

University Students' Attitudes Towards Their Peers with Special Needs

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ORIGINAL ARTICLE

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Abstract

In this study, it was aimed to determine the level of university students' attitudes towards their peers with special needs and the thoughts in the formation of these attitudes with metaphors. The participants of the research were determined by the easily accessible case sampling method. In this direction, a total of 113 students studying at Bandırma Onyedli Eylül University Faculty of Sport Sciences and different faculties constitute the study group of the research. However, the responses of 16 students who participated in the research were not evaluated because the statements in the form were left blank. Convergent parallel design from mixed method research was used as the research design. In the research, "Multidimensional Attitude Scale towards Disabled People" was used to collect quantitative data. The quantitative data obtained in the study were analysed using SPSS software. The qualitative data of the study were analysed by content analysis method. Accordingly, four stages were followed in content analysis. Coding of data, finding themes, organisation of codes and themes, interpretation of findings. In the quantitative findings, it was determined that there was a significant difference in the total attitude score and thought sub-dimension of the scale according to the gender variable. According to the total attitude score of the scale, university students' attitudes towards their peers with special needs were found to be positive. Considering the qualitative findings, the metaphors produced by university students were categorised under 4 themes. These categories were determined as "Equality", "Successful/Struggling", "Empathy/Support", "Accessibility/Opportunities". In conclusion, positive attitude scores showed a parallel result with the findings in the metaphor analysis.

Keywords: University Student, Peer with special needs, Attitude, Inclusive education

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Üniversite Öğrencilerinin Özel Gereksinimli Akranlarına İlişkin Tutumları

Özet

Bu araştırmada, üniversite öğrencilerinin özel gereksinimli akranlarına yönelik tutumlarının düzeyi ile bu tutumların oluşmasındaki düşüncelerin metaforlarla belirlenmesi amaçlanmıştır. Araştırmanın katılımcıları kolay ulaşılabilir durum örnekleme yöntemi ile belirlenmiştir. Bu doğrultusunda Bandırma Onyedli Eylül Üniversitesi spor bilimleri fakültesinde ve farklı fakültelerde okuyan toplam 113 öğrenci araştırmanın çalışma grubunu oluşturmaktadır. Ancak araştırmaya katılan 16 öğrencinin yanıtları formdaki ifadelerin boş bırakılması sebebiyle değerlendirmeye alınmamıştır. Araştırma desen olarak karma yöntem araştırmalarından, yakınsayan paralel desen kullanılmıştır. Araştırmada "Engellilere Yönelik Çok Boyutlu Tutum Ölçeği" nicel verileri toplamak için kullanılmıştır. Araştırmada elde edilen nicel veriler SPSS programı kullanılarak analiz edilmiştir. Araştırmanın nitel verileri ise içerik analizi yöntemi ile analiz edilmiştir. Buna göre içerik analizinde dört aşama takip edilmiştir. Verilerin kodlanması, temaların bulunması, kodların ve temaların düzenlenmesi, bulguların yorumlanması. Nicel bulgularda ölçeğin toplam tutum puanında ve düşünce alt boyutunda cinsiyet değişkenine göre anlamlı farklılık olduğu belirlenmiştir. Ölçeğin toplam tutum puanına göre üniversite öğrencilerinin özel gereksinimli akranlarına yönelik tutumlarının olumlu olduğu bulunmuştur. Nitel bulgulara bakıldığında üniversite öğrencilerinin ürettikleri metaforlar 4 tema altında kategorileştirilmiştir. Bu kategoriler "Eşitlik", "Başarılı / Mücadeleci", "Empati / Destek", "Erişilebilirlik / İmkanlar" olarak belirlenmiştir. Sonuç olarak, olumlu tutum puanları, metafor analizindeki bulgularla paralel bir sonuç göstermiştir.

Anahtar kelimeler: Üniversite Öğrencisi, Özel gereksinimli Akran, Tutum, Kapsayıcı Eğitim

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Introduction

It is critical to examine university students' attitudes toward disabilities to address issues of equity, acceptance, and inclusion of students with special needs (Freer, 2020). School-aged students with special needs appear to have difficulty forming friendships with peers in school (Avramidis, 2013; Petry, 2018). Studies in the literature suggest that attitude is the root cause of this problem (de Boer et al., 2013; Vignes et al., 2009).

According to the Regulation on Special Educational Services, a person with special needs is defined as "a person who differs from peers in his or her individual development and educational needs" (Ministry of National Education, 2021). Studies show that forming positive attitudes is important for integrating people with special needs into society as a productive part of society. Therefore, negative attitudes are found to create a second barrier in addition to a pre-existing disability (Özyurek, 2013; Şahin and Bekir, 2016; Buell et al., 1999).

In this direction, it can be considered that it is important to create equal and adequate opportunities in education and training environments for people with special needs so that they can continue their lives actively in society. Therefore, inclusive educational environments are needed to support both the best learning environments and peer relationships for people with special needs (Chhabra et al., 2018; Cavkaytar and Eripek, 2003; Gözün and Yıkmış, 2004). Negative attitudes toward disability, however, also threaten the very essence of inclusive education. While inclusion used to mean that students with special education needs were taught in the same classroom as their peers, it is now understood as a philosophy that all students should feel welcome and part of their class (Specht and Bennett, 2013). Therefore, the role of peers in the social acceptance of students with special needs in society is very important. In this direction, studies on the positive development of attitudes toward people with special needs are noteworthy in the literature (Şahin and Güldenoglu, 2013).

In examining the literature, the level of attitudes of teachers, prospective teachers, and students (Szumski et al., 2020; Bogart et al., 2019; Hutzler et al., 2019; Yaralı, 2016; Bek et al., 2009) and the variables that influence these attitudes seem to be the subjects of the studies (Yaralı, 2015; Şahbaz and Kalay, 2010; Bek et al., 2009; Obrusnikova, 2008; Block and Obrusnikova, 2007). However, there are no studies that examine the thoughts of university students regarding the formation of positive or negative attitudes toward peers with special needs. The purpose of this study was to determine the level of university students' attitudes toward peers with special needs and their thoughts in forming these attitudes through metaphors. Therefore, the attitudes of university students toward peers with special needs in the same educational settings can make an important contribution to inclusive education and future research in this area.

Materials and Methods

Information on the research design, research group, data collection tools, and data analysis will be provided in this section.

Model of the Research

The study used a convergent parallel design, which is one of the mixed methods studies. The purpose of this design is to "collect data on the same topic using different methods but complementing each other." This design is used to explain qualitative findings with quantitative findings by combining quantitative and qualitative findings to explain a phenomenon (Creswell and Plano Clark, 2011). In convergent design, three steps were followed. These are: a) the researcher collects quantitative and qualitative data by the topic, b) the researcher analyzes the data separately using quantitative and qualitative analysis techniques, c) the researcher interprets in which cases the two results merge and diverge, relate to each other, or combine to interpret them by the overall purpose of the study (Creswell and Plano Clark, 2011).

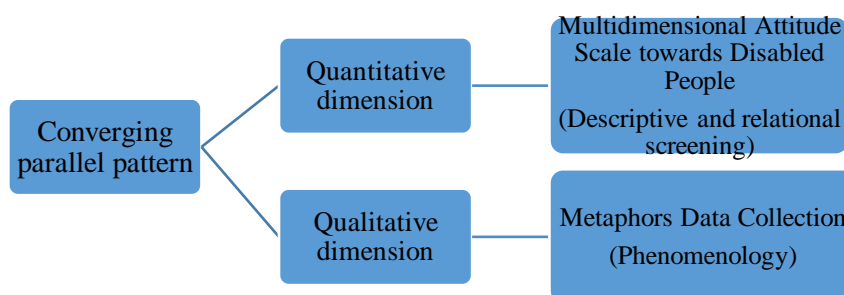


Figure 1. Schematic representation of the research method (Baştuğ ve Servi, 2021)

Research Group

The participants were determined by the convenience sampling method. In this method, the sample group that is easy to access and close is selected. It is the most widely used sampling strategy in both qualitative and quantitative studies (Suri, 2011) because it provides speed and practicality to the research (Yıldırım & Şimşek, 2016). The quantitative and qualitative data of the study were collected from 113 students studying at Bandırma Onyedi Eylül University. However, the responses of 16 students who participated in the research were not taken into consideration because the expressions in the form were left blank or there was no integrity of meaning. Table 1 shows the demographic characteristics of the participants. Accordingly, the participants are studying in different departments such as physical education and sports teaching, coaching education, physiotherapy, nursing and engineering.

Table 1
Demographic Information of University Students

		N	%
Gender	Female	42	43,3
	Male	55	56,7
Section	Physical Education and Sports Teaching	29	29,9
	Coaching Education	24	24,7
	Other Departments	44	45,4
Class	1	67	69,1
	2	14	14,4
	3	16	16,5
Status of having a relative with a disability	Yes	28	28,9
	No	68	70,1
Status of taking courses on disability	Yes	22	22,7
	No	74	76,3

Data Collection Tools

The quantitative data of the study were collected using the Personal Information Form and the "Multidimensional Attitude Scale Towards People with Disabilities," which was translated into Turkish by Yelpaze and Turkum (2018). The scale consists of 3 factors and 31 items with a 5-point Likert rating (1: Not at all, 5: Very much). These factors consist of the subdimensions "emotions (14 items)," "thoughts (9 items)," and "behavior (8 items)." Cronbach's alpha values were obtained for the entire scale (0.90), emotion (0.88), thought (0.89), and behavior (0.84) subdimensions. The score achievable with the scale varied from 31 to 155, so the scale has high validity and reliability.

The qualitative data of the study were collected using metaphors. Participants were asked to write the sentence " When I see a peer who is a university student with special needs, I am, because" on the scale form.

Analysis of Data

Analysis of quantitative data

The quantitative data obtained in the study were analysed using SPSS 25.0 software. In the reliability analysis of the scale, Cronbach's alpha coefficient was calculated as .84. As a result of the normality test, the scale value was found to have a normal distribution and a homogeneous structure. In the analysis of whether there is a difference in the scale value according to demographic variables, the t-test was used for variables with two groups, and the one-way ANOVA test was used for variables with three or more groups ($p < 0.05$).

Table 2
Reliability and Normality Test of the Scale

	N	X	SS	Coefficient reliability	of	Kolmogorov-Smirnov	
Multidimensional attitudes towards people with disabilities Scale	97	114	15,2	,84	statistics	Sd	P
						0,69	97

Analysis of qualitative data

In the study, qualitative data were analysed by content analysis method. The aim of this method is to reach appropriate concepts and relationships to explain the data obtained. In content analysis, data are analysed in four stages (Yıldırım & Şimşek, 2016):

1. Coding of the data: After analysing the obtained data, they were divided into important sections. Then, the conceptual meaning of each section was tried to be determined. These sections may sometimes contain a word, sentence or paragraph, and sometimes a page of data. The researcher named these sections that formed a meaningful part in themselves (Neuman, 2012).
2. Finding Themes: At this point, themes that can explain the data at a general level and categorise the codes into certain categories were found by using the codes that emerged. For this, the codes were first brought together, compared and similarities were found. This is also a type of thematic coding (Yıldırım & Şimşek, 2016).
3. Organisation of Data According to Codes and Themes: At this stage, the data are organised to define and interpret the data. It is very important to present the data in a clear and understandable way (Yıldırım & Şimşek, 2016).
4. Interpretation of Findings: In this last stage, explanations were made about giving meaning to the collected data, establishing cause-effect relationships with the results, drawing some conclusions and the importance of the results (Yıldırım & Şimşek, 2016).

To test the internal consistency of the themes, two researchers evaluated the metaphors separately. The formula for coder reliability proposed by Miles and Huberman (2014), percentage of agreement = agreement / (agreement + disagreement)*100 was used. Accordingly, it is said that this ratio should be 80% or more for the reliability of the research. The calculated percentage for the reliability of the research is 85%. Therefore, it can be said that the coding is reliable. Moreover, the data of each participant were coded as follows: PES 15 (15 numbered students of the physical education department), CDS 10 (10 numbered students of the coaching department), and ODS 4 (4 numbered students of other departments).

Ethics of Research

The decision regarding the ethical suitability of the study was taken at the meeting of Bandırma Onyedi Eylül University Social and Human Sciences Scientific Research and Publication Ethics Commission dated 15.05.2023 and numbered 2023-5. In the method of the article, during the current research, the Directive on Scientific Research and Publication Ethics of Higher Education Institutions was acted within the framework of the Scientific Research and Publication Ethics Directive.

Results

The Quantitative Results

Within the scope of the research, the attitudes of university students were evaluated according to the evaluation criteria for attitudes towards the disabled in Table 3. Accordingly, Table 4 shows students' attitudes towards their peers with special needs.

Table 3

Measures for Assessment of Attitudes Towards People with Disabilities

Expressions	Value	Range of assessment
Very Negative	1	1,00 – 1,80
Negative	2	1,81 – 2,60
Middle	3	2,61 – 3,40
Positive	4	3,41 – 4,20
Very Positive	5	4,21 – 5,00

Table 4

University Students' Attitudes towards Peers with Special Needs

Sub-dimensions	X	SS	Significance
Emotions	3,083	,772	Middle
Reflection	4,39	,568	Very Positive
Behavior	3,97	,859	Positive
Total attitude	3,69	,490	Positive

According to the results of the analysis, university students' attitudes towards their peers with special needs were found to be moderate ($x=3,083$) in the emotion sub-dimension, very positive ($x=4,39$) in the thought sub-dimension, and positive ($x=3,97$) in the behavior sub-dimension. According to the total attitude score of the scale, it can be said that university students' attitudes towards their peers with special needs are positive. The results of the t-test analysis to determine whether the attitudes of university students towards their peers with special needs differ according to gender variable are given in Table 5. Accordingly, a significant difference was found in the thought sub-dimension and total attitude score of the scale ($p<0.05$).

Table 5
Results of Attitude Scores According to Gender Variable

	Variable	N	X	Sd	t	P
Emotion dimension	Female	42	45,33	11,09	1,735	,086
	Male	55	41,52	10,40		
Thought Dimension	Female	42	40,85	3,68	92,173	,018*
	Male	55	38,52	5,81		
Behavior Dimension	Female	42	32,52	6,98	,899	,371
	Male	55	31,25	6,80		
Total attitude score	Female	42	118,71	15,02	2,437	,017*
	Male	55	111,31	14,68		

*p<0,05

When the results of the attitude score in terms of other variables were examined, no significant difference was found in the sub-dimensions and total score of the scale in terms of whether they had taken a course on disabilities, whether they had a relative with a disability, the department and class in which they studied (p<0.05).

The Qualitative Findings

Within the scope of this research, students studying Physical Education and Sports, Coaching Education and different departments (such as Nursing, Engineering, Physiotherapy) produced a total of 81 metaphors towards their peers with special needs. In this direction, it is seen that the participants explained their attitudes towards their peers with special needs mostly with the metaphors "Happy (31)" and "Helpful (28)". The metaphors created by university students towards their peers with special needs were grouped under four different themes. These are "Equality", "Successful/Struggling", "Empathy/Support" and "Accessibility/Opportunities".

Table 6
Expressions under the Theme of Equality

Theme	Category	F	Expressions
EQUALITY	Happy (10) Normal (5) Pleased (1) Natural (1) Neutral (1)	18	CDS 62 "... ..I would be pleased, because everyone has every right. Seeing friends with special needs in my environment makes me realize that we are equal."
			CDS 35 "... I would be happy, because I would be happy that they will be able to complete their undergraduate education like us."
			PES 29 "...I would be happy, because it would make me happy to see that he/she gets the same standard of education as us."
			PES 28 "...I would be neutral, because any attention or indifference I might show him at that moment could make him feel bad. She deserves to be treated like a normal person."
			ODS 19 "...I would be happy, because socializing is everyone's right."
			ODS 38 "...I become normal, because he is no different from us."

The "equality" theme consists of "happy, normal, pleased, natural and neutral" metaphors. It was seen that the students produced the metaphor about being happy (10) the most when they saw their peers with special needs (Table 6). In this theme, physical education students produced 6 metaphors, coaching education students produced 7 metaphors and students from other departments produced 5 metaphors. When the metaphors and explanations of the "equality" theme are examined, it is seen that the students express that their peers with special needs have equal rights to receive education like them at the university. At the same time, it can be said that this idea is based on a rights-based approach, that is, they perceive individuals with special needs as individuals with rights.

Table 7
Expressions under the Theme of Successful / Struggling

Theme	Category	F	Expressions
Successful / Struggling	Happy	19	<i>CDS 61"...I feel happy, because I think they have achieved something great. That they are trying to hold on to life despite these difficulties."</i>
			<i>CDS 78"...I would be happy, because every obstacle is a struggle to succeed."</i>
			<i>ODS 36"...I'm happy because he never gives up despite the conditions."</i>
			<i>ODS 47"...I would be happy, because I see his will and effort as success."</i>
			<i>PES 31"...I'm happy because it makes me happy to see you striving for something instead of keeping to yourself."</i>
			<i>PES 14 "...I'd be happy, because he's following his dreams"</i>
			<i>PES 26" ...I am happy because he has achieved what he wanted to achieve."</i>
<i>PES 25"... I would be happy, because it makes me happy that they continue their lives, that they do not lose hope, that they strive to succeed, that they hold on to life."</i>			

"Successful/struggling" theme consists of the metaphor "happy". It was seen that the students produced a single metaphor about being the most happy (19) when they saw their peers with special needs (Table 7). In this theme, physical education students produced 14 metaphors, coaching education students produced 3 metaphors and students from other departments produced 2 metaphors. When the metaphors and explanations of the " successful/struggling" theme are examined, it is understood that they perceive the fact that their peers with special needs receive education at the university as an indicator of an individual who has succeeded at the end of a difficult struggle.

Table 8
Expressions under the Theme of Empathy / Support

Theme	Category	F	Expressions
EMPATHY / SUPPORT	Helpful(28) Support (2) Gratitude (1) Bad (3) Happy (2) Upset (1) Understanding(2) Beside (2) Responsible(1) Emotional (1) Sensitive (1) Stress (1) Sad (1) Careful (1)	47	CDS 71" ...I help, because one day I might be in his place and even thinking about it makes me feel bad, so I try to help as much as I can."
			CDS 12" ...I help, because he should never feel alone."
			CDS 66" ...I am grateful, because what I have that he doesn't have makes me grateful."
			ODS 7 "....I would be bad, .because I empathize with him"
			ODS 15 "....I would be sensitive because they are special people and I would see if they need help."
			ODS 17 "....I get stressed, because I don't know what to do about whether I can help him or not."
			PES 32 "Because he feels bad about his difference"
			PES 27" ... I empathize, because it can happen to anyone"

The "Empathy/Support" theme consists of the metaphors "helpful, support, gratitude, bad, happy, upset, understanding, beside, responsible, emotional, sensitive, stress, sad, careful". It was observed that the students produced the metaphor that they were most helpful (28) when they saw their peers with special needs (Table 8). In this theme, physical education students produced 6 metaphors, coaching education students produced 11 metaphors and students from other departments produced 30 metaphors. When the metaphors and explanations of the "Empathy/Support" theme are examined, it is understood that university students are seen as individuals who need help when they empathize with their peers with special needs. It can be said that this idea is based on the social model understanding, that is, they perceive individuals with special needs as an individual to be helped.

Table 9
Expressions under the Theme of Accessibility / Opportunities

Theme	Category	F	Expressions
ACCESSIBILITY/ OPPORTUNITIES	Sad (8) Unhappy (3) Bad (2)	13	CDS 72 "...I'd be sad because he can't get what he needs as easily as we can."
			CDS 10 "...I would be unhappy, because I realize that you don't have the same opportunities as us."
			PES 5"... I feel sad because I think of the difficulties he went through in this country."
			ODS 41"... I would be bad because we cannot ensure equality for them in every field."
			ODS 6"... I would be sad because he is being educated in a more difficult situation than me."
			ODS 21 " I'd be unhappy because it's very difficult there are no disability regulations at our school."

The "Accessibility / Opportunities" theme consists of sad, unhappy and bad metaphors. It was observed that students produced the metaphor of sad (8) the most when they saw their peers with special needs (Table 8). In this theme, physical education students produced 2 metaphors, coaching education students produced 2 metaphors and students from other departments produced 8 metaphors. When the metaphors and explanations of the "Accessibility / Opportunities" theme were examined, it was seen that university students stated that their peers with special needs did not have the same opportunities as them, and that the main obstacle was that the environment they lived in was not an accessible environment.

Discussion

In this study, it was aimed to determine the level of university students' attitudes towards their peers with special needs and the thoughts in the formation of these attitudes with metaphors. The findings obtained in this direction showed that university students had a positive attitude in terms of total attitude score. It was concluded that they had very positive attitudes in the thought sub-dimension of the scale, positive attitudes in the behavior sub-dimension and moderate attitudes in the emotion sub-dimension. Looking at the studies in the literature, it is seen that there are studies supporting these results (Shalev et al., 2016; Gaad, 2015; Şahin and Akyol, 2010; Macmillan et al., 2014).

Attitude scores of university students towards their peers with special needs were analyzed in terms of variables such as gender, class, department, having a relative with disabilities, and taking a course on disabilities. Accordingly, it was found that there was a significant difference in total attitude and thought sub-dimension according to the gender variable. As the studies in the literature support this result (Şahin and Bekir, 2016; Culp et al., 2017; Gedik and Toker, 2018; Oliva Ruiz et al., 2020; Olaleye et al., 2020; Schwab, 2017; Sheridan and Scior 2013), fewer studies did not find a significant difference depending on gender (Baştuğ and Servi, 2021; McKay et al., 2019; Magnusson et al., 2017; Olcay and Gül, 2012).

Culp et al. (2017) found that the attitudes of female university students were more positive than male students according to gender variable. In another study, it was found that the attitudes of female university students studying in the departments of nursing and physiotherapy were more positive than male students (Oliva Ruiz et al., 2020).

No significant difference was found according to the students' status of taking a course related to disabilities, having a relative with a disability, the class and department in which they study. There are studies supporting this result in the literature (Özer et al., 2012). Another study found that a course on disability had a limited effect on students' attitudes towards disability (de Boer et al., 2014). Lee

and Shin (2019) found that there was no difference in attitudes between students with and without knowledge about learning disabilities as a type of disability. In contrast to these results, another study found that a course on disability was associated with more positive attitudes towards disability (Al-Kandari, 2015).

In another study, it was found that there was no difference in attitude scores in terms of the variables of having a friend with special needs, the class in which they were educated (Şahin and Bekir, 2016). In their study, Baştuğ and Servi (2021) found that university students did not show a significant difference according to the variable of having a relative with special needs. However, in the same study, a difference was found in the attitudes of university students towards individuals with special needs in terms of the variables of taking a course on disabilities, the type of department they study and the grade level.

When the findings obtained with metaphors within the scope of the research were analyzed, the metaphors were grouped under 4 themes. It was observed that the participants were most concentrated on the theme of "Empathy / Support" and that the metaphor of "helpful" was expressed the most in this theme. Another most developed metaphor was "happy". This metaphor is under the themes of "Successful/ Struggling" and "Equality". The least concentration was observed in the theme of "Accessibility / Opportunities". The metaphors in this theme were identified as "sad, unhappy, bad".

When we look at the studies conducted in the literature, it seems to be in parallel with the findings in our study. Accordingly, in a study conducted on the theme of "special attention and help", it was determined that individuals with special needs need attention and help (Kumaş and Süer, 2020). In another study, it was stated that the metaphors were combined under two themes "In need of attention or care" and "Struggling" (Baştuğ and Servi, 2021). These results in the literature support the "Helpful" metaphor, which is the most repeated metaphor in the "Empathy / Support" theme of the study, and the "Successful/ Struggling" themes.

A study conducted by Symons et al. (2014) revealed that the students who participated in the study felt sorry for individuals with special needs and thought that these individuals needed special treatment. This result supports the "Sad, Unhappy, Bad" metaphors in the "Accessibility / Opportunities" theme of our study. In addition, studies in the literature have found that there is a positive correlation between students who receive education with their peers with special needs (Ottoboni et al. 2017). Therefore, these results support that students with special needs and students with natural development should have opportunities to interact with each other. When students are given more opportunities to interact with each other, prejudices that hinder the development of friendships can be eliminated (Hellmich and Loeper, 2018).

Conclusion and Recommendations

As a result, it can be said that students have positive and expected attitudes towards their peers with special needs. In this direction, the positive attitude scores of university students towards their peers with special needs showed a parallel result with the findings in the metaphor analysis. In other words, the reason for the positive attitude level in the behavior sub-dimension of the scale can be explained by the most common metaphors in the "Empathy / Support" theme. On the other hand, the very positive attitude level in the thought sub-dimension can be explained by the metaphors in the themes of "Successful / Struggling" and "Equality", while the moderate level of attitude in the emotion sub-dimension can be explained by the metaphors in the theme of "Accessibility / Opportunities". There are more negative emotions in this theme compared to other metaphors. Therefore, it is thought to be the reason for the mid-level attitude. In this direction, it can be suggested that this research can be conducted with a larger sample and different groups. In addition, it is suggested to examine the reasons for students' attitudes in depth with open-ended questions.

Ethics Committee Permission Information

Ethics review board: Bandırma Onyedi Eylül University Social and Human Sciences Ethics Committee

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Authors' contributions

The processes related to the introduction, method, findings and discussion parts of the study were carried out by the first author, the processes related to the findings and conclusion parts were carried out by the second author, and the processes related to the method and findings parts were carried out by the third author.

Conflicts of interest

The authors do not declare any conflicts with the research.

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