THE RELATIONSHIPS BETWEEN CURRICULUM RESPONSIBILITY, SCHOOL AUTONOMY AND ACADEMIC ACHIEVEMENT IN TURKEY, FINLAND AND GERMANY: A COMPARATIVE ANALYSIS BASED ON PISA 2022 DATA

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Abstract

This study aims to comparatively examine the relationships between curriculum responsibility, school autonomy and academic achievement in Turkey, Finland and Germany based on PISA 2022 data. The study employed the correlational survey model, one of the quantitative research methods and analyzed the relationships between variables through correlation analysis, while differences between countries were assessed using ANOVA. The sample of the study, derived from the PISA 2022 dataset, consists of 196 schools and school administrators, 322 teachers and 7,250 students from Turkey; 241 schools and school administrators, 434 teachers and 10,239 students from Finland; and 257 schools and school administrators, 400 teachers and 6,116 students from Germany. The findings reveal that Finland achieved the highest academic achievement due to its decentralized and autonomous education system, Germany exhibited intermediate values with its federal structure and Turkey demonstrated the lowest performance due to its centralized structure. According to the correlation analysis, significant relationships were found between curriculum responsibility, school autonomy and academic achievement, with school autonomy showing a stronger relationship with academic achievement. ANOVA results confirmed that the differences between the countries were statistically significant. In conclusion, decentralized education systems enhance academic achievement by granting schools greater autonomy. While Finland's decentralized structure ensures high performance, Turkey's centralized decision-making mechanism leads to lower performance. Germany, on the other hand, achieves positive outcomes by reducing regional disparities through its federal structure. Decentralized systems are more successful compared to centralized ones.

Keywords: Curriculum Responsibility, School Autonomy, Decentralization

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TÜRKİYE, FİNLANDİYA VE ALMANYA'DA EĞİTİM PROGRAMI SORUMLULUĞU, OKUL ÖZ-YÖNETİMİ VE AKADEMİK BAŞARI ARASINDAKİ İLİŞKİLER: PISA 2022 VERİLERİYLE KARŞILAŞTIRMALI BİR ANALİZ

Özet

Bu çalışma, Türkiye, Finlandiya ve Almanya'nın eğitim programı sorumluluğu ve okul öz-yönetimi ile akademik başarı arasındaki ilişkilerini PISA 2022 verileri üzerinden karşılaştırmalı olarak incelemeyi amaçlamaktadır. Araştırmada nicel yöntemlerden ilişkisel tarama modeli kullanılmış ve değişkenler arasındaki ilişkiler korelasyon analiziyle, ülkeler arasındaki farklılıklar ise ANOVA testiyle değerlendirilmiştir. Çalışmanın örneklemi, PISA 2022 veri setinden alınan, Türkiye'den 196 okul ve okul yöneticisi, 322 öğretmen ve 7250 öğrenci; Finlandiya'dan 241 okul ve okul yöneticisi, 434 öğretmen ve 10239 öğrenci; Almanya'dan 257 okul ve okul yöneticisi, 400 öğretmen ve 6116 öğrenciden oluşturmaktadır. Araştırma bulguları, Finlandiya'nın yerelleşmiş ve özerk eğitim sistemi sayesinde en yüksek akademik performansa ulaştığını, Almanya'nın federal yapısıyla orta düzeyde değerlere sahip olduğunu ve Türkiye'nin merkeziyetçi yapısının en düşük performansı sergilediğini ortaya koymuştur. Korelasyon analizine göre, eğitim programı sorumluluğu ve okul öz-yönetimi ile akademik başarı arasında anlamlı ilişkiler bulunmuş, okul öz-yönetiminin akademik başarıyla olan ilişkisinin daha güçlü olduğu belirlenmiştir. ANOVA sonuçları ise ülkeler arasındaki farkların istatistiksel olarak anlamlı olduğunu göstermiştir. Sonuç olarak, yerelleşmiş eğitim sistemleri, okullara daha fazla özgürlük tanıyarak akademik başarıyı artırmaktadır. Finlandiya'nın yerelleşmiş yapısı yüksek performans sağlarken, Türkiye'nin merkezi karar alma mekanizması düşük başarıya yol açmıştır. Almanya ise federal yapısıyla bölgesel farklılıkları azaltarak olumlu sonuçlar elde etmiştir. Yerelleşmiş sistemler, merkeziyetçi yapılara kıyasla daha başarılıdır.

Anahtar kelimeler: Eğitim Programı Sorumluluğu, Okul öz-yönetimi, Yerelleşme

INTRODUCTION

The success of educational systems is directly related not only to student performance but also to the administrative structures of schools, the applicability of curricula and the competencies of teachers (Caldwell & Spinks, 2008; Hanushek & Woessmann, 2011). In educational paradigms, school autonomy and curriculum responsibility are among the critical elements for enhancing educational quality. The impacts of these two concepts significantly contribute not only to the functioning of educational systems but also to the sustainable improvement of student achievements (Leithwood & Menzies, 1998; OECD, 2016).

The variables of curriculum responsibility and school autonomy are at the center of this research due to their potential to create direct and indirect effects on academic achievement. Curriculum responsibility refers to the active roles of teachers and school administrators in the preparation, implementation and evaluation of the curriculum, while school autonomy allows schools to have more decision-making authority in areas such as budget, personnel and curriculum. These two variables can be defined as fundamental factors determining the flexibility and innovativeness levels of educational systems. Academic achievement is not only an individual outcome but also a crucial indicator reflecting the quality of an educational system (Hanushek & Woessmann, 2011). In this context, examining the effects of curriculum responsibility and school autonomy on academic achievement can provide concrete data for improving educational paradigms and making systems more efficient. Comparative analyses conducted through these variables in countries with different management models, such as Turkey, Finland and Germany, which are the focus of this study, have the potential to contribute to understanding the strengths and weaknesses of educational systems. The reasons for including these countries in the research are explained in the following sections.

Bobbitt (1918) defines the curriculum as a series of directed educations that are concerned with all experiences that reveal or do not reveal the abilities of the individual, or that the school carefully completes and tries to develop to reveal the abilities in individuals. In this context, the curriculum is not only about the standards set at the national level but also should be designed to respond to local needs. Teachers and school administrators play a critical role in the preparation, implementation and evaluation of curricula (Fullan, 2007). While teachers directly guide students as the implementers of the curriculum in the classroom, school administrators make strategic decisions supporting the

implementation of the curriculum in line with general objectives (Darling-Hammond, 2010). Therefore, the influence of teachers and administrators on the curriculum stands out as a factor directly determining the success of the curriculum.

The concept of flexibility in curricula is of great importance both for effectively conducting the teaching process and for responding to different student needs (Schleicher, 2018). A flexible curriculum should be adaptable to local conditions and student profiles. For example, in the Finnish education system, teachers and schools are given the freedom to adapt the content of curricula to local needs. This flexibility allows teachers to develop innovative methods and respond more effectively to the individual learning needs of students (Sahlberg, 2015). In contrast, in centralized systems, flexibility is limited, restricting the influence of teachers and administrators on the curriculum (Smith & Brown, 2018).

Curriculum responsibility expresses the authority and responsibilities of schools in the preparation, implementation and evaluation of curricula. In centralized systems, this responsibility is usually taken at the national level, while in localized systems, schools and teachers play a more active role (Smith & Brown, 2018). The literature indicates that localized systems increase the applicability of curricula and positively contribute to academic achievement (Leithwood & Menzies, 1998; Sahlberg, 2015, Nataño, 2023). For example, in countries like Finland, known worldwide for their local autonomy and flexibility practices in education, curriculum responsibility offers schools and teachers broad freedom. This allows for the adoption of innovative approaches in education and the achievement of high academic achievements (Sahlberg, 2015).

School autonomy is a management model where schools have more decision-making authority in matters such as budget, personnel and curriculum. This model allows schools to develop solutions suitable for their needs and offers a flexible structure (Hanushek & Woessmann, 2011; OECD, 2016). Schools with a high level of autonomy can develop more innovative practices, which positively contributes to student performance (Caldwell & Spinks, 2008). For example, a study by Leithwood and Menzies (1998) indicates that student achievement is higher in schools with a high level of autonomy. This finding demonstrates the critical role of localized management models in enhancing educational quality.

The PISA (Programme for International Student Assessment), applied on an international scale to evaluate the performance of educational systems and make comparisons between countries, is an important data source in this

regard. PISA is an assessment program organized every three years by the OECD, measuring the mathematics, science and reading skills of 15-year-old students. This program not only makes it possible to analyze the individual performance of students but also the strengths and weaknesses of educational systems. PISA data provide a concrete guide for countries to develop their educational paradigms and increase student success. Therefore, in this study, using PISA 2022 data, the effects of curriculum responsibility and school autonomy on academic achievement in Turkey, Finland and Germany were examined comparatively. The graph below shows the PISA 2022 results of Turkey, Finland and Germany comparatively.
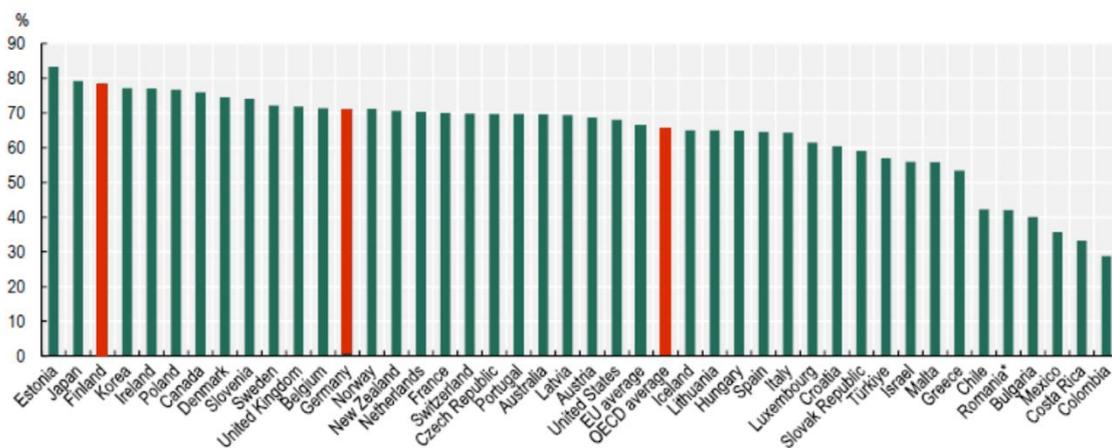

Figure 1. Comparative graph of PISA 2022 academic achievement of countries

Finland stands out as a country recognized worldwide for its local autonomy and flexibility practices in education. Finland's localized structure, which grants broad freedom to teachers and schools, is directly related to high academic achievement (Sahlberg, 2015). Germany, on the other hand, has a federal structure and educational paradigms are shaped at the state level. This creates regional differences in Germany's education system while ensuring that local governments are effective in decision-making processes (Eurydice, 2022). Turkey's education system, however, has a centralized structure. Curricula are determined by the Ministry of National Education (MEB) and schools have limited authority in implementing these programs (MEB, 2023). However, recent reforms aim to provide more flexibility at the local level.

This study aims to comparatively examine the relationships between curriculum responsibility, school autonomy levels and academic achievement in Turkey, Finland and Germany. In this direction, the following research questions were sought:

1. Are there significant differences in the levels of curriculum responsibility and school autonomy in Turkey, Finland and Germany?

2. What is the relationship between curriculum responsibility and school autonomy and academic achievement?

These questions will contribute to a better understanding of the differences between countries and the effects of educational systems on academic achievement. This research provides concrete suggestions for developing educational paradigms by examining the relationships between curriculum responsibility and school autonomy concepts and academic achievement. The comparison of countries with different management models, such as Turkey, Finland and Germany, adds a new dimension to the discussions on decentralization and centralization in education. In this context, it is foreseen that the research results will guide high-level decision-makers, school administrators and teachers.

METHOD

Research Model
In the study, the correlational research model, one of the quantitative research methods, was used. The correlational research model is a research design aiming to determine the relationships between variables (Karasar, 2009). This model is used to examine the relationships between multiple variables and reveal the direction and strength of these relationships. In this study, using the PISA 2022 data set, the relationships between curriculum responsibility, school autonomy and academic achievement variables were examined.

Population and Sample of the Research
The population of the research consists of school administrators, teachers and students working in secondary education level schools in Turkey, Finland and Germany. The sample of the study using the PISA 2022 data set consists of 196 schools and school administrators, 322 teachers and 7250 students from Turkey; 241 schools and school administrators, 434 teachers and 10239 students from Finland; 257 schools and school administrators, 400 teachers and 6116 students from Germany. Information about the sample is summarized in Table 1.

Table 1. Number of countries, schools, school administrators, teachers and students in the research

Country	Number of schools	Number of school administrators	Number of teachers	Number of students
Turkey	196	196	322	7250

Finland	241	241	434	10239
Germany	257	257	400	6116

Data Collection Tools

The data used in the research were obtained from the PISA 2022 database. PISA (Programme for International Student Assessment) is an international assessment program organized every three years by the OECD, measuring the mathematics, science and reading skills of 15-year-old students. PISA provides a comprehensive data set that makes it possible to analyze not only the individual performance of students but also the administrative structures of schools, teaching processes and the effects of educational paradigms. Indicators related to curriculum responsibility and school autonomy were analyzed using PISA 2022 data in the research.

Research data were obtained from surveys applied to school administrators, teachers and students and performance tests of students. Surveys applied to school administrators consist of questions about school management structure, decision-making processes, budget and personnel management and the implementation of curricula. Surveys applied to teachers consist of questions about the implementation of curricula, classroom teaching methods, adaptation to local needs and participation levels in school management processes. Student surveys and performance tests were used to evaluate the effects of learning environments and the administrative structures of schools on student success with academic achievement scores in mathematics, science and reading areas.

The PISA database provides contextual data on countries' educational paradigms, socio-economic conditions and the structure of educational systems. This data has allowed for a better understanding of differences between countries.

Data Analysis

During the data analysis process of the research, the mean and standard deviation values of curriculum responsibility, school autonomy and academic achievement variables by country were revealed with descriptive statistics. The relationships between curriculum responsibility, school autonomy and academic achievement were examined through correlation analysis. ANOVA test was used to determine whether the differences between countries were statistically significant.

FINDINGS

Aligned with the general aim of the research, this section presents findings addressing two research questions. The first question examines: "Are there significant differences in the levels of curriculum responsibility and school autonomy in Turkey, Finland and Germany? To answer this, arithmetic mean and standard deviation scores were calculated based on the indicators from PISA 2022 and the results are displayed in Table 2. Subsequently, variance analysis was conducted to assess whether the differences between the arithmetic means were statistically significant and these results are provided in Table 3.

The second research question explores: "What is the relationship between curriculum responsibility, school autonomy and academic achievement?" To address this, correlation analysis was performed to examine the relationships among the research variables and the findings are presented in Table 4.

Table 2. Arithmetic mean and standard deviation scores of PISA 2022 curriculum responsibility and school autonomy indicators

Country	Curriculum responsibility		School autonomy	
	Arithmetic mean	Sd	Arithmetic mean	Sd
Finland	4.8	0.6	4.5	0.5
Germany	4.2	0.7	3.8	0.6
Turkey	3.2	0.8	2.5	0.7

When Table 2 is examined, it is seen that Finland has the highest arithmetic mean for curriculum responsibility in PISA 2022 (X=4.8), while Germany is in second place (X=4.2). Turkey has the lowest arithmetic mean (X=3.2). Similarly, in school autonomy indicators, Finland has the highest arithmetic mean (X=4.5), Germany is in second place (X=3.8) and Turkey has the lowest arithmetic mean (X=2.5). It is not shown in the table; however, the PISA 2022 reports indicate that, in terms of academic achievement rates, Finland scored 520 (SD = 35), Germany scored 500 (SD = 30), and Turkey scored 450 (SD = 40) in PISA assessments. Since academic achievement scores have already been analyzed, publicly reported, and made available to the public, no further analysis on this matter was deemed necessary. It has been directly taken from the PISA reports and incorporated into the findings.

Table 3. Cross-national comparison of educational responsibility, autonomy and academic achievement

Variable	F Value	p Value	Significant difference (Post-hoc Test)

Curriculum responsibility	45.32	< 0.001	Finland > Germany > Turkey
School autonomy	52.18	< 0.001	Finland > Germany > Turkey
Academic achievement	60.45	< 0.001	Finland > Germany > Turkey

When Table 3 is examined, it is evident that the arithmetic mean scores for curriculum responsibility, school autonomy and academic achievement in Finland, Germany and Turkey in PISA 2022 reveal significant differences. In terms of curriculum responsibility, significant differences were observed among the countries ($F = 45.32$, $p < 0.001$). Post-hoc test results indicate that Finland, with the highest scores, significantly differs from the other two countries. For school autonomy, the differences among countries were also statistically significant ($F = 52.18$, $p < 0.001$). Finland once again stands out significantly compared to Germany and Turkey in this domain.

Similarly, regarding academic achievement, the differences among countries were statistically significant ($F = 60.45$, $p < 0.001$). Finland demonstrates the highest academic achievement among the three countries. The ANOVA test demonstrates that the differences among countries are not only observable but also statistically significant. The results of the Tukey's HSD test conducted to determine the source of the difference showed that the scores of curriculum responsibility and school autonomy in Finland are significantly higher than in Germany and Turkey. Also, Germany's scores are significantly higher than Turkey's.

According to these findings, it is seen that Finland has the highest values in terms of curriculum responsibility and is significantly different from the other two countries. In terms of school autonomy, Finland also significantly differs from other countries. In the dimension of Academic achievement, Finland has the highest academic achievement. Finland's higher values compared to the other two countries support the success of its decentralized education system.

In line with the general aim of the research, to answer the research question "What is the relationship between curriculum responsibility and school autonomy and academic achievement?", the relationships between the research variables, namely curriculum responsibility, school autonomy and academic achievement were examined through correlation analysis and presented in Table 4.

Table 4. Relationships between curriculum responsibility, school autonomy and academic achievement

Variable	Curriculum responsibility	School autonomy	Academic achievement
Curriculum responsibility		0,75*	0,68*
School autonomy	0,75*		0,72*
Academic achievement	0,68*	0,72*	

*P<0,001

When Table 4 is examined, it is determined that there is a significant and high degree of relationship between curriculum responsibility and school autonomy (r = 0.75). It is determined that there is a significant and moderate degree of relationship between curriculum responsibility and academic achievement (r = 0.68) and a significant, high degree of relationship between school autonomy and academic achievement (r = 0.72).

DISCUSSION and CONCLUSION

Three conclusions were reached in the study. First, curriculum responsibility in Finland, Germany and Turkey is significantly different from each other. The findings obtained in this study clearly reveal that curriculum responsibility differs between countries. Finland, with its localized structure, has the highest values in curriculum responsibility and this is interpreted in relation to the country's high academic achievement. Finland's decentralized structure has allowed teachers and schools to develop innovative methods, which has provided positive contributions to students' learning processes.

Germany, on the other hand, can shape its educational paradigms at the state level thanks to its federal structure and this situation positively affects academic achievement by reducing regional differences. Decisions taken at the state level, due to its federal structure, provide flexibility in Germany, while creating differences in some regions. This leads to Germany having moderate values in terms of curriculum responsibility.

In contrast, Turkey's centralized structure limits the roles of schools and teachers in decision-making processes, which causes curricula to not adequately respond to local needs. The centrally determined curricula by the Ministry of National Education (MEB) in Turkey being insufficient to meet the local needs of schools is considered one of the reasons for low academic achievement. Turkey's having the lowest values in this area (3.2 ± 0.8) clearly shows the limiting effect of the centralized structure.

In conclusion, while the applicability of decentralized curricula positively affects student success in Finland and Germany, Turkey's centralized structure limits development in this area. Turkey's orientation towards decentralization by benefiting from successful practices in countries like Finland and Germany could enable curricula to become more effective and innovative.

The second conclusion reached is, school autonomy in Finland, Germany and Turkey is significantly different from each other. The research findings show that school autonomy levels in Finland, Germany and Turkey are significantly different from each other. Finland has the highest values in terms of school autonomy and this is directly related to the country's high academic achievement. Finland's localized structure allows for more freedom in decision-making processes for schools and teachers, encouraging innovative practices. This freedom environment in Finland has increased teachers' motivation and provided positive contributions to students' learning processes.

In Germany, the school autonomy level is at a medium level and this is related to the flexibility provided by the federal structure. Decisions taken at the state level in Germany allow schools to develop solutions suitable for their needs, but also create differences in some regions. This situation shows that although Germany does not reach as high values as Finland in the field of school autonomy, it offers a more flexible system compared to centralized structures.

Turkey, however, has the lowest values in terms of school autonomy. The dominance of the centralized decision-making mechanism shows that schools and teachers have a limited role in decision-making processes. This situation limits the effects of teachers and school administrators in autonomy processes and hinders innovative practices in education. The centralized structure in Turkey is considered one of the reasons for lower academic achievement compared to other countries.

The third conclusion reached is, it can be concluded that there is a significant and strong relationship between curriculum responsibility and school autonomy. This suggests that improvements in curriculum responsibility are likely to be associated with enhancements in school autonomy practices. Additionally, the moderate relationship between curriculum responsibility and academic achievement indicates that while curriculum responsibility plays a role in academic achievement, other factors may also contribute. Furthermore, the strong relationship between school autonomy and academic achievement highlights the importance of effective autonomy practices in achieving high academic outcomes. These results underscore the interconnectedness of these

educational variables and suggest that integrated strategies focusing on both curriculum responsibility and school autonomy could be beneficial in enhancing academic achievement.

When the results obtained from the research are considered together with the studies in the literature, the research conducted by Hanushek and Woessmann (2011) reveals that schools with a high level of autonomy provide significant and positive contributions to student performance. This situation is directly related to Finland's high academic achievement and supports the country's success in decentralization in education. Similarly, studies conducted by Smith and Brown (2018) show that the applicability of decentralized curricula is higher and this situation positively reflects on student success. This finding proves the effectiveness of Germany's educational paradigms shaped at the state level.

When looking at other studies on the benefits of decentralization in education, Leithwood and Menzies (1998) state that school-based management models allow schools to develop solutions suitable for their needs and this situation increases student success. OECD (2016) reports emphasize that decentralized systems encourage innovative practices by allowing teachers and school administrators to be more involved in decision-making processes. These types of systems are stated to increase not only academic achievement but also equality and quality in education. However, it is seen that Turkey's centralized structure limits the levels of school autonomy and curriculum responsibility. This situation limits the effects of teachers and school administrators in decision-making processes and can hinder innovative practices in education. For example, the centrally determined programs by the MEB in Turkey being insufficient to meet the local needs of schools is considered one of the reasons for low academic achievement (MEB, 2023b).

In this context, examining successful practices in countries like Finland and Germany offers an important opportunity for the development of Turkey's educational paradigm. Sahlberg (2015) states that the broad freedoms granted to teachers and schools in Finland are one of the cornerstones of success in the education system. Germany's federal structure allows educational paradigms to be shaped at the local level, contributing to the reduction of regional differences (Eurydice, 2022). Turkey's orientation towards decentralization by benefiting from such examples could enable the education system to become more flexible and innovative. The benefits of decentralization in education, not only increasing academic achievement but also positively affecting the motivation of teachers and students, are frequently emphasized in the literature (Darling-

Hammond, 2010). Therefore, prioritizing reforms that encourage decentralization and gradually moving away from the centralized structure with a long-term strategy will be a critical step in increasing the quality of education.

Conclusion

When the findings obtained in this study are examined, the relationships between localized and flexible structures with school autonomy are clearly seen. The decentralization of curricula plays a critical role not only in improving the management processes of schools but also in increasing the academic achievement of students. The decentralization of educational systems allows schools to be given more decision-making authority, enabling teachers and administrators to produce solutions suitable for local needs. This situation makes it possible to meet the individual learning needs of students more effectively, creating positive effects on academic achievement.

Finland's possession of a localized educational structure is highlighted as one of the main reasons for the country reaching the highest values in PISA 2022 results. The flexibility of curricula and the broad freedoms granted to teachers have directly contributed to students' learning processes and increased academic achievement. For example, teachers and school administrators in Finland can adapt curricula according to local needs and this situation allows for the development of innovative teaching methods. In this context, Finland's success in education clearly demonstrates the positive impact of decentralization on academic achievement.

Germany's federal structure allows educational paradigms to be shaped according to regional needs with decisions taken at the state level. This flexibility has ensured that Germany has moderate values in terms of academic achievement. Decentralization in Germany's education system has supported equality in education by reducing regional differences and this situation has positively affected students' overall performance. However, it should also be considered that differences between states limit academic achievement in some regions.

Turkey's centralized structure, on the other hand, limits the roles of schools and teachers in decision-making processes, creating a negative impact on academic achievement. The centralized decision-making mechanism restricts the capacity of schools to develop solutions suitable for local needs and is insufficient in meeting the individual requirements of students. This situation is considered one of the main reasons for Turkey's low academic achievement in PISA 2022

results. The decentralization of curricula and granting more autonomy authority to schools will be an important step in increasing Turkey's academic achievement level.

In conclusion, localized and flexible educational systems provide a significant advantage in increasing academic achievement. Finland's decentralized structure has enabled high academic achievement by responding more effectively to the individual learning needs of students. Germany's federal structure has supported equality in education by reducing regional differences and this situation has positively reflected on students' performance. Turkey's orientation towards decentralization and reforms encouraging autonomy will play a critical role in both improving the management processes of schools and increasing student success. In this context, adopting the understanding of decentralization will not only increase academic achievement but also contribute to ensuring quality and equality in education.

RECOMMENDATIONS

In light of these findings, it is important for Turkey to prioritize reforms that encourage decentralization in its education system. Increasing the contribution of local administrations and teachers in the preparation and implementation processes of curricula will allow schools to develop solutions suitable for their own needs. Granting more autonomy authority to schools will enable both teachers and administrators to participate more actively in decision-making processes, contributing to the increase in educational quality. Additionally, developing joint projects with countries like Finland and Germany, which have successful practices, within the scope of international cooperation can bring innovative and effective approaches to Turkey's education system. By benefiting from the experiences of these countries, solutions can be produced for the challenges that may be encountered in the decentralization process. As a long-term strategy, it should be aimed to gradually transition from the centralized decision-making mechanism to decentralization. This process, supported by careful planning and continuous evaluation, will ensure the sustainable improvement of the education system. For the success of decentralization paradigms, educational curricula that will increase the capacity of teachers and school administrators can be designed.

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Genişletilmiş Türkçe Özet

Giriş

Eğitim sistemleri, öğrenci başarısını ve genel eğitim kalitesini şekillendirmede kritik bir rol oynamaktadır. Eğitimsel çıktıları etkileyen temel faktörler arasında, eğitim programı sorumluluğu ve okul öz-yönetimi öne çıkmaktadır. Bu faktörler, okulların nasıl yönetildiğini, eğitim programlarının ne kadar uyarlanabilir olduğunu ve öğrencilerin ihtiyaçlarını ne ölçüde karşılayabildiğini doğrudan etkilemektedir. Bu bağlamda, merkeziyetçi ve yerelleşmiş eğitim sistemleri, kendilerine özgü avantajları ve zorluklarıyla iki farklı model olarak karşımıza çıkmaktadır. Merkeziyetçi sistemler, genellikle ulusal düzeyde karar alma mekanizmalarına dayanmakta ve okulların ve öğretmenlerin yerel ihtiyaçlara cevap verme esnekliğini sınırlamaktadır. Buna karşılık, yerelleşmiş sistemler, okullara ve eğitimcilere daha fazla özerklik tanıyarak, eğitim programlarının tasarımı ve uygulanmasında daha geniş bir özgürlük sunmaktadır. Özellikle Finlandiya, yerelleşmiş ve esnek eğitim sistemiyle tanınmakta ve PISA gibi uluslararası değerlendirmelerde sürekli yüksek performans göstermektedir. Almanya ise federal yapısıyla, eğitim politikalarının bölgesel düzeyde uyarlanmasına olanak tanımaktadır. Türkiye'nin merkeziyetçi yapısı ise, okulların ve öğrencilerin çeşitli ihtiyaçlarına etkili bir şekilde yanıt vermekte zorlanmaktadır. Bu çalışma, PISA 2022 verilerini kullanarak, Türkiye, Finlandiya ve Almanya'nın eğitim programı sorumluluğu, okul öz-yönetimi ve akademik başarı değişkenleri arasındaki ilişkilerini incelemektedir. Üç ülke arasında yapılan karşılaştırmalar yoluyla, merkeziyetçi ve yerelleşmiş eğitim sistemlerinin eğitim-öğretim süreçlerine yaptığı olası etkileri belirli değişkenler açısından belirlemek ve eğitim süreçlerini iyileştirmek için kanıta dayalı öneriler sunmak amaçlanmaktadır.

Yöntem

Çalışmada nicel araştırma yöntemlerinden biri olan ilişkisel tarama modeli kullanılmıştır. İlişkisel tarama modeli, değişkenler arasındaki ilişkileri belirlemeyi amaçlayan bir araştırma desenidir. Bu model, birden fazla değişken arasındaki ilişkileri incelemek ve bu ilişkilerin yönü ile gücünü ortaya koymak için kullanılmaktadır. Veriler, öğrenci performansı, okul yönetim uygulamaları ve eğitim programı politikalarına ilişkin kapsamlı bilgiler içeren PISA 2022 veri tabanından elde edilmiştir. Örneklem, Türkiye'den 196 okul, 322 öğretmen ve 7.250 öğrenci; Finlandiya'dan 241 okul, 434 öğretmen ve 10.239 öğrenci; Almanya'dan ise 257 okul, 400 öğretmen ve 6.116 öğrenciden oluşmaktadır. Araştırmada verileri açıklamak için betimleyici istatistikler kullanılmış, ülkeler arasındaki anlamlı ilişkileri ve farklılıkları belirlemek için korelasyon ve

ANOVA testleri uygulanmıştır. Ayrıca, bulguların mevcut alanyazınla bağdaştırılması ve eğitim programları, yerelleşme ve akademik performans üzerindeki etkilerinin daha iyi anlaşılması için alanyazın taraması yapılmıştır. Bu çok yönlü yaklaşım, araştırma bulgularının hem veri odaklı hem de akademik söylemle uyumlu olmasını sağlamaktadır.

Bulgular

Bulgular, Türkiye, Finlandiya ve Almanya arasında eğitim programı sorumluluğu, okul öz-yönetimi ve akademik başarı açısından anlamlı farklılıklar olduğunu ortaya koymaktadır. Finlandiya, okullara ve öğretmenlere eğitim programlarını yerel ihtiyaçlara uyarlama konusunda önemli ölçüde özerklik tanıyan yerelleşmiş eğitim sistemi sayesinde tüm değişkenlerde en yüksek puanları elde etmiştir. Bu esneklik, yenilikçiliği ve öğrenci merkezli öğrenmeyi teşvik ederek Finlandiya'nın uluslararası değerlendirmelerde sürekli yüksek performans göstermesine katkıda bulunmaktadır. Almanya, federal yapısının etkilerini yansıtan orta düzey değerlere sahiptir. Her bir Alman eyaleti, kendi eğitim politikalarını tasarlama ve uygulama yetkisine sahiptir. Bu yaklaşım, bölgesel uyarlamalara olanak tanırken, eyaletler arasında eğitim kalitesinde farklılıklara da yol açmaktadır. Bu zorluklara rağmen, Almanya'nın federal sistemi, orta düzeyde eğitim programı sorumluluğu ve okul öz-yönetimi seviyelerini desteklemekte ve bu durum akademik performans üzerinde olumlu bir etki yaratmaktadır. Türkiye ise, eğitim programı sorumluluğu ve okul öz-yönetimi açısından en düşük puanları almış ve bu durum, görece düşük akademik performansıyla ilişkilendirilmiştir. Merkeziyetçi sistem, okulların ve öğretmenlerin yerel ihtiyaçlara uyum sağlama esnekliğini sınırlamaktadır. Bu esneklik eksikliği, okulların belirli zorluklara ve fırsatlara yanıt verme yeteneğini kısıtlayarak öğrenci sonuçlarını olumsuz etkilemektedir. Korelasyon analizi, eğitim programı sorumluluğu, okul öz-yönetimi ve akademik başarı arasında güçlü pozitif ilişkiler olduğunu ortaya koymuştur. Eğitim programı tasarımı ve yönetiminde daha yüksek düzeyde özerkliğe sahip okulların, daha iyi akademik sonuçlar elde etme eğiliminde olduğu belirlenmiştir. ANOVA sonuçları, ülkeler arasındaki farklılıkların istatistiksel olarak anlamlı olduğunu ve Finlandiya'nın tüm boyutlarda diğer ülkeleri geride bıraktığını doğrulamıştır.

Tartışma ve Sonuç

Çalışma, eğitimde yerelleşmenin önemini vurgulamakta ve bunun eğitim programı sorumluluğu, okul öz-yönetimi ve akademik başarı üzerindeki olumlu etkilerini ortaya koymaktadır. Finlandiya ve Almanya örneklerinde görüldüğü gibi, yerelleşmiş sistemler, okulları ve öğretmenleri yerel ihtiyaçlara daha duyarlı kararlar almaya teşvik etmektedir. Bu yaklaşım, yenilikçiliği

teşvik etmekte, öğretmen motivasyonunu artırmakta ve öğrenci sonuçlarını iyileştirmektedir. Finlandiya'nın yerelleşmiş yapısı, öğretmenlere ve okullara önemli bir özgürlük tanımakta, bu da öğrencilerin çeşitli ihtiyaçlarını etkili bir şekilde karşılayan yenilikçi yaklaşımların benimsenmesini sağlamaktadır. Bu esneklik, Finlandiya'nın yüksek akademik performans elde etmesinin temel taşlarından biri olmuştur. Almanya'nın federal sistemi de bölgesel düzeyde karar alma süreçlerini desteklemekte, bu da eşitsizlikleri azaltmakta ve eğitim kalitesini artırmaktadır. Ancak, eyaletler arasındaki farklılıklar, bölgeler arası eğitim fırsatlarının eşitliğini sağlamada mekanizmaların geliştirilmesi gerektiğini göstermektedir. Türkiye'nin merkeziyetçi yapısı ise, okulların ve öğretmenlerin karar alma süreçlerindeki rollerini sınırlamakta ve bu durum, akademik başarı üzerinde olumsuz bir etki yaratmaktadır. Eğitim programı tasarımı ve okul yönetimindeki esneklik eksikliği, öğretmenlerin ve yöneticilerin öğrencilerin farklı ihtiyaçlarına yanıt verme kapasitesini kısıtlamakta ve bu da idealden uzak sonuçlara yol açmaktadır. Çalışma, yerelleşmiş ve esnek eğitim sistemlerinin merkeziyetçi sistemlere kıyasla daha iyi sonuçlar verdiğini göstermektedir. Finlandiya'nın başarısı, okullara ve öğretmenlere özerklik tanımanın faydalarını ortaya koyarken, Almanya'nın federal yaklaşımı, eğitimde bölgesel karar almanın önemini vurgulamaktadır. Bu örnekler, eğitim sistemlerinin ulusal standartları korurken yerel özerkliği de sağlaması gerektiğini, böylece hem eşitlik hem de uyarlanabilirlik açısından dengeli bir yapı oluşturulabileceğini göstermektedir.

Öneriler

Bu bulgular ışığında, eğitim yönetimini ve sonuçlarını iyileştirmek için çeşitli öneriler sunulmaktadır. Türkiye için reformlar, yerelleşmeyi teşvik ederek yerel otoritelerin ve öğretmenlerin eğitim programlarının hazırlanması ve uygulanması süreçlerine daha fazla katılımını sağlamaya öncelik vermelidir. Finlandiya ve Almanya gibi başarılı yerelleşmiş sistemlere sahip ülkelerle iş birliği yapmak, Türk eğitimcilerin bu ülkelerin deneyimlerinden öğrenmesine yardımcı olabilir. Merkeziyetçilikten yerelleşmeye kademeli bir geçiş, dikkatli bir planlama ve sürekli değerlendirme ile desteklenmelidir. Bu süreç, eğitim sisteminin sürdürülebilir şekilde iyileştirilmesini sağlayacaktır. Finlandiya ve Almanya için ise, yerelleşmiş sistemlerinde eşitliği sağlama çabalarına odaklanmaları önerilmektedir. Bu ülkeler yerelleşme konusunda başarılı olsalar da bölgeler veya eyaletler arasındaki eşitsizliklerin giderilmesi, kaliteli eğitime eşit erişim sağlamak için kritik öneme sahiptir. Ayrıca, öğretmenler ve yöneticiler için sürekli mesleki gelişim programlarının sürdürülmesi, yenilikçi uygulamaların devamlılığını sağlayacaktır. Genel olarak, eğitim sistemlerinin ulusal standartları korurken yerel özerkliği sağlamayı hedeflemesi gerekmektedir. Öğretmen eğitimi ve mesleki gelişime yatırım yapmak,

yerelleşmiş politikaların başarılı bir şekilde uygulanması için kritik öneme sahiptir. Ayrıca, reformların hedeflenen sonuçlara ulaşıp ulaşmadığını izlemek ve değerlendirmek için sürekli bir izleme ve değerlendirme süreci gereklidir.