient was found to be 0.96.

Data analysis

The data for this study were collected through online forms during the 2024-2025 academic year. Data collection instruments were sent to physical education and sports teachers who agreed to participate in the study. Data analysis was performed using SPSS software. Skewness and kurtosis values were examined to determine whether the data were normally distributed. These values were evaluated by checking whether they fell within the range of +2 to -2 (Tabachnick & Fidell, 2013). This evaluation revealed that the data exhibited a normal distribution, and accordingly, for data analysis, frequencies and percentages were first calculated for gender, graduation status, and interaction status with individuals with special needs, and mean ages were calculated. Independent samples t-tests were conducted to analyze differences in gender and interaction scores with individuals with special needs. ANOVA was conducted to determine whether teachers' educational levels differed in terms of their scores. Pearson correlation analysis was conducted to determine the relationship between teachers' levels of feelings, attitudes, concerns, and competencies towards inclusion. Linear regression analysis was conducted to analyze the effects of feelings, attitudes, and concerns on competency. The analyses were completed using SPSS 26.0 software and Excel databases.

Ethical considerations

Before the study was started, written approval was obtained from the author's Balikesir University Social and Humanities Research Ethics Committee (Date: 30.12.2024, Approval no: E-19928322-050.04-471588).

RESULTS

A total of 256 individuals participated in the study. The majority of the participants were female, accounting for 59.4% (n=152) of the total sample, while the remaining 40.6% (n=104) were male. In terms of educational background, the largest proportion of participants were university graduates or held an equivalent degree, making up 85.2% (n=218) of the sample. Additionally, 11.7% (n=30) had a master's degree, whereas only a small percentage, 3.1% (n=8), held a doctoral degree. When considering participants' previous interactions with individuals with special needs, 55.5% (n=142)

reported having experience in this area, while 44.5% (n=114) stated that they had no prior interaction.

Table 1. Sociodemographic characteristics of the study group (n=256).

Variables		n	%
Gender	Female	152	59.40
	Male	104	40.60
Graduation Status	University graduate and equivalent	218	85.20
	Master's degree	30	11.70
	Doctorate	8	3.10
Interaction with Individuals with Special Needs	Yes	142	55.50
	No	114	44.50
Total		256	100.00

n: Count, %: Column percentage.

Furthermore, the age distribution of the participants revealed an average age of 34.73 years, with a standard deviation of 6.38 years, indicating a relatively homogeneous age range within the sample (Table 1). Examination of the scores achieved by the physical education and sports teachers participating in the study on the subscales of the Inclusion Feelings, Attitudes, and Anxiety Scale revealed that

the highest mean score was obtained from the attitude dimension (13.01 ± 3.23), while the lowest mean score was obtained from the feelings dimension (10.50 ± 2.91). The total score of physical education and sports teachers on the Inclusion Feelings, Attitudes, and Anxiety Scale was found to be above the median value (35.28 ± 6.70). (Table 2).

Table 2. Mean scores of the subscales of the inclusion feelings, attitudes, and anxiety scale.

Inclusion Feelings, Attitudes, and Anxiety Scale Sub-Dimensions	Min.	Max.	X±S.D.
Feelings	5.00	20.00	10.50±2.91
Attitude	6.00	20.00	13.01±3.23
Anxiety	5.00	20.00	11.77±3.04
Total	18.00	60.00	35.28±6.70

Min: Minimum, Max: Maximum, X: Mean, S.D.: Standard deviation.

Analyzing the scores obtained by physical education and sports teachers on the subscales of the Inclusive Teacher Competency Scale reveals that the highest mean value was for collaboration competency (29.46 ± 5.61), while the lowest mean value was for

classroom management competency (29.42 ± 5.67). The total score for physical education and sports teachers on the Inclusive Teacher Competency Scale was above the average (88.35 ± 16.09). (Table 3).

Table 3. Mean scores of physical education and sports teachers on the subscales of the Inclusive Teacher Competency Scale.

Inclusion Teacher Competency Scale Sub-Dimensions	Min.	Max.	X±S.D.
Teacher Competency	8.00	36.00	29.46±5.47
Collaboration Competency	10.00	36.00	29.46±5.61
Classroom Management Competency	9.00	36.00	29.42±5.67
Total	29.00	108.00	88.35±16.09

Min: Minimum, Max: Maximum, X: Mean, S.D.: Standard deviation.

The table analyzes whether the inclusion feelings, attitudes, anxiety, and inclusive teacher competency scores of female and male teachers differed by gender. No significant difference was found between genders in terms of feelings ($\bar{X}_{\text{female}}=10.47$; $\bar{X}_{\text{male}}=10.53$) and attitude ($\bar{X}_{\text{female}}=12.93$; $\bar{X}_{\text{male}}=13.13$) scores ($p>0.05$). However, male teacher candidates had significantly higher anxiety

scores ($\bar{X}=12.39$) than females ($\bar{X}=11.31$) ($p=0.005$). No significant difference was found between female and male candidates in terms of inclusive teacher competency ($\bar{X}_{\text{female}}=88.43$; $\bar{X}_{\text{male}}=88.22$, $p>0.05$). This indicates that gender only created a difference in anxiety levels and had no significant effect on the other variables. (Table 4).

Table 4. T-test results of scale scores according to the gender variable.

Scales	Gender	N	\bar{X}	S.D.	t	P
Feelings	Female	152	10.47	2.96	-0.166	0.869
	Male	104	10.53	2.85		
Attitude	Female	152	12.93	3.02	-0.486	0.628
	Male	104	13.13	3.54		
Anxiety	Female	152	11.31	2.96	-2.838	0.005
	Male	104	12.39	3.04		
Inclusion Teacher Competency	Female	152	88.43	17.30	0.102	0.919
	Male	104	88.22	14.31		

$p<0.05$, \bar{X} : Mean, S.D.: Standard deviation.

The table analyzes whether teachers' inclusion feelings, attitudes, anxiety, and teacher competency scores differ based on whether they had an acquaintance/relative/student with special needs. In terms of feelings, the mean for those who had an acquaintance/relative/student with special needs was ($\bar{X}=10.20$), and for those who did not, it was ($\bar{X}=10.86$), with the p-value ($p=0.690$) indicating no significant difference. Attitude scores similarly showed no significant difference ($\bar{X}_{\text{yes}}=13.00$; $\bar{X}_{\text{no}}=13.03$, $p=0.931$). Regarding anxiety scores, teachers who had an acquaintance/relative/student with special needs had a significantly lower mean ($\bar{X}=11.40$) than those who did not ($\bar{X}=12.23$) ($p=0.029$). In terms of inclusive teacher competency, teachers with an acquaintance/relative/student with special needs had a significantly higher mean score ($\bar{X}=90.56$) compared to those without ($\bar{X}=85.61$) ($p=0.014$). This suggests that having an acquaintance/relative/student with special needs reduces teachers' anxiety levels and positively affects

their perception of inclusion competency. (Table 5). Table 6 analyzes whether teachers' feelings, attitudes, anxiety, and inclusive teacher competency scores differ based on their graduation status (undergraduate, graduate, doctorate). No significant differences were found based on graduation status for feelings ($F=0.522$, $p=0.594$), attitude ($F=0.172$, $p=0.842$), and anxiety ($F=0.615$, $p=0.541$). Similarly, no significant difference was observed among graduation statuses in terms of inclusive teacher competency ($F=0.427$, $p=0.653$). These findings indicate that graduation status has no significant effect on these variables. (Table 6).

In Table 7, the relationship between Emotion, Attitude, Anxiety, and Competence scales were analyzed using the Pearson Correlation test. Accordingly, a moderate, positive, and significant relationship was found between Attitude and Competence ($r = 0.290$, $p<0.01$). No significant relationship was found between the Emotion and Anxiety variables and Competence. (Table 7).

Table 5. T-test results of scale scores according to the presence of an acquaintance/relative/student with special needs.

Scales	Having an Acquaintance/Relative/Student with Special Needs	N	\bar{X}	S.D.	t	P
Emotion	Yes	142	10.20	2.91	-1.823	0.69
	No	114	10.86	2.87		
Attitude	Yes	142	13.00	3.26	-0.086	0.931
	No	114	13.03	3.20		
Anxiety	Yes	142	11.40	3.14	-2.196	0.029
	No	114	12.23	2.86		
Inclusive Teacher Competency	Yes	142	90.55	15.31	2.466	0.014
	No	114	85.61	16.67		

$p<0.05$, \bar{X} : Mean, S.D.: Standard deviation.

Table 6. One-way ANOVA results of mean scale scores according to graduation status.

Scales	Graduation Status	N	\bar{X}	S.D.	F	p
Emotion	Undergraduate	218	10.48	2.90	0.522	0.594
	Graduate	30	10.33	3.05		
	Doctorate	8	11.50	2.56		
Attitude	Undergraduate	218	12.96	3.24	0.172	0.842
	Graduate	30	13.33	3.36		
	Doctorate	8	13.12	2.64		
Anxiety	Undergraduate	218	11.74	3.05	0.111	0.895
	Graduate	30	11.83	3.11		
	Doctorate	8	12.25	2.96		
Inclusive Teacher Competency	Undergraduate	218	87.82	16.37	0.853	0.427
	Graduate	30	90.93	14.83		
	Doctorate	8	88.35	12.21		

$p < 0.05$, \bar{X} : Mean, S.D.: Standard deviation

Table 7. Correlation between Emotion, Attitude, Anxiety, and Competence.

		Teacher Competency
Emotion	r	-0.099
	p	0.114
Attitude	r	*0.290**
	p	<0.001
Anxiety	r	-0.118
	p	0.058

** $p < 0.01$

The multiple linear regression analysis results in Table 8 show that the regression model is statistically significant ($F=10.348$; $p < 0.001$). According to the standardized regression coefficient (β), the relative importance of the predictor variables on teacher competence is Emotion, Attitude, and Anxiety, respectively. Examination of the t-test results for the regression coefficients of the independent variables revealed that the Attitude variable ($\beta=0.311$; $t=5.186$; $p < 0.001$) has a significant and positive effect on teacher competence, while the Anxiety variable ($\beta=-0.103$; $t=-1.264$; $p=0.207$) and the Emotion variable ($\beta=-0.073$; $t=-0.891$; $p=0.374$) do not have a significant effect on teacher competence. These variables explain 10% of the total variance in the dependent variable ($R^2=0.110$). (Table 8).

DISCUSSION

The findings of this study, which examined the levels of emotion, attitude, anxiety, and competence of physical education and sports teachers in inclusive practices, were interpreted by comparing them with similar studies in the literature.

The research findings indicate that teachers received the lowest mean score on the emotion dimension and the highest mean score on the attitude dimension of

the emotion, attitude, and anxiety scales. This suggests that physical education and sports teachers have a positive attitude towards inclusion practices but may need support in the emotional dimension. The high attitude score indicates that teachers exhibit a positive stance on inclusive education (Orel, Zerey, and Töret, 2004), while the low score on the emotion dimension may indicate a need for more awareness and training in this area (Keskinçiliç and Yılmaz, 2023). This finding is consistent with the results of studies in the literature that emphasize the impact of teacher attitudes on inclusive practices (Metin, 2015; Mindivanlı Akdoğan, Koçak, and Subaşı, 2017; Sart et al., 2004; Smith 2001).

Physical education and sports teachers received the highest mean score on the collaboration competence dimension and the lowest mean score on the classroom management competence dimension of the inclusion competence scale. The collaboration dimension reveals teachers' ability to establish effective dialogue and collaborate with students and other partners in the inclusion process (Akay, 2011; Foster and Cue, 2009). The high score on this dimension may be due to teachers feeling competent in situations requiring collaboration. On the other hand, the low score on the classroom management competence dimension may indicate that teachers need more support in managing students with diverse needs in the classroom. The literature emphasizes the significant impact of classroom management skills in the inclusive education process and the need to develop these skills (Başkurt, 2024; Marzano, Marzano, and Pickering, 2003; Soodak, 2003).

Analyses conducted based on the gender variable in the study revealed no significant difference in emotion and attitude scores, while male physical education teachers scored higher on the anxiety sub-dimension compared to female physical education teachers. This situation may stem from male teachers' lack of experience with inclusion or societal expectations. When examining studies in the literature, Bayar and Üstün (2017) examined the

emotional and attitudinal levels of 502 teachers towards inclusion in terms of gender during the 2015-2016 academic year and found no significant difference, while they found a significant difference between anxiety levels and the gender variable, but this difference was in favor of female teachers. Similarly, Akdemir et al. (2022) stated that female teachers have higher anxiety levels than male teachers based on the gender variable. However, there was no

significant difference between genders in terms of teacher competence in inclusive education. Similar studies in the literature have shown no significant difference between genders in terms of teacher competence in inclusive education (Dağlar, 2011; Güteryüz, 2014; Hofman & Kilimo, 2014; Şahbaz and Kalay, 2010). This might be attributed to the similar levels of education and experience of female and male physical education teachers.

Table 8. Regression Analysis Results of the Effect of Emotion, Attitude, and Anxiety on Teacher Competence.

Variables	B	SE	β	t	p
Constant	78.780	5.250		15.006	<0.001
Emotion	-0.401	0.450	-0.073	-0.891	0.374
Attitude	1.549	0.299	0.311	5.186	<0.001
Anxiety	-0.541	0.428	-0.103	-1.264	0.207
R=0.331 R ² adj=0.099 F=10.348 p<0.001					

B: Unstandardized Coefficients Beta, SE: Standard Error, β : Standardized Beta, F: ANOVA, R²: R Square.

Upon examining the status of physical education and sports teachers who have a relative, close friend, or student with special needs, no significant difference was found in terms of emotion and attitude scores, but anxiety scores were found to be lower in this group. Furthermore, these teachers also had higher inclusion competency scores. The reason for the lower anxiety scores might be that these teachers have more opportunities for confidence and experience in interacting with individuals with special needs (Püllü et al., 2024). In addition, it is likely that teachers with inclusion experience approach the process with inclusion students more positively and demonstrate better competence in this practice (Önder, 2007). Literature reviews also emphasize that teachers who have a relative, close friend, or student with special needs have lower anxiety levels and higher competency levels regarding inclusion education (Camadan, 2012; Dağlar, 2011; Dolapçı, 2013; Sari and Bozgeyikli, 2002).

In the analyses conducted according to the graduation status variable, no significant difference was found in emotion, attitude, anxiety, and competency levels. This suggests that graduation status does not have a significant effect on teachers' perceptions of inclusion practices. Similarly, Toy (2015) found no significant difference in teachers' inclusion competencies in terms of educational status. However, Sali-Bilgiç (2011), in her research with psychological counselors, found that primary school psychological counselors who graduated from faculty had significantly higher self-efficacy beliefs in psychological counseling than those with postgraduate education. These differences may stem from variations in factors (teachers' personal experiences, professional attitudes, practical skills, etc.) influencing the relationship between teachers'

graduation status and their inclusion education competencies.

The research findings indicated a positive, moderate, and significant relationship between attitude and competency, but no significant relationship between emotion and anxiety variables and competency. A review of the literature revealed that Emam and Mohamed (2011), in their study examining the relationship between teachers' competencies and their attitudes towards inclusion education, found a significant relationship between competency and attitudes towards inclusion education. Similarly, Girgin (2019) found a significant relationship between teachers' perceived competency and their attitudes towards inclusion education. Consistent with the literature, the findings indicate that teachers' attitudes and competencies play a significant role in the development of their inclusion practices.

Another finding from the research revealed that the attitude variable plays a decisive role in teacher competency and explains 11% of the variance in competency levels. However, the relationship between teacher competency and anxiety and emotion variables was not found to be significant. These results suggest that attitude is an important factor in increasing teacher competency. Findings supporting the study were found when the literature was reviewed (Aküzüm and Akbulut, 2021; Özokçu, 2018; Sağın and Karadaş, 2023; Şahan, 2019). In this regard, the study's findings indicate that developing positive attitudes towards inclusion education among teachers can strengthen their perception of competence and enable them to implement more effective educational practices.

CONCLUSION

In conclusion, this study examined the attitudes, emotions, anxieties, and competency levels of

physical education and sports teachers towards inclusion education and revealed the relationship between these variables. The findings indicate that teachers have high attitudes towards inclusion practices, and this attitude plays a decisive role on competency. However, it was found that emotion and anxiety variables did not show a significant relationship with competency. Teachers' collaborative competency was found to be high, while classroom management competency was lower, indicating that they need support, especially in classroom management, in inclusion practices. While factors such as gender and having a relative, close friend, or student with special needs influenced teachers' anxiety levels, graduation status did not have a significant effect on these variables. In this context, strengthening teachers' positive attitudes and developing their classroom management skills can contribute to more effective outcomes in inclusion education. Future research could investigate intervention programs focused on developing special education and classroom management skills to enhance teachers' competencies in inclusive education. In addition, more in-depth studies on the psychological and socio-cultural factors affecting teachers' anxiety levels could contribute to the development of more effective approaches in inclusion education.

Acknowledgement

None.

Conflict of Interest

The author declares no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

Author Contributions

Plan, design: ZA; **Material, methods and data collection:** AHS; **Data analysis and comments:** ST; **Writing and corrections:** L-GT.

Funding

None.

Ethical Approval

Institution: Balıkesir University Social and Humanities Research Ethics Committee

Date: 30.12.2024

Approval no: E-19928322-050.04-471588

REFERENCES

Akay, E. (2011). Kaynaştırma ortamındaki işitme engelli ilköğretim öğrencilerine sunulan destek eğitim odası sürecinin incelenmesi. Yayınlanmamış yüksek lisans tezi. Anadolu Üniversitesi, Eğitim Bilimleri Enstitüsü, Eskişehir.

Akçamete, G. (2010). Özel gereksinimli çocuklar ve özel eğitim. Ankara: Kök Yayıncılık.

Akdemir, B., Çapar, E. & Bayraktar, M. (2022). İlkokul öğretmenlerinin kaynaştırma uygulamasına

ilişkin tutumları ve yeterlilik algıları: Bir karma yöntem araştırması. *Trakya Eğitim Dergisi*, 12(2), 1036-1056.

<https://doi.org/10.24315/tred.953616>

- Akdenk, M., Ağaoglu, S. A., & İmamoğlu, O. (1997). Türkiye'de Engelliler İçin Uygulamalı Spor Eğitimi Modeli. Antalya Uluslararası Engellilerde Spor Eğitim Sempozyumu, (179-191), Antalya.
- Aküzüm, C., & Akbulut, E. (2021). Sınıf öğretmenlerinin öz yeterlilik algıları ile kaynaştırma eğitimine yönelik tutumları arasındaki ilişkinin değerlendirilmesi. *Dicle Üniversitesi Ziya Gökalp Eğitim Fakültesi Dergisi*, (39), 74-91. <http://dx.doi.org/10.14582/DUZGEF.2021.167>
- 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>
- Başkurt, E. A. İ. (2024). Kaynaştırma Sınıflarında Sınıf Yönetimi. *Social Sciences Studies Journal*, 4(23), 4295-4305. <https://dx.doi.org/10.26449/sss.j.874>
- Bayar, A. (2015). Kaynaştırma uygulamalarında öğretmen yeterliği ölçeğinin Türkçeye uyarlama, geçerlik ve güvenilirlik çalışması. *Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi*, 16, 71-85.
- Bayar, A., Özaşkın, A.G. ve Bardak, Ş. (2015). Kaynaştırma eğitimi ile ilgili duygular, tutumlar ve kaygılar ölçeğinin Türkçeye uyarlama, geçerlik ve güvenilirlik çalışması. *International Periodical For The Languages, Literature and History of Turkish or Turkic*, 10(3), 175-186. doi: <http://dx.doi.org/10.7827/TurkishStudies.7556>
- Bayar, M., & Üstün, A. (2017). İlkokullarda görev yapmakta olan öğretmenlerin kaynaştırma eğitimine ilişkin duygu, tutum ve kaygılarının değerlendirilmesi. *Electronic Turkish Studies*, 12(17). <http://dx.doi.org/10.7827/TurkishStudies.11872>
- Büyüköztürk, Ş., Akgün, Ö. E., Demirel, F., Karadeniz, Ş. ve Çakmak, E. K. (2015). Bilimsel araştırma yöntemleri. (23. Baskı). Ankara: Pegem Akademi.
- Camadan, F. (2012). Sınıf öğretmenleri ve sınıf öğretmeni adaylarının kaynaştırma eğitimine ve bep hazırlamaya ilişkin öz-yeterliliklerinin belirlenmesi. rize üniversitesi, eğitim fakültesi eğitim bilimleri bölümü, *Elektronik Sosyal Bilimler Dergisi*, 11(39), S.128-138.
- Dağlar, G. (2011). Okulöncesi Öğretmenlerinin ve Okulöncesi Öğretmen Adaylarının Kaynaştırmaya İlişkin Görüşlerinin Karşılaştırılması. Yüksek Lisans Tezi. Mehmet Akif Ersoy Üniversitesi Sosyal Eğitim Bilimleri Enstitüsü. Burdur.
- Danyoli, A. (2019). Okul öncesi öğretmen adaylarının kaynaştırmaya yönelik tutumlarının incelenmesi. Yüksek Lisans Tezi, Trakya Üniversitesi, Sosyal Bilimler Enstitüsü, Edirne.
- Dolapçı, S., & Demirtaş, V. Y. (2016). Öğretmen adaylarının öz-yeterlilik algıları ve kaynaştırma eğitimine bakış açıları. *Batı Anadolu Eğitim Bilimleri Dergisi*, 7(13), 141-160.
- Emam, M. M., & Mohamed, A. H. H. (2011). Preschool and primary school teachers' attitudes towards inclusive education in Egypt: the role of

- experience and self efficacy. *Procedia Social and Behavioral Sciences*, 29, 976-985. <http://dx.doi.org/10.1016/j.sbspro.2011.11.331>
- Erbaş, M. K. (2019). Beden eğitimi öğretmenlerinin kaynaştırma eğitimi sürecine ilişkin yeterlilik algıları. *Eğitimde Kuram ve Uygulama*, 15(1), 45-58.
- Fitzgerald, H. & Stride, A. (2012). Stories about physical education from young people with disabilities. *International Journal of Disability. Development and Education*, 59(3), 283-293. <https://doi.org/10.1080/1034912X.2012.697743>
- Forlin, C., Earle, C., Loreman, T., & Sharma, U. (2011). The sentiments, attitudes, and concerns about inclusive education revised (SACIE-R) scale for measuring pre-service teachers' perceptions about inclusion. *Exceptionality education international*, 21(3). <https://doi.org/10.5206/eei.v21i3.7682>
- Foster, S. ve Cue, K. (2009). Roles and responsibilities of itinerant specialist teachers of deaf and hard of hearing students. *American Annals of The Deaf*, 153(5), 435-449. <https://doi.org/10.1353/aad.0.0068>
- Girgin, U. İ. (2019). Sınıf öğretmenlerinin ve sınıf öğretmeni adaylarının kaynaştırma eğitimi yeterliliklerinin incelenmesi. Yüksek Lisans Tezi, Marmara Üniversitesi, İstanbul.
- Güleryüz, B. (2014). Sınıf öğretmenlerinin ve sınıf öğretmeni adaylarının kaynaştırma eğitimine ilişkin görüşlerinin belirlenmesi. Yüksek Lisans Tezi. Bülent Ecevit Üniversitesi, Sosyal Bilimler Enstitüsü, Zonguldak.
- Hofman, R. H., & Kilimo, J. S. (2014). Teachers' attitudes and self-efficacy towards inclusion of pupils with disabilities in Tanzanian schools. *Journal of Education and Training*, 1(2), 177-198. <https://doi.org/10.5296/jet.v1i2.5760>
- Hutzler, Y., ve Zach, S. (2013). Physical education and sport for individuals with disabilities: A review. *European Journal of Adapted Physical Activity*, 6(2), 26-41.
- Ismailos, L., Gallagher, T., Bennett, S., & Li, X. (2022). Pre-service and in-service teachers' attitudes and self-efficacy beliefs with regards to inclusive education. *International Journal of Inclusive Education*, 26(2), 175-191. <https://doi.org/10.1080/13603116.2019.1642402>
- Keskinkılıç, K., & Yılmaz, A. (2023) Beden Eğitimi ve Spor ile Özel Eğitim Bölümü Öğretmen Adaylarının Özel Gereksinimli Bireylere Yönelik Duygusal Mesafelerinin İncelenmesi. *Akdeniz Spor Bilimleri Dergisi*, 6(1-Cumhuriyet'in 100. Yılı Özel Sayısı), 320-334. <https://doi.org/10.38021/asbid.1298002>
- Lindsay, G. (2007). Inclusive education: A critical analysis of the role of teachers in promoting inclusion. *Journal of Research in Special Educational Needs*, 7(1), 22-31. <https://doi.org/10.1111/1467-8527.00275>
- Marzano, R. J., Marzano, J. S., & Pickering, D. J. (2003). Classroom management that works: Research-based strategies for every teacher. Virginia: ASCD
- Metin, N. (2015). Kaynaştırma. N. Baykoç (Ed.). Özel Gereksinimli Çocuklar ve Özel Eğitim İçinde (3. baskı, s. 89-103). Ankara: Eğiten Kitap.
- Mindivanlı Akdoğan, E., Koçak, G. ve Subaşı, M. (2017). Özel yetenekli çocukların belirlenmesinde okul öncesi öğretmenlerinin görüşleri. *Eğitim ve İnsani Bilimler Dergisi*, 8(16), 2-22.
- Orel, A., Zerey, Z. ve Töret, G. (2004). Sınıf öğretmeni adaylarının kaynaştırmaya yönelik tutumlarının incelenmesi. *Ankara Üniversitesi Eğitim Fakültesi Özel Eğitim Dergisi*, 5 (1), 23-33.
- Önder, M. (2007). Sınıf Öğretmenlerinin Zihin Engelli Kaynaştırma Öğrencileri İçin Sınıf İçinde Yaptıkları Öğretimsel Uygulamaların Belirlenmesi. Yüksek Lisans Tezi. Abant İzzet Baysal Üniversitesi, Sosyal Bilimler Enstitüsü, Bolu.
- Özokcu, O. (2018). The relationship between teacher attitude and self-efficacy for inclusive practices in Turkey. *Journal of Education and Training Studies*, 6(3), 6-12. <https://doi.org/10.11114/jets.v6i3.3034>
- Püllü, O., Yelboğa, E., Göde, H. İ., Bekar, H., & Yakut, Ö. (2024). Otistik Öğrencilerin Eğitiminde Alan Dışı Görevlendirilen Öğretmenlerin Yaşadıkları Sorunlar ve Mesleki Yeterliliklerine Yönelik Görüşlerin İncelenmesi. *Balkan & Near Eastern Journal of Social Sciences*, 10(2).
- Roth, K., & Kearny, M. (2017). Inclusive physical education: The role of teacher beliefs and self-efficacy in creating inclusive environments. *Adapted Physical Activity Quarterly*, 34(1), 78-91. <https://doi.org/10.1123/apaq.2016-0010>
- Sağın, A. E., & Karadaş, C. (2023). The prediction of physical education teachers' sentiments, attitudes, and concerns about inclusion by their efficacy for inclusive practices. *Inonu University Journal of the Faculty of Education*, 24(1), 489-507. <https://doi.org/10.17679/inuefd.1242586>
- Sali-Bilgiç, H. (2011). Rehber Öğretmenlerin (Psikolojik Danışmanların) Öz Yeterlilikleri. Yüksek Lisans Tezi, Selçuk Üniversitesi, Eğitim Bilimleri Enstitüsü, Konya.
- Sarı, H., ve Bozgeyikli, H. (2002). Öğretmen Adaylarının Özel Eğitime Yönelik Tutumlarının İncelenmesi: Karşılaştırmalı Bir Araştırma. XII. Ulusal Özel Eğitim Kongresi. Ankara Üniversitesi Eğitim Bilimleri Fakültesi Yayınları. 193:57-80
- Sart, Z.H., Ala, H., Yazlık, Ö. ve Yılmaz, F.K. (2004). Türkiye Kaynaştırma Eğitiminde Nerede?: Eğitime Öneriler. XIII. Ulusal Eğitim Bilimleri Kurultayı. Malatya.
- Sharma, U., Loreman, T., & Forlin, C. (2011). Measuring Teacher Efficacy to Implement Inclusive Practices. *Journal of Research in Special Educational Needs*, <https://doi.org/10.1111/j.1471-3802.2011.01200.x>
- Singh, J. D. (2016). Inclusive education in India—concept, need and challenges. *Scholarly Research Journal for Humanity Science and English Language*, 3(13), 3222-3232.
- Smith, T. &. (2001). Teaching students with special needs inclusive settings. Boston: Allyn & Bacon.
- Soodak, L. C. (2003). Classroom management in inclusive classrooms. *Theory into Practice*, 42(4), 327-333. https://doi.org/10.1207/s15430421tip4204_10
- Şahan, S. (2019). Rehber Öğretmenlerin Özel Eğitime İlişkin Öz Yeterlilik Algıları ile Kaynaştırma Eğitimine Yönelik Tutumlarının

- Karşılaştırılması, Yüksek Lisans Tezi, Necmettin Erbakan Üniversitesi, Eğitim Bilimleri Enstitüsü, Konya.
- Şahbaz, Ü. & Kalay, G. (2010). Okulöncesi Eğitimi Öğretmen Adaylarının Kaynaştırmaya İlişkin Görüşlerinin Belirlenmesi. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi*, 19:116-135.
- Tabachnick, B. G., & Fidell, L. S. (2013). Using multivariate statistics. United States: Pearson Education
- Toy, S. N. (2015). Sınıf öğretmenlerinin öğretmen öz yeterlikleri ile kaynaştırma eğitime ilişkin yeterlik inançlarının karşılaştırılması, Yüksek Lisans Tezi, Pamukkale Üniversitesi Eğitim Bilimleri Enstitüsü, Denizli.
- Yetiştirme ve Özel Eğitim Müdürlüğü, (2006). Öğretmenlik mesleği genel yeterlikleri. T.C. Millî Eğitim Bakanlığı.
<http://oyegm.meb.gov.tr/yet/index.htm>
- Yılmaz, E. ve Melekoğlu M. A. (2018). Kaynaştırma eğitiminin yasa ve uygulamalardaki durumunun Türkiye ve Avrupa bağlamında değerlendirilmesi. *Osmangazi Journal of Educational Research*, 5 (1), 1-17.