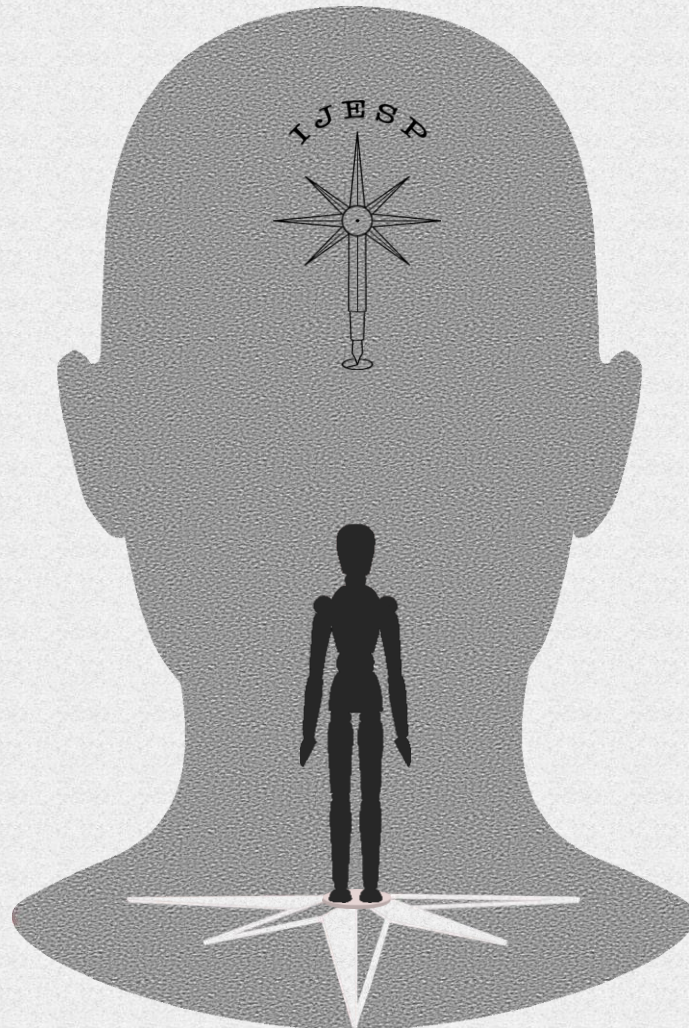


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## CONTENTS

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Introduction	i-iii	
<b>Articles</b>	<b>Pages</b>	<b>Article Type</b>
<i>Comparative Analysis of Mathematics Teacher Training Processes in Turkey, Singapore and the Netherlands</i> <b>İpek Gündüz Çetin</b>	1-14	Research
<i>Exploring Strategies for Environmental Education Interventions Through Distributed Leadership in Secondary Schools in South Africa</i> <b>Nonkanyiso Pamella Shabalala</b>	15-27	Research
<i>Theoretical Analysis on Caring School Leadership</i> <b>Gökhan Arastaman -Ali Ulaman - Cemalettin Şener – Mustafa Çalışır</b>	28-36	Review
<i>Perceptions and Experiences of Postgraduate Students of Educational Management vis-a-vis Academic Jealousy</i> <b>Ramazan Şamil Tatık- Pınar Ayyıldız</b>	37-56	Research
<b>IJESP Volume:4, Issue:1, May 2023</b>		

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# International Journal of Educational Studies and Policy (IJESP)

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## Comparative Analysis of Mathematics Teacher Training Processes in Turkey, Singapore and the Netherlands

İpek Gündüz Çetin

### ABSTRACT

The aim of this study is to compare the mathematics teacher training processes of Turkey, Singapore and the Netherlands in the context of prospective student selection, training programs, employment conditions and in-service training. Countries have been selected due to their success in PISA exams, and the processes of achieving success in teacher education of different approaches in training field teachers have been examined and compared with our country. The study is a comparative education research and horizontal comparison approach was used. In addition, the study was designed with an intertwined multiple-case pattern, one of the qualitative research methods. The data of the study were obtained by examining the teacher training programs of the countries compared, the curricula reflecting their systems, and the comparative education studies covering these countries. In the findings of the study, it was seen that the planning and criteria for the selection of pre-service mathematics teachers contributed to the qualified teacher training process in Singapore. In addition, making a postgraduate selection in the Netherlands also contributes to the selection of students with high field knowledge. While mathematics teacher training programs in Singapore and Turkey focus on similar fields, they differ in the Netherlands as they are at postgraduate level. While the employment problem progresses centrally and smoothly, since teacher prospective students are selected according to needs in Singapore, the elimination process in Turkey at the end of the undergraduate education brings employment problems with it. In the Netherlands, there is a local recruitment system. The importance given by countries to in-service training is high and similar. In this context, various suggestions have been made, taking into account cultural elements.

**Keywords:** Mathematics teacher training, Turkey, Holland, Singapore

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## Introduction

Since the existence of mankind, the concept of education has been mentioned in every society, regardless of the level of civilization. In order for education to be beneficial for the period and society it is in, it had to undergo many developments and changes. Education can reach its goals in today's conditions and in the future only through development and change. (Koçer & Koçoğlu, 2020). The development of a country and its ability to stay in a strategic position in the world are based on the power of the education system. The education system, on the other hand, draws its power from the teacher, student, school, environment, family and their communication with each other. In this system, the teacher plays an important role with his key position (Kahyaoğlu & Yang, 2007).

Examining different education systems in the world and integrating them into their own systems will be useful for increasing the quality of the education system. Studies that comparatively examine many elements of countries such as education systems, education policies, and education programs for this purpose are called comparative education studies. Türkoğlu (1988) also defined comparative education as a discipline that shows the similarities and differences of two or more education systems from different countries and different cultures, and brings useful suggestions to improve the system. States can complete the missing points by blending them with the cultural context by examining the education systems of the states that have better conditions than the ones they are in. This also helps to monitor global progress.

The importance of mathematics education has been going on for many years. Because the purpose of mathematics teaching is to provide the person with the mathematical knowledge and skills required by daily life, to teach him how to solve problems, and to gain a way of thinking that deals with the problem-solving approach (Altun & Alkan, 1998). In mathematics teaching, it is aimed to provide individuals with methods and skills that will help them in solving the problems they encounter, rather than burdening them with various information. For this reason, a mathematics education that is based on the ability of individuals to comprehend mathematical concepts and principles, to think critically and creatively, and to communicate is a desired and expected education (Orbeyi, 2007). For this reason, mathematics teachers should be competent to provide students with these skills instead of taking on a role that conveys mathematical knowledge. These competencies are shaped by pre-service and in-service programs, as well as prospective student selection and employment conditions.

According to Ernest (1989), there are two dimensions of mathematics teaching knowledge that a qualified teacher should have:

1. Pedagogical knowledge of mathematics: problem solving, concepts, difficulties, common mistakes, activities, etc.

2. Mathematics program knowledge

Ernest (1989) mentions the following types of knowledge apart from these two general types of knowledge:

- Mathematics knowledge
- Subject information
- Mathematics teaching knowledge

- Mathematics pedagogy knowledge
- Knowledge of classroom organization and management for teaching mathematics
- Mathematics education knowledge

When the studies conducted in this context are examined, although there are studies in terms of teacher characteristics on mathematics teacher training, few studies have been found in terms of comparative education. In a study comparing the Mathematics teacher training programs of Turkey, Finland, Japan and Singapore, it was concluded that the key factor in entry to teaching is starting a job in Turkey, while entering pre-service education in other countries. It has been concluded that the course distribution and graduation requirements are similar (Erbilgin & Boz, 2013). Similarly, when the studies in the field of teacher training are examined, there are significant differences between countries, especially in terms of prospective student teacher selection, internship, graduation, employment, and in-service training (Cirit Gül, 2016; Çelik & Bozgeyikli, 2019; Ergun & Ersoy, 2016; Uçar et al. Ucar, 2004). In addition, many studies & reports on teacher qualifications emphasize the importance of selection, training and employment of teacher prospective students (Barber & Mourshed, 2007; Darling - Hammond & Rothman, 2011).

Singapore and the Netherlands are among the countries that have achieved significant scores in terms of Mathematics success in international exams (OECD, 2019). In this study, it is aimed to investigate the similarities and differences of the processes of becoming a secondary school mathematics teacher in Turkey, Singapore and the Netherlands. In this context, the problem sentence of this study is “What are the similarities and differences of the processes of becoming a secondary school mathematics teacher in Turkey, Singapore and the Netherlands?” is in the form.

In addition, in the light of the problem statement, the sub-problems of the study are as follows:

1. How are the pre-service mathematics teachers in Turkey, Singapore and the Netherlands admitted to teacher training institutions?
2. What are the mathematics teacher training programs in Turkey, Singapore and the Netherlands?
3. What are the employment conditions of mathematics teachers in Turkey, Singapore and the Netherlands?
4. What is the in-service training of mathematics teachers in Turkey, Singapore and the Netherlands?

## **Method**

### **Research Model**

In this study, case study, one of the qualitative research methods, was used. Case study is a research method that helps understanding one or more current situations in their context (Yin, 1984). In this study, the selection of pre-service mathematics teachers, educational programs, employment conditions, in-service training status and desired teacher qualifications are considered as separate situations, while Turkey, Singapore and the Netherlands are considered as units of analysis. Working with this perspective is a nested multi-state pattern. In this study,

document analysis was used as a data collection method. Document analysis is the analysis of written sources of information about the case or cases to be investigated (Yıldırım & Şimşek, 2005).

Comparative education research has been affected by the paradigm shifts of social sciences because it is structured on the basis of social sciences. Therefore, the effect of the positivist paradigm in the 1980s left its place to the post-positivist paradigm (Crossley, 2000). In the context of comparative education, the positivist paradigm seeks generalizable explanations and universal principles applicable to educational phenomena across societies and cultures (Khakpour, 2012). However, they share a strong belief that the interpretative perspective in which empirical research methods are used in comparative education is important for cultural, political and social contexts and that education cannot be detached from its local culture (Bray et al., 2006). In this research, while comparing the processes of becoming a mathematics teacher in Turkey, Singapore and the Netherlands, it was interpreted by blending it with the local culture without aiming to draw a universal conclusion. Therefore, this study was carried out in the light of the interpretative paradigm.

### **Data Collection**

Official institutions of the countries , especially the programs implemented by institutions that train mathematics teachers in Turkey, Singapore & the Netherlands, & also from previous academic studies in this field (Aksoy, 2013; Aşçı, Topal & Yıldırım, 2021; Eurydice , 2022; Gülşen, 2021; Khoh & Teo , 2002; Ministry of National Education [MEB], 2013; MEB, 2015; MEB, 2022; National Institute of Education [NIE], 2021; Orakçı, 2015; Student Selection and Relocation Placement Center [ÖSYM], 2022; Universityit Leiden, 2022; Council of Higher Education [YÖK], 2022)

### **Data Analyses**

In this study, descriptive analysis, one of the qualitative data analysis methods, was used. Descriptive analysis is a type of qualitative data analysis that enables the data to be analyzed and interpreted in line with predetermined themes (Yıldırım & Şimşek, 2005). The data obtained were classified with reference to the sub-problems of the research and analyzed comparatively.

### **Results**

The results of the document analyzes made in this section were separated according to the sub-problems according to the situations and each analysis unit was analyzed within the situations.

#### **Comparison of the selection of mathematics teacher training institutions and prospective student teachers between countries**

To become a teacher in Turkey; In terms of education, it is necessary to graduate from the relevant departments of education faculties. However, graduates of higher education institutions other than education faculties who are suitable for teaching the field to which they will be assigned can also become teachers. The prerequisite for this is to successfully complete the pedagogical formation training program approved by the ministry (MEB, 2015). For this reason, secondary school mathematics teacher prospective students can complete their undergraduate education in their own departments, as well as receive formation by graduating from mathematics engineering, computer and mathematics departments. It is necessary to graduate from secondary education institutions and take the Higher Education Institutions Exam



(YKS). YKS consists of three sessions. All prospective students applying to YKS take the Basic Proficiency Test (TYT) first. This score is sufficient to study in the associate degree departments of vocational schools, but to enter the education faculties, it is necessary to take the Field Proficiency Test (TYT), in which the numerical score type will be calculated (ÖSYM, 2022). In the undergraduate education of all universities, it is seen that students with success rankings between 35,000 and 120,000 were placed in mathematics teaching departments in 2021 (ÖSYM, 2021).

In order to become a teacher in Singapore, it is necessary to be 18 years old and to be a graduate of secondary education institutions. Students must pass the A-Level exam, which is the National exam, which is accepted as the first qualifying exam, and the O- level (Ordinary) English exam. Level) exam (Khoh & Teo, 2002). Prospective students who pass the exam are interviewed by a committee consisting of faculty members and school principals in order to evaluate their cognitive and emotional characteristics. In these interviews, matters such as individuals' communication skills, their interest in teaching, their goals and ideals, their desire to learn and whether they have a strong desire to be a teacher are evaluated (Aksoy, 2013). The interview consists of a written exam, an oral exam and additional assessments at the initiative of the Ministry of Education. Thus, the process is based on the selection of the successful 3/1 cut.

Since Singapore does not have a separate teaching unit such as Secondary Education / High School, 5-year schools are continued after 6 years of primary education. Within the scope of this study, the process of teacher training for secondary schools with students of the same age group as Turkey will be examined. There are 2 programs to train mathematics teachers in Singapore: undergraduate program (4 years), pedagogical formation certificate program (1 year). In Singapore, branch teachers are trained in two specialties. Unlike basic education teaching, there is a program called "Post-Bachelor's Qualification in Education" for secondary education teachers. Prospective students wishing to apply for this program must be a university graduate (NIE, 2021).

In order to teach at the secondary level of secondary education in the Netherlands, high school graduates are required to take 1-year postgraduate education after their undergraduate education. Secondary education teachers are trained in teaching programs affiliated to vocational higher education institutions with four-year combined programs in order to provide education between the ages of 12-16. While primary school teachers take courses related to all fields, those who will teach from the second half of primary education specialize in one field. However, undergraduate specialization is not sufficient for secondary education teaching.

Secondary education teachers are those who are trained to teach HAVO (Higher general secondary education) and VWO (General secondary education preparatory to scientific education) students after the completion of the basic secondary education program. These teachers have to do a master's degree in one year on top of their 4-year teaching education. Secondary school teachers can teach all the lessons taught by primary school second cycle teachers (Eurodice, 2022).

When it is analyzed specifically in mathematics, it is necessary to have a master's degree in mathematics teaching in order to be a mathematics teacher in secondary education. The prerequisite for participation in this master's education is as follows, "Basic degree in a Mathematics-related program from a research university in the Netherlands, having accumulated a mathematical background at least equivalent to a Bachelor's degree in Mathematics". In

addition, the admissions committee examines the accuracy of the statements and evaluates whether the prospective students are sufficiently related to mathematics. Leiden, 2022).

A comparative analysis of the selection process of countries to become a Mathematics teacher is given in Table 1.

Table 1. Comparative analysis of prospective students' mathematics teacher selection

Countries	The Path to Become a Mathematics Teacher	Prospective student Teacher Selection Method	Prospective student Teacher Selection Criteria
Turkey	1. Undergraduate Education (Faculty of Education) 2. Undergraduate Education + Pedagogical Formation	National Examination	TYT+ AYT (numerical) score is sufficient for the relevant department
Singapore	Undergraduate Education in Education + Post-Bachelor's Qualification in Education	National Exam+Interview+Additional Criteria	A Level+ from the National Exam + Sufficient score in the English Exam + Appropriate communication skills and motivation during the interview process
Holland	Undergraduate Education in Mathematics + Master in Mathematics Teaching	Having completed a department that will have a command of the field of mathematics	Mastering the field of mathematics

### **Comparison of mathematics teacher pre-service education programs between countries**

Pre-service teachers who enroll in the Mathematics Teaching Program in Turkey receive a four-year undergraduate education. The general framework of the courses that teacher prospective students have to take has been determined by the Council of Higher Education (YÖK) with a centralist approach. Although education faculties make minor changes and additions to their programs depending on the Bologna process, they generally comply with the framework program of YÖK (YÖK, 2022). The framework program of YÖK is given in Table 2. In Table 2, it is abbreviated as Field Education AE, General Culture GK, Vocational Knowledge MB.

Table 2. Turkish mathematics teacher training program

Period	Course title	CTS	Period	Course title	ECTS
1	Introduction to Education	3	2	Education psychology	3
1	Educational Philosophy	3	2	Educational Sociology	3
1	Ataturk's Principles and History of Revolution 1	3	2	Ataturk's Principles and History of Revolution 2	3
1	Foreign Language 1	3	2	Foreign language	3
1	Turkish language	5	2	Turkish Language 2	5
1	information technologies	5	2	Analysis 2	5
1	Analysis 1	4	2	Abstract Mathematics 2	5
1	Abstract Mathematics	4	2	Euclidean Geometry	3
3	Instructional Technologies	3	4	Turkish Education History	3
3	Teaching Principles and Methods	3	4	Research Methods in Education	3
3	MB Elective 1	4	4	MB Elective 2	4
3	GK Elective 1	3	4	GK Elective	3
3	AE Elective 1	4	4	AE Elective	4
3	Approaches to Learning and Teaching Mathematics 2	3	4	High School Mathematics Curriculum 2	3
3	Linear Algebra 1	3	4	Linear Algebra 2	3
3	Analytical Geometry 1	3	4	Analytical Geometry2	3
3	Analysis 3	4	4	Algorithm and Programming	4
5	Classroom Management	3	6	Measurement and Evaluation in Education	3
5	Ethics and Ethics in Education	3	6	Turkish Education System and School Management	3
5	MB Elective 3	4	6	MB Elective 4	4
5	GK Elective	3	6	GK Elective 4	3
5	AE Elective 3	4	6	AE Elective 4	4
5	Teaching Mathematics 1	4	6	Teaching Mathematics 2	4
5	Possibility	3	6	Statistics	3
5	Problem Solving in Mathematics	3	6	Mathematical Modeling	3
5	Differential equations	3	6	Introduction to Algebra	3
7	Teaching Practice 1	10	8	Teaching Practice 2	13
7	Special Education and Inclusion	3	8	Guidance in Schools	3
7	MB Elective 5	4	8	MB Elective 6	4
7	Community Service Practices 1	3	8	AE Elective 6	4
7	AE Elective 5	4	8	Geometry Teaching	3
7	History of Mathematics	3	8	Philosophy of Mathematics	3
7	Algebra Teaching 2	3			

(YÖK, 2022)

There are 2 programs for education of mathematics teachers in Singapore: the undergraduate program and the pedagogical formation certificate program. In Singapore, branch teachers are educated in two specialties. This application is expected to introduce prospective teachers to the basic concepts and principles in education necessary for effective teaching and reflective practice in primary and secondary schools. Nine core courses are required for Educational Studies, the undergraduate program to become a teacher in Singapore, and deals with key educational concepts such as student development, the learning and thinking process, the social context in which the school operates, the application of psychology in teaching and learning, and the use of instructional technologies.

Table 3. Singapore mathematics teacher training program

Lessons	Credit
1 year	
Professional Practice and Inquiry I	2
Educational Psychology I: Learning and Teaching Theories and Practices	2
Group Studies in Service Learning	1
Social Context of Education in Singapore	2
Character and Citizenship Education in the Context of Singapore	2
2 years	
Teaching and Managing Students at the Intermediate Level (Part 1)	2
Meaningful Learning Technologies	2
Evaluating Learning and Performance	1
Digital Literacy for the Net Generation (elective)	3
Digital Media Literacy (elective)	3
Computer Literacy Through Coding and Practices (elective)	3
3 years	
Pedagogical Practices	1
Teaching and Managing Students at the Intermediate Level (Part 2)	1
educational research	3
Research Project	3
4 years	
Professional Practice and Inquiry II	

(NIE,2022)

Educational Studies BA (Ed)/ BSc (Ed) prospective teachers will specialize in teaching methodology at primary or secondary school level. These are designed to provide trainees with pedagogical skills while teaching specific subjects in Singaporean schools.

Program Studies is the field in which (CS) specialization topics are selected. The choice of specialization topics in this field also depends on the path and options chosen by the pre-service teacher.

Pre-service teachers can choose 2 courses that are compatible with the choice of Academic Subjects (AS). CS1 and CS2 are the programs to be chosen for secondary school mathematics teaching (NIE, 2022).

Table 4. CS1 and CS2 Mathematics Structure for BA/ BSc (Ed)

Lessons	Credit
Teaching and Learning Mathematics I	3
Teaching and Learning Mathematics II	3
Teaching and Learning Mathematics III	3
Specialization Areas in Mathematics Teaching and Learning	3

(NIE, 2022)

The graduate courses taken to become a Mathematics teacher in the Netherlands are based on the education program of the Leiden Mathematics Institute. The courses of the two-semester program are given below.

- Mathematics component (60 EC)
  - Research Project (30 EC)
  - Courses suitable for the research topic (30 EC)
- Education component (60 EC, Dutch)
  - Training Courses (30 EC, Dutch)
  - Teaching and Practice (30 EC, Dutch)
- World Education Program (60 EC, Dutch and English)
  - Training Courses (30 EC, partly in Dutch)
  - International Teaching and Practice (30 EC, English)

The Mathematics component of the specialization includes a 40 EC research project, including a master's thesis and an oral presentation in one of the research groups of the Leiden Mathematics Institute, and 20 EC courses to be selected in accordance with the research topic. Some of these courses can be taken from the national Mastermath program (Universiteit Leiden, 2022).

The percentages of countries' mathematics teacher training programs by area are given in Table 5.

Table 5. Percentages of countries' mathematics teacher training programs

Countries	Profession Information	General Culture	Field Training
Turkey	34%	18%	48%
Singapore	43%	9%	48%
Holland	50%	-	50%

### Comparison of mathematics teacher employment conditions between countries

Pre-service teachers who have graduated from the department of mathematics teaching can work as a mathematics teacher in high schools and equivalent schools, private schools and private teaching institutions affiliated to the Ministry of National Education. In addition, prospective students who want to do academic research can have academic job opportunities at universities by completing their master's and doctoral education in their fields. In order to be able to work in public schools in Turkey, all teacher prospective students must take the Public Personnel Selection Examination (KPSS) at the end of their undergraduate education and obtain a required score. In recent years, in addition to the KPSS score, the interview exam has also been among the appointment criteria (Aşçı, Topal, & Yıldırım, 2021).

In Singapore, the National Institute of Education and the Ministry of Education work very effectively and collaboratively. The Ministry of Education provides salaries and scholarships to prospective teachers throughout their undergraduate education in order to encourage multi-faceted development as well as their professional development. Pre-service training (orientation) for teacher prospective students who have completed their undergraduate education is provided by the National Education Institute. After the orientation training, prospective students are impartially assigned to schools in different regions of the country by the Ministry of Education. It can be said that teacher prospective students in Singapore do not have job anxiety (Orakçı, 2015). In short, teacher training and appointments in Singapore are carried out without any disruption due to effective communication and coordination between the National Institute of Education and the Ministry of Education. This situation contributes to the positive attitudes of teachers and the public towards the education system.

In the Netherlands, the open recruitment method is preferred. The terms of service and legal status of education personnel, including teachers, in both public and private institutions are determined at a decentralized level in sectoral collective agreements. These agreements are set out in negotiations between employers and unions. The Minister of Education, Culture and Science is not involved in the negotiation of collective bargaining agreements. Where possible and desired, these agreements allow for further refinement at the school board level. At the institutional level, negotiations are held between each competent authority and the federations of civil service and education associations representing the staff of the institutions for which that authority is responsible (Eurydice, 2022).

For these appointments, preservice teachers applying for jobs in a particular education sector must be eligible for a teaching appointment. This means that mathematics teachers have a certificate that qualifies them to teach at the secondary level. In addition to teaching qualifications, teachers must have a certificate of conduct (VOG). Teachers who are not yet fully qualified may also be appointed on a temporary basis. These teachers are also usually side entrance teachers (Eurydice, 2022).

Table 6. Comparison of mathematics teacher employment conditions

Countries	Assignment Type	Assignment Conditions
Turkey	Central	KPSS Exam Interview
Singapore	Central	Graduation from the relevant department
Holland	Local	Open recruitment method

### **Comparison of in-service training of mathematics teachers between countries**

In our country, activities related to the professional development of the personnel working in official education institutions at all levels are carried out by the "Education Board" formed by the Ministry of National Education and the "In-Service Training Department" operating under the Ministry. In this context, all kinds of professional development programs are carried out within the scope of the "Ministry of National Education In -Service Training Regulation" published in the Official Gazette dated 4.1.1995 and numbered 22161. When the change plans and practices of the Ministry of National Education are examined and the studies to develop teachers in these plans are on the agenda, the in-service training plans of the Ministry come to the fore and the effectiveness levels of the in -service training plans are discussed. In-service training activities carried out through the In-Service Training Institutes established within the body of the Ministry of National Education "Teacher Training and Development General

Directorate” are regularly planned and implemented periodically every year as trainings to develop teachers (Gülşen, 2021).

For teachers who want to receive postgraduate education in Turkey, it is stated in the relevant law that “necessary convenience is provided in terms of giving permission provided that they do not disrupt their duties”. Curriculums of teachers are arranged in a way that allows them to continue their postgraduate education (MEB, 2013). In addition, with the Regulation on Promotion in the Teaching Career Levels published in 2022, teachers who have received postgraduate education are exempted from the exams that must be taken in order to receive a title (MEB, 2022).

Teachers assigned to post-adaptation schools in Singapore have versatile professional development opportunities. Teachers are encouraged to attend courses that cover different methods and techniques, tailored to the educational needs of the 21st century, planned by the National Institute of Education. The institution is responsible for the coordination and planning of these courses, workshops and conferences. One of the in-service activities offered to teachers is postgraduate education, and teachers who want to work in this field are provided with facilities (education permit, financial aid, etc.). Online professional development studies are also planned, taking into account the intensity of teachers and their participation opportunities (NIE, 2021).

To enable teachers in the Netherlands to keep their professional skills up to date, every teacher in the Netherlands, including those in higher vocational education, is provided with a grant from the teacher development fund once in their teaching career. They can use it to pursue a second undergraduate or graduate education. From 2015, all teachers are given sufficient time, funding and opportunity to pursue their professional skills. This situation is guaranteed by collective bargaining agreements (Eurydice, 2022).

### **Discussion, Conclusion and Suggestions**

In this study, mathematics teacher training systems of Turkey, Netherlands and Singapore were analyzed comparatively. Requirements for participation in pre-service mathematics teacher training differ in all three countries. In Singapore, pre-service teachers decide that they want to take this education before their undergraduate degree, but in the Netherlands, those who have a sufficient level of mathematics can receive training to become a mathematics teacher with postgraduate education. In Turkey, on the other hand, there is an alternative way to become a mathematics teacher with the pedagogical formation certificate obtained after the undergraduate education from the departments related to mathematics as well as the undergraduate departments of mathematics teaching.

People's choice of profession is related to the harmony between the requirements of the profession they will choose and the characteristics of the person (Ginzberg, Gingsburg, Axelrad & Herma, 1951). From this point of view, as in all professions, teacher prospective students are expected to prefer education faculties, considering that they have the qualifications related to the teaching profession. In addition, as Erdem, Gezer and Çokadar (2005) stated, teachers' perspectives on their profession play a major role in their successful fulfillment of this profession, since subjects such as the psychology of the teacher, his thoughts, lifestyle and habits affect the students. For this reason, the better the teacher can educate himself, the more he gets ready for change and open to innovations, the more qualified and competent individuals he will train and contribute to the progress of the society with each individual he trains. However,

testing of communication skills, including motivation to become a teacher, is carried out only in Singapore.

Shulman (1986), who is one of the prominent names among researchers working on what types of knowledge teachers should have in mathematics education, examined the content knowledge that a branch teacher should have under three headings: content knowledge, pedagogical content knowledge and curriculum knowledge. Curriculum knowledge has been evaluated in the category of vocational knowledge in all three countries, and all three topics are included in the mathematics teacher training programs of the countries. When the education programs of the countries are examined, it is seen that the field education is given similar importance in all three countries. While education is given in the field of general culture as well as vocational knowledge and field education in Turkey and Singapore, this is ignored in the Netherlands. The reason for this may be that the education is given at the postgraduate level.

When the employment conditions of mathematics teachers in the countries are examined, a central recruitment method is applied in Turkey and Singapore, while local governments in the Netherlands make open recruitment. Although Turkey and Singapore seem similar in terms of recruitment methods, in fact, there is no unemployment problem in Singapore because the number of prospective student teachers is determined key to the needs, while teacher prospective students in Turkey go through a tough race to start the job by going through KPSS and interview processes. However, due to the post-licensing of this screening system, human resources trained in Turkey may be wasted (Kalkan, 2021). With reference to 2021 data of ÖSYM, the number of mathematics teachers waiting to be appointed is around 14000 (ÖSYM, 2021).

In-service training is as important as pre-service training in order to increase teacher quality (Saracaloğlu & Ceylan, 2016). When the in-service training status of teachers is examined, it can be said that all three countries create in-service training opportunities for teachers. In addition, in Turkey and Singapore, opportunities are provided for postgraduate education as well as for all teachers.

The cultural, sociological, ethnic and economic structure of each country differs from each other in many ways. That's why every country has its own education system. Every education system has positive and negative aspects. Also, no system can be regarded as an ideal model. Countries may have problems in education arising from the specific structure of that country. Copying the education system of a country and taking it as a model should not mean a solution (Arslan & Cashier 2021). When the processes of the three countries are examined in detail, criteria other than higher education entrance exam should be determined for student entry to mathematics teacher training programs. It should be ensured that teacher prospective students are selected from people who love to research, have a special interest in mathematics and have high communication skills. While determining the quota of teacher training programs, the need for teachers that may arise as a result of the planning should be taken into consideration. Taking advantage of the positive aspects of the process of being a mathematics teacher in Singapore and the Netherlands is thought to be a solution for improving the mathematics teacher training process in Turkey. In addition, it is recommended for researchers to compare the details of the mathematics teacher training process and education programs of different countries.



## References

- Aksoy, E., & Gözütok, D. (2014). Amerika Birleşik Devletleri, Finlandiya, Singapur ve Türkiye’de öğretmen eğitimindeki dönüşümler. *Journal of Educational Sciences and Practices*,13(25)  
<https://www.idealonline.com.tr/IdealOnline/lookAtPublications/paperDetail.xhtml?uId=5937&>
- Altun, M. (2005). *İlköğretim ikinci kademe (6, 7 ve 8. sınıflarda) matematik öğretimi*. İstanbul: Alfa Basım Yayım Dağıtım.
- Arslan, Ü. G. & Vezne, R. (2021). Almanya ve türkiye mesleki eğitim öğretmeni yetiştirme sistemlerinin karşılaştırılması. *Öğretim Teknolojisi ve Hayat Boyu Öğrenme Dergisi*, 2 (1) , 111-134. <https://doi.org/10.52911/itall.910388>
- Aşçı, M., Topal, T. & Yıldırım, R. (2021). Türkiye’de 2050 yılına yönelik öğretmen yetiştirme programlarına ilişkin senaryolar. *OPUS International Journal of Society Researches, Eğitim Bilimleri Özel Sayısı* , 5099-5115. <https://doi.org/10.26466/opus.865457>
- Barber, M. & Mourshed, M. (2007). *How the world’s best-performing school systems come out on top*. London: McKinsey and Company.
- Çelik, Z & Bozgeyikli, H. (2019). *Dünyada ve Türkiye’de öğretmen yetiştirme, istihdam ve mesleki gelişim politikaları*. Ankara: EBSAM.
- Council of Higher Education [YÖK] (2022). Yeni Öğretmen Yetiştirme Lisans Programları. Retrieved from:<https://www.yok.gov.tr/kurumsal/idari-birimler/egitim-ogretim-dairesi/yeni-ogretmen-yetistirme-lisans-programlari>
- Darling-Hammond, L. & Rothman, R. (2011). Lessons learned from Finland, Ontario, and Singapore. L. Darling-Hammond and R. Rothman (Eds.), *Teacher and leader effectiveness in high performing education systems*. Washington, DC: Alliance for Excellent Education and Stanford, CA: Stanford Center for Opportunity Policy in Education. <http://www.all4ed.org/files/TeacherLeaderEffectivenessReport.pdf>
- Erbilgin, E. & Boz, B. (2013). Matematik öğretmeni yetiştirme programlarımızın Finlandiya, Japonya ve Singapur programları ile karşılaştırması. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, Özel sayı* (1), 156-170. <http://efdergi.hacettepe.edu.tr/yonetim/icerik/makaleler/286-published.pdf>
- Erdem, A. R., Gezer, K. & Çokadar, H. (2005, September). Ortaöğretim fen-matematik ve sosyal alanlar öğretmenliği tezsiz yüksek lisans öğrencilerinin öğretmenlik mesleğine ilişkin tutumları [Conference presentation abstract]. 14. Proceedings of the National Educational Sciences Congress, 471-477.
- Ergun, M. & Ersoy, Ö. (2016). Hollanda, Romanya ve Türkiye’deki sınıf öğretmeni yetiştirme sistemlerinin karşılaştırılması. *Kastamonu Eğitim Dergisi* , 22(2) , 673-700. <https://dergipark.org.tr/tr/pub/kefdergi/issue/22602/241499>
- Eurydice (2022). Netherlands Overview. Retrieved from: [https://eacea.ec.europa.eu/national-policies/eurydice/content/netherlands\\_en](https://eacea.ec.europa.eu/national-policies/eurydice/content/netherlands_en)
- Ginzberg, E., Ginsburg, S., Axelrad, S. & Herma, J. L. (1951). *Occupational choice: An approach to a general theory*. New york: Columbia University Pres.

- Gül, A. G. A. C. (2016). Türkiye ile Çin, Finlandiya, Japonya ve Hollanda'nın Öğretmen yetiştirme ve seçme sistemlerinin karşılaştırılması. *Adnan Menderes Üniversitesi Eğitim Fakültesi Eğitim Bilimleri Dergisi* , 7 (2) , 63-72. <https://dergipark.org.tr/tr/pub/aduefebder/issue/33910/375347>
- Kahyaoğlu, M.& Yangın, S. (2007). İlköğretim öğretmen adaylarının mesleki öz-yeterliklerine ilişkin görüşleri. *Kastamonu Eğitim Dergisi*, 15(1), 73-84. <https://dergipark.org.tr/tr/pub/kefdergi/issue/49108/626697>
- Kalkan, A. (2021). Türkiye ve bazı gelişmiş ülkelerin öğretmen yetiştirme sistemleri ve programlarının karşılaştırılması olarak incelenmesi. *Uluslararası Karamanoğlu Mehmetbey Eğitim Araştırmaları Dergisi* , 3 (1) , 1-16. <https://doi.org/10.47770/ukmead.878302>
- Köçer, M., Koçoğlu, E & Öner, G. (2020). Eğitim Tarihi. Ankara: Pegem Akademi
- Millî Eğitim Bakanlığı [MEB]. (2013). Millî Eğitim Bakanlığı İzin Yönergesi Retrieved from: <http://mevzuat.meb.gov.tr/dosyalar/1627.pdf>
- Ministry of National Education [MEB] (2015). Millî Eğitim Bakanlığı öğretmenlerinin atama ve yer değiştirme yönetmeliği. Retrieved from: <https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=20694&MevzuatTur=7&MevzuatTertip=5>
- Ministry of National Education [MEB] (2022). Öğretmenlik Kariyer Basamaklarında Yükselme Yönetmeliği Retrieved from: <https://www.mevzuat.gov.tr/anasayfa/MevzuatFihristDetayIframe?MevzuatTur=7&MevzuatNo=9304&MevzuatTertip=5>
- National Institute of Education [NIE] (2021). A Teacher Education Model for the 21 Century. Retrieved from: [https://nie.edu.sg/docs/default-source/nie-files/office-of-strategic-planning-academic-quality/te21-report\\_a-tchr-ed-model-for-the-21st-century.pdf?sfvrsn=2](https://nie.edu.sg/docs/default-source/nie-files/office-of-strategic-planning-academic-quality/te21-report_a-tchr-ed-model-for-the-21st-century.pdf?sfvrsn=2)
- NIE.(2021). National institute of education Retrieved from <https://nie.edu.sg/te-undergraduate/>
- OECD (2019). PISA 2018 Results: Executive Summary. Retrieved from: [https://www.oecd.org/pisa/Combined\\_Executive\\_Summaries\\_PISA\\_2018.pdf](https://www.oecd.org/pisa/Combined_Executive_Summaries_PISA_2018.pdf)
- Öğrenci Seçme ve Yerleştirme Merkezi [ÖSYM], (2021) Yükseköğretim Kurumları Sınavı Retrieved from: <https://www.osym.gov.tr/TR,21286/2021-yks-yerlestirme-sonuclarina-iliskin-sayisal-bilgiler.html>
- Öğrenci Seçme ve Yerleştirme Merkezi [ÖSYM], (2021). KPSS Lisans. Retrieved from: [https://www.osym.gov.tr/TR,21301/2021\\_kpss-a-grubu-ve-ogretmenlik-genel-yetenek-genel-kultur-egitim-bilimleri-alan-bilgisi-ve-oabt-sinav-sonuclarina-iliskin-sayisal-bilgiler.html](https://www.osym.gov.tr/TR,21301/2021_kpss-a-grubu-ve-ogretmenlik-genel-yetenek-genel-kultur-egitim-bilimleri-alan-bilgisi-ve-oabt-sinav-sonuclarina-iliskin-sayisal-bilgiler.html)
- Öğrenci Seçme ve Yerleştirme Merkezi [ÖSYM], (2021). Yükseköğretim Kurumları Sınavı (Yks) Kılavuzu Retrieved from: [https://dokuman.osym.gov.tr/pdfdokuman/2022/YKS/kilavuz\\_11022022.pdf](https://dokuman.osym.gov.tr/pdfdokuman/2022/YKS/kilavuz_11022022.pdf)

- Orakçı, Ş. (2015). Şangay, Hong Kong, Singapur, Japonya ve Güney Kore'nin öğretmen yetiştirme sistemlerinin incelenmesi. *Asya Öğretim Dergisi* 3(2), 26-43. <https://dergipark.org.tr/tr/pub/aji/issue/38889/454208>
- Press Release on New Teacher Capacity Building Policy. (2014). Retrieved from: <http://www.moe.gov.sg/media/press/2014/09/growing-our-teachersbuilding-our-nation> (Deleted)
- Saracaloğlu, A. S. & Ceylan, V. (2016, October). *Farklı Ülkelerde Öğretmen Yetiştirme: ABD, Güney Kore, İrlanda, Singapur ve Türkiye*. In The 4th International Congress on Curriculum and Instruction'da sunulmuş bildiri, Antalya.
- Shulman, L. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4-14.
- Teo, T. W. & Khoh, R. L. (2015). Teaching Science in Culturally Relevant Ways Teaching Science in Culturally Relevant Ways: Ideas from Singapore Teachers. World Scientific
- Türkoğlu, A. (1998). *Karşılaştırmalı eğitim dünya ülkelerinden örneklerle*. Adana: Baki Kitabevi.
- Uçar, R. & Uçar, İ. H. (2004). Japon eğitim sistemi üzerine bir inceleme: Çeşitli açılardan Türk eğitim sistemi ile karşılaştırma. *Yüzüncü Yıl Üniversitesi Eğitim Fakültesi Dergisi*, 1(1), 1-18.
- Ültanır, G. (2000). *Karşılaştırmalı eğitim bilimi kuram ve teknikler*. Ankara: Eylül Yayınları.
- Universiteit Leiden, (2022). Mathematics and Education (MSc) Retrieved from: <https://www.universiteitleiden.nl/en/education/study-programmes/master/mathematics/mathematics-and-education>
- Yıldırım, A. & Şimşek, H. (2005). *Sosyal bilimlerde nitel araştırma yöntemleri*. Ankara: Seçkin Yayıncılık.
- Yin, R. (1984). *Case study research: design and methods*. California: Sage Publications.

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## Exploring Strategies for Environmental Education Interventions Through Distributed Leadership in Secondary Schools in South Africa\*

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### ABSTRACT

Environmental education (EE) allows citizens to explore environmental issues, engage in problem solving by taking action to improve the environment in totality. To solve environmental issues, there is a need for interventions for EE globally. However, there is evidence in the field that there are no interventions in place for EE curriculum management in schools. This research aimed to explore interventions that can be fostered by distributed leadership to manage EE curriculum in schools. The current research adopted a constructivism research paradigm supporting qualitative research approach, employed the descriptive case study research design as well as non-probability sampling, which is purposive in nature, and individual interviews as data collection tools. The participants invited to contribute to the understanding of distributed leadership in schools in the current research is, two subject advisors and three principals. The findings of the current research point that there are no interventions in place to manage EE curriculum. But the research recommended strategies that could help to manage the curriculum of EE. The monitoring of teachers and learners' books were believed to be an intervention to manage the curriculum, likewise, the EE curriculum. However, the current research recommended a buy-in strategy, a need to improve the curriculum to be less theoretical, but more practical. Therefore, it is recommended that the content of EE is revisited to best suit the current human lifestyles.

**Keywords:** Environmental education, environmental education management, curriculum, curriculum management, distributed leadership

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## **Introduction**

Environmental education (EE) is a process that allows individuals to practically apply the knowledge and skills acquired to care for their environment. In previous studies, EE has been recognized as one of the strategies to help mitigate numerous environmental issues around the world (Edsand & Broich, 2020; Erhabor & Don, 2016; Satyaraouppulet, 2018; Tlhagale, 2005). Several scholars have outlined the purpose of EE as being to develop an environmentally literate citizenry, through inter alia, teaching the citizens about the natural environment, its functions and how people can manage their actions towards the environment (Edsand & Broich, 2020; Erhabora & Don, 2018; Frazen, 2017). Ideally, EE should be implemented in various situations, which include formal, non-formal and informal educational settings and across different levels of education (Ardoin et al., 2020; Erhabora & Don, 2018; Radeiski, 2009; UNESCO-UNEP, 1978).

In schools, the School Management Team and subject advisors often referred to as stakeholders, are not aware of their roles when it comes to the management of EE curriculum. The stakeholder's role in EE is to ensure the management of EE curriculum in schools, since EE is integrated in all school subjects that are regularly monitored as one of the elements of curriculum management. However, EE curricula is thought to be difficult to follow through theoretical tests like the curricula of other subjects. As in my opinion, EE can be evaluated through action initiation that proves the relevancy of teaching and learning of EE curriculum. With action initiation, I meant through developing programmes that are engaging and promotes practical action. This is evident from various studies that were conducted, particularly, with the view to investigate the implementation of EE at school level (Mokhele, 2008; Rahman, 2016; Shabalala, 2019). In a study conducted by Mokhele (2008), and Luna-Krauletz et al., (2021) with a view to integration and implementation of EE, the different authors found that in South Africa and other parts of the world, where EE is implemented, there is no clarity on how EE should be implemented in the formal education system. In support, Damoah and Adu (2020) concluded that the policy has failed to spell out a clear direction on how teachers should integrate EE into their subjects.

Even though prior authors have found that there are challenges with the integration and implementation of EE in schools, literature does not show of any interventions to meet the recommendations made by authors in their studies to address EE implementation and integration related challenges (Damoah & Adu, 2020; Luna-Krauletz et al., 2021; Mokhele, 2008). Therefore, the purpose of the current study is to explore the availability of interventions to manage EE and identify strategies that may contribute to successful distributed leadership in schools to manage EE curriculum.

### **Theoretical Framework**

The current research is grounded on a distributed leadership theory. Using this theory helped to understand how distributed leadership can be used to facilitate the management of EE curriculum in secondary school. Distributed leadership includes activities that are tied to the core work of an organization that are designed by organization members as intended to influence and impact the motivation, knowledge, affect or practices of other organizational members (Cooper, 2012). According to Grenda (2011), distributed leadership theory is an emerging conceptualization that relies on the guidance and direction of multiple human resources. This view of leadership allows the organization to benefit from the combined expertise and joint interaction of school leaders and professional colleagues. Together, this group can work in

concert toward a common goal so that the outcome is greater than the sum of their individual actions (Elmore, 2000; Gronn, 2000; Spillane, 2005).

Spillane (2012) tested and proposed distributive leadership theory as the best leadership approach that schools should use. In the school context, distributed leadership moves beyond the philosophy that leadership emanates solely from the formal position of the principal and instead frames leadership as a practice that involves an array of individuals whose dynamic interactions mobilize and guide teachers in the process of instructional change and learning improvements (Harris, 2005; Spillane, 2005; Timperley, 2005). Distributed leadership does not take the responsibility and authority of leading the school away from the principal (Grenda, 2011). But most importantly, distributed leadership requires the principal to understand the synergistic relationship between leadership and organizational structures, school vision, and school culture. Distribution of leadership by default typically occurs when internal and external stakeholders take the responsibility of leadership functions or routines that are not fulfilled by others within the school community (Cooper, 2012). Therefore, distributed leadership serves as a catalyst to manage EE curriculum at schools as environmental issues cannot be solved by an individual, but everyone has a responsibility to make the environment conducive for future generations.

### **Problem Statement**

The implementation of EE has long been reported to be coupled by challenges that hinder the efficiency of the implementation in the sphere of education (Motshegoa, 2006; Mokhele, 2008). Amongst the challenges mentioned by different authors in all parts of the world, but particularly in South Africa, is the provision of EE in the curriculum; inadequate knowledge about the environment and environmental issues; lack of monitoring of the implementation of workshop process in practice, inability to generate a whole-school approach to active environmental learning; lack support on the part of the school management in respect of the introduction of environmental learning into the curriculum; lack of support materials; lack of support and assistance on the part of teachers in respect of the implementation of EE; funds to with which to purchase learning support materials; lack of information from the curriculum development unit; attitudes of teachers; lack of facilities; time constraint and inappropriate class size (Bacon & Ziepniewski, 2017; Joseph, 2014; Mathenjwa, 2014; Rahman, 2016).

Another challenge that has been mentioned is the issue of teachers being the only role players who are recognized as key agents in the implementation of EE (Del Carmen Conde & Sanchez, 2010; Matshe, 2012). Within the school setting, teachers are the key role players in the implementation of EE. In fact, there are empirical study evidence to suggest that, in many schools in South Africa where EE is implemented, teachers are on their own (i.e., they do not receive support) and they lack resources to support the implementation of EE (Loubser & Simalumba, 2016; Milupi et al., 2022).

Apart from highlighting impediments to EE, some scholars also provided recommendations on how these challenges could be addressed (Mathenjwa, 2014; Ketlhoilwe, 2003). One of the recommendations is that distributed leadership could be used to facilitate curriculum reform, particularly in respect of teaching EE-inclined topics (Avisar et al., 2018). This is attributed to the success of distributed leadership on numerous areas within the sphere of education and is seen as one form of leadership that is prominent in the current education discourse (Shava & Tlou, 2018). Distributed leadership is one of the successful leadership styles in primary and secondary schools as it improves the leadership conditions of the schools (Dampson et al., 2018). For that reason, some scientists are of the view that responsibilities

should be distributed equally to various role players, and no one should be left behind (Dampson et al., 2018; Lumby, 2019).

The benefits of distributed leadership, include inter alia, collaboration amongst staff members for the betterment of the organization (Harris, 2008). Similarly, the organizational commitment has also been identified as a crucial factor in determining and influencing organizational outcomes (Shah, 2012). Based on the successes of distributed leadership, in other parts of the world within the sphere of education (Dampson et al., 2018), distributed leadership can be considered as one of the tools by which EE can be managed. Accordingly, within distributed leadership, school management teams, teachers, parents, and education department officials should strive for a common purpose and, thus, work cooperatively towards the meaningful implementation of EE in South African schools.

The stakeholders' role in EE is to ensure the management of EE curriculum in schools, since EE is integrated in all school subjects that are regularly monitored as one of the elements of curriculum management. However, EE curriculum cannot be monitored through theoretical testing like other subjects' curriculum. In my view, EE can be assessed through action initiation that proves the relevancy of teaching and learning of EE curriculum. This research might help recommend interventions that could help to efficiently facilitate the management of environmental education through distributed leadership. As mentioned in the above paragraph, distributed leadership has a potential to bring positive change in managing the curriculum. However, despite this potential, the literature reviewed for this research suggests that in South Africa, as in other parts of the world, there is paucity of research which focusses on the role of distributed leadership in education, particularly, in the management of EE. Hence, Sibanda (2017, p.577) writes, "there is still a need for more research on distributed leadership in primary and secondary schools in South Africa". This is particularly true in respect of the management of EE because, as previously stated, EE curriculum does not receive as much attention as the other subjects.

Accordingly, this research aimed to explore the strategies for environmental education interventions through distributed leadership in secondary schools in South Africa. The questions to be answered by the current research is: What are the interventions available to manage environmental education curriculum in schools? And What are the strategies that may contribute to the successful distributed leadership in schools to manage EE curriculum? The objectives of this study are: to determine the availability of interventions to manage environmental education curriculum in schools. Another objective is to identify strategies that may contribute to successful distributed leadership in schools to manage EE curriculum.

## **Method**

A research methodology is the specific procedures or techniques used to identify, select, process, and analyses information about a topic. The research model, study group, data collection tools, data analysis, ethical consideration and ethics committee approval processes are discussed in the following sections.

### **Research Model**

This study is part of a larger PhD thesis that the researcher is engaging on to investigate strategies to manage EE curricula through distributed leadership in one of the provinces of KwaZulu-Natal in South Africa. A qualitative study approach was adopted, allowing the researcher to comprehend the issue more deeply (Alase, 2017). Within the scope of qualitative

study, it is essential that the relationships between the methods used in observing, describing, and analyzing various dimensions of daily life are managed by the researcher (Dingwall and Miller, 1997). In this research, which aims to explore the interventions that can be fostered by distributed leadership to manage EE curriculum in schools, the case study model (Yin, 2006), one of the qualitative research methods, was preferred as part of the research to conduct. The case study design was chosen because it makes it easier to provide rich context-based data that is indicative of the respondents' "actual" lives (Thanh & Thanh, 2015).

### **Study Group-Universe/Sample**

A purposeful sample component was utilized to choose the cases for this research (Crossman, 2020). The researcher can access a wide range of variations, formats, and viewpoints on the topic at hand using this method. The demographics of the region where this investigation was conducted served as a guide for the researcher, who employed a set of specified criteria (Patton, 1990), as informed by the demographics of the geographical location of this investigation, to identify the three secondary schools in one district that served as research sites for the current research. The participants consisted of the school stakeholders such as principals, deputy principal, head of departments, teachers and subject advisors as stakeholders who manage the curriculum at a school level. From each school, one school principal, deputy principal/head of departments (HOD), and one Natural sciences teacher in a grade 8 class and two subject advisors from one district were chosen to voluntarily partake in the current research. These participants were chosen because the researcher might get rich data as the participants are responsible for curriculum management.

### **Data Collection**

The data of this study, which aims to explore the strategies for environmental education interventions through distributed leadership in secondary schools in South Africa were collected through a semi-structured interview guide. An interview is an important qualitative research method in which the researcher collects data directly from the participants (Snowkat & Parveen, 2017). Necessary arrangements were made with the school leaders and the semi-structured interview guide was determined as 11 questions. The interviews were held in the teachers' room, in the principal's rooms, in the HODs/deputy principal's rooms and on MS Teams with subject advisors by making an appointment with the participants. The interviews lasted an average of 45 minutes. Voice recordings were taken from the participants who gave permission for the interviews, and the data were recorded in the form of notetaking for those who did not give permission. After the interviews were completed, the audio recordings were transcribed. In order to check the accuracy of the data, the audio recordings were confirmed by an independent researcher.

### **Data Collection Tool**

Semi-structured one-on-one interviews were employed in this research to gather data. These interviews were conducted with three principals, two subject advisors, one deputy principal/two HODs and three teachers. An interview guide was created guided by the research questions that had to be answered. The purpose of the interview guide was to ensure that the interview questions respond to the research questions. Guided by an interview guide was used. The interviews were audio recorded with each respondent's consent. Each responder had the option to have their interview performed in the language of their choice, and the interviews were conducted at the convenience of the participants. Additionally, to increase the data's richness,



numerous documents were shared by the participants to show what is it that they are talking about, such as Annual teaching plans and school's improvement plans.

### **Data Analyses**

Text reduction, coding, categorization, and note of numerous themes or patterns were used to analyses the data thematically (Alhojailan, 2012). As the research progressed, the connections between the themes were discovered through ongoing comparison (Bowen, 2008). Additionally, all audio recordings of interviews were transcribed, and interviews that were conducted in languages other than English were translated. Translations were controlled by doing a forward and back translation to the language spoken by the interviewee to ensure that no meaning was lost. After translations member checking was applied to ensure that the researcher reported the exact words of the participant.

### **Trustworthiness**

To assure three aspects of trustworthiness, namely credibility, dependability, and confirmability of the findings, data, and methodological triangulation as well as an audit trail of raw data, field notes, and data analysis techniques were used (Cohen et al., 2018; Cypress, 2017). The researcher gave a thorough and meaningful account of the research setting and events to facilitate the transferability of findings to other settings.

### **Ethical Considerations**

Each respondent was personally met and interacted with by the researcher before to data collection to fully explain the purpose of the research, study's objectives and secure their agreement to participate. The participants were given the assurances of anonymity and confidentiality; instead, pseudonyms were utilized to identify each participant. Furthermore, it was made clear to the participants that they might withdraw from the study at any time if they choose to do so.

### **Ethics Committee Approval Process**

The ethics application for the study was made on 22/01/2021 and the research was carried out with the approval of the University of South Africa (UNISA) College of Education (CEDU) Research Committee (REC).

## **Results**

### **Theme: Interventions that have a potentially in promoting the management of EE through distributed leadership**

The process of curriculum management involves curriculum development, integration, implementation, and evaluation (The Mansfield Independent School District (MISD), 2019). The management of EE curriculum is importance in the educational sector since EE is an importance element to combat the accelerating deterioration of the environment. This section aimed to explore the strategies available to manage EE curriculum through distributed leadership, if not propose suitable strategies.

### **What are the interventions available to manage environmental education curriculum in schools?**

This section aims to answer the first research questions of whether there are any interventions available to manage EE curriculum in schools. There seems to be no strategies in

place to manage EE curriculum in schools, except strategies to manage the schools. The participant’s responses are based on how learners were taught during Covid-19 pandemic, which was irrelevant for this research.

However, participants did share strategies that they believe can assist in facilitating the management of EE curriculum. The diagram below represents the above-mentioned theme and subthemes that are discussed in the following sections.

**What are the strategies that may contribute to the successful distributed leadership in schools to manage EE curriculum?**

The following section answers the 2<sup>nd</sup> research question about the possible strategies manage EE curriculum in schools.

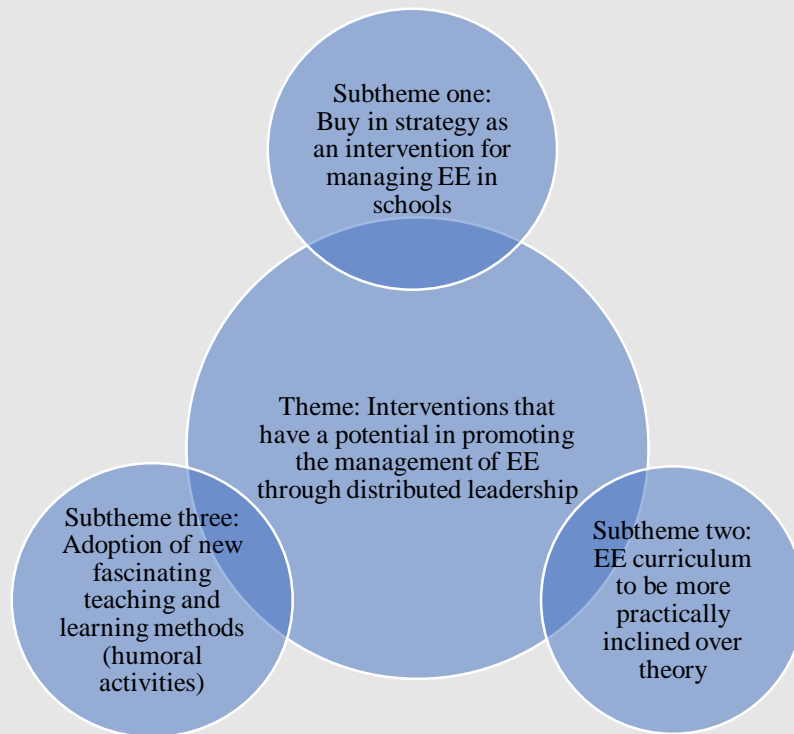


Figure 1: Theme and sub-themes

**Subtheme one: Buy in strategy as an intervention for managing EE in schools**

Amongst these strategies Mr Mofolo stated that a buy-in strategy can be one of the strategies to manage EE curriculum. In his response, Mr Mofolo mentioned that a leader needs to ensure that his followers buy-in, meaning they approve of the idea.

*“If you come up with strategies to manage the curriculum and the teachers do not buy it, they will not do it. So, I adopt a buy in strategy...”*

Buy in is a strategy to get leaders, managers, supervisors, peers, colleagues, lobbyists, politicians, and everywhere to get people to agree to do what they want them to do (Clawson, 2007). A buy in strategy is basically a way to make followers do what their leader wants. Buy in is also a strategy to get people to take part and be engaged (Willumse et al., 2018). A buy in

strategy seems to have so much significance in this research, as the adoption of this strategy might help get different stakeholders on board for the management of EE curriculum. Firstly, the implementation of this strategy should start from the National level as they seem to hold more powers when it comes to curriculum decisions and its development.

### **Subtheme two: EE curriculum to be more practically inclined over theory**

Another strategy would be to improve the curriculum of EE to be more practical than theoretical. This way has an advantage to incorporate and motivate creativity and innovation amongst the citizens. It has been reported in prior research that the system of education in place does not set students ready for the job market, but what they are taught are basics that are not applicable in the corporative market. In support, Hansen (2021) reported that, many people have lost their jobs in the United States (US) because the US education system is not held accountable for ensuring that students are equipped with the skills and capabilities to prepare for a career where they can obtain financial stability. In concurrence, Krishnan (2020) mentioned that our education system is losing relevance. Krishnan (2020) further noted that our education system is built on the Industrial Revolution model and focuses on Intelligence Quotient (IQ), memorization and standardization. The responses of participants were in line with the view of Hansen (2021) and Krishnan (2020) when they mentioned that the implementation and management of EE should not only be about teaching environmental topics or making examples that relates to the environment just like it is now happening, but rather to promote practicality to prepare learners for the job market. In his response Mr Mofolo mentioned that,

*“Yes! it has to be more practical. If I say practical, I do not only mean to be physical practicality used because it is there as prescribed topics...”*

Mr Mofolo further stated that, *“gradual implementation should be there, together with the theory. Application in general, how we apply the content in our daily affairs. For example, a teacher needs to make a student realise how their actions affect all of us...”*

### **Subtheme three: Adoption of new fascinating teaching and learning methods (humoral activities)**

Another strategy would be to involve all stakeholders through teaching EE in a more interesting, fascinating, and creative manner. Making learning fun and more interesting is recommended as it is believed to help keep students focused, involved, interested, and more willing to participate and take risks; retain information better because the process is enjoyable and memorable (Teachers Corner, n.d). From Mrs Sydney’s response, it is evident that students from his school take EE as a figure of fun because even them as school leaders or managers, do not see any value in teaching students about the environment. If EE was considered as an important aspect of the curriculum, students would see a need to take it seriously. In his response, Mrs Sydney mentioned that,

*“We wanted to cater for environmental education last year (2020) as early as March or April, but we were disturbed because we were going to do it for the first time. You know when you are introducing something for the first time, students will simply laugh at you. Let say maybe we clean this river or stream here; students will say why do we clean the rivers? (giggles). You know last year, we made an example by papers, we showed them a river in Japan that was polluted by plastics and papers, students did not understand what is the significance of cleaning the sea, how does that affect us if the whale is dying, there you see they do not understand that this is an environment that we need, we need it since*

*there is food in the sea. I, as a principal and teachers were taking this initiation to engage students, but they were not interested because of the environment they grew up on which is not enabling...”*

This makes it difficult to manage something that you view as figure of fun and which is convincing that we live in hard times where the state of the environment is devastating, but we find humour in that. However, as a researcher and a teacher, humour can be considered as another way of teaching students about the environment through humour. Which means that such humour should not be a discouragement for school staff to teach environmental education, but it should be used as a strategy to get students involved through introducing exciting activities.

### **Discussion, Conclusion and Suggestions**

In this research, which was conducted with the aim of exploring the interventions that can be fostered by distributed leadership to manage EE curriculum in schools. As mentioned in the preceding section, there seems to be no interventions currently in place for managing EE in secondary schools. It has been determined that participants only explained the strategies that they have used to teach students during Covid-19 pandemic with concepts such as “creating WhatsApp groups to give work to students to do even at homes, not having enough infrastructure and less time given by the Department of Basic Education to complete the syllabus, and others”. However, in absence of the strategies in place, participants were able to share strategies that they believe may assist in managing EE curriculum in schools.

The first strategy that was discussed by Mr Mofolo is the Buy In strategy which might ensure that the other school stakeholders buy in to the idea of collaboration and distribution of roles in terms of managing EE curriculum. When the literature was reviewed, Half (2017) confirmed that a buy in strategy in the organization does not just benefit the organization, but collaboration can also increase job satisfaction and lead to better company outcomes. Working in teams allows your staff more opportunities to release their creative ideas and offers a greater sense of belonging (Half, 2017). Therefore, for the purpose of this research, a buy in strategy might emphasize the stakeholders value in the management of EE curriculum.

Another strategy mentioned by the participants was that EE curriculum needs to be more practically inclined over theory. Powers (2004) assert that more practice in the classrooms, through hands-on immersion, prospective teachers can feel and be motivated by the energy and enthusiasm students have for the natural world. Practicality improves participation. Additionally, having a curriculum that is more practically based might require participation from all relevant stakeholders to improve the teaching and learning process.

Lastly, there is a need of adopting new fascinating teaching and learning methods that are humorous in nature. Bakar and Kumar (2019) states that humour serves many roles in teaching and learning. Bakar and Kumar (2019) further states that there is something intriguing and exciting about humour and its use in teaching and learning contexts. In support, Meyer (2000) mentioned that since humour is subjective (different people have different understandings and perceptions of humour) and humour is a receiver-centered communication. Therefore, the use of humour when teaching EE may be considered to attain learners’ interest and attention on the environmental topic that is being discussed in the classroom.

The findings of this study point that there are currently no EE interventions in schools. However, as suggested by the findings of the current study, the above strategies might have the potential to serve as interventions for EE. The findings of this study, further reveal that teachers

are viewed as the main catalyst of initiating environmental interventions. However, I argue that other school leaders seem to distance themselves from taking initiative and pass the role to teachers alone. This poses a need for all stakeholders to realize their roles to intervene on EE initiatives as the world cannot be changed by the power of one man. Furthermore, distributed leadership in this case has a significant responsibility to bring school stakeholders to work together through adopting a buy-in strategy where all stakeholders take upon themselves the responsibility of ensuring that EE is relevant to the context of students and their daily interactions. Ensuring that EE content is relevant and beneficial to introduce skills and get students ready for the job market.

The mentioned strategies for environmental education interventions might serve as the building blocks of environmental education curriculum reform and implementation in a comprehensive manner. Again, distributed leadership may serve as a vehicle to allow for this reform as it has a potential of bringing different school stakeholders on board.

This study suggested.

- The adoption of the aforementioned strategies for environmental education intervention.
- Restructuring the curriculum to be practically based, rather than being theoretical.
- Involvement of all stakeholders through decision making where powers are being distributed.

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The author declares that this paper is her own personal work emanated from her PhD study.

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## References

- Alase, A. (2017). The interpretative phenomenological analysis (IPA): A guide to a good qualitative research approach. *International Journal of Education and Literacy Studies*, 5(2), 9-19.
- Alhojailan, M. I. (2012). Thematic Analysis: A Critical Review of Its Process and Evaluation. *West East Journal of Social Sciences*, 1(1), 39-47.
- Ardoin, N. M., Bowers, A. W., & Gaillard, E. (2020). Environmental education outcomes for conservation: A systematic review. *Biological Conservation*, 241, 1-13.
- Avissar, I., Alkaher, I., & Gan, D. (2018). The role of distributed leadership in mainstreaming environmental sustainability into campus life in an Israeli teaching college: A case study. *International Journal of Sustainability in Higher Education*, 19(3), 518-546.
- Bacon, J. P., & Ziepniewski, C. (2017). Environmental Education: The Need, The Challenges, and What We've Learned. *Environmental Education*, 3, 16-23.
- Bakar, F., & Kumar, V. (2019). The use of humour in teaching and learning in higher education classrooms: Lecturers' perspectives. *Journal of English for Academic Purposes*, 40, 15-25.
- Bowen, G. A. (2008). Naturalistic inquiry and the saturation concept: a research note. *Qualitative Research*, 8(1), 137-152.
- Clawson, J. G. (2007). Buy-In. Available at SSRN 1282433.
- Cohen, L., Manion, L., & Morrison, K. (2018). *Research Methods in Education* (8th ed.). London: Routledge.
- Cooper, G. (2012). *Examining the transformational and distributive leadership styles of secondary principals: a mixed methods study* (Published Doctoral dissertation). Texas Technology University, Texas.
- Crossman, A. (2020). Understanding Purposive Sampling. An Overview of the Methods and Its Applications. Retrieved from: <https://www.thoughtco.com/purposive-sampling-3026727> on 13.12.2021
- Cypress, B. S. (2017). Rigor or Reliability and Validity in Qualitative Research. *Dimensions of Critical Care Nursing*, 36(4), 253-263.
- Damoah, B., & Adu, E. O. (2020). Teacher's Awareness of The Integrated Environmental Education Curriculum in South Africa. *E-Bangi*, 17(6).
- Dampson, D. G., Havor, F. M., & Laryea, P. (2019). Distributed Leadership an Instrument for School Improvement: The Study of Public Senior High Schools in Ghana. *Journal of Education and E-Learning Research*, 5(2), 79-85.
- Del Carmen Conde, M., & Sanchez, J. S. (2010). The School Curriculum and Environmental Education: A School Environmental Audit Experience. *International Journal of Environmental and Science Education*, 5(4), 477-494.
- Edsand, H. E., Broich, T. (2020). The Impact of Environmental Education on Environmental and Renewable Energy Technology Awareness: Empirical Evidence from Colombia. *International Journal of Science and Mathematics Education*, 18, 611-634.

- Elmore, R. F. (2000). *Building a New Structure for School Leadership*. Washington, DC: Albert Shanker Institute. Retrieved from: <https://www.files.eric.ed.gov/fulltext/ED546618.pdf>
- Erhabora, N. I., & Don, J. U. (2018). Impact of Environmental Education on the Knowledge and Attitude of Students Towards the Environment. *Tạp Chí Nghiên Cứu Dân Tộc*, 24.
- Frazen, R. L. (2017). Environmental Education in Teacher Education Programs: Incorporation and Use of Professional Guidelines. *Journal of Sustainability Education*, 16, 1-16.
- Grenda, J. P. (2011). *Instances and principles of distributed leadership: A multiple case study of Illinois middle school principals' leadership practices*. University of Illinois at Urbana-Champaign.
- Gronn, P. (2000). Distributed properties: A new architecture for leadership. *Educational management & administration*, 28(3), 317-338.
- Half, R. (2017). How (and Why) to Get Employee Buy-In on Projects. Retrieved from: <https://www.roberthalf.com/blog/management-tips/how-and-why-to-get-employee-buy-in-on-projects> on 06.02.2023
- Hansen, M. (2021). The U.S. Education System Isn't Giving Students What Employers Need. In *Harvard Business Review, Business Education*. Retrieved from: <https://hbr.org/2021/05/the-u-s-education-system-isnt-giving-students-what-employers-need> on 12.08.2022
- Harris, A. (2005). Leading or Misleading? Distributed Leadership and School Improvement. *Journal of Curriculum Studies*, 37(3), 255-265.
- Harris, A. (2008). Distributed Leadership: According to the Evidence. *Journal of Educational Administration*, 46(2), 172-188.
- Joseph, C. N. (2014). *Investigating the inclusion of Environmental Learning in the Life Science Grade 10 curriculum: A case study of three Namibian schools* (Published Doctoral dissertation) Rhodes University, South Africa.
- Ketlhoilwe, M. (2003). Environmental education policy implementation in Botswana: The role of secondary education officers and school heads. *Southern African Journal of Environmental Education*, 20, 75-84.
- Krishnan, K. (2020). Our Education System Is Losing Relevance. Here's How to Unleash Its Potential. In *The Impact-se*. Retrieved from: <https://www.impact-se.org/our-education-system-is-losing-relevance-heres-how-to-unleash-its-potential/> on 08.01.2022
- Loubser, C., & Simalumba, P. (2016). The implementation of environmental education in geography (Grades 8–10) in the Caprivi Region, Namibia. *Southern African Journal of Environmental Education*, 32, 51-65.
- Lumby, J. (2019). Distributed leadership and bureaucracy. *Educational Management Administration & Leadership*, 47(1), 5-19.
- Luna-Krauletz, M. D., Juárez-Hernández, L. G., Clark-Tapia, R., Súcar-Súccar, S. T., & Alfonso-Corrado, C. (2021). Environmental education for sustainability in higher education institutions: design of an instrument for its evaluation. *Sustainability*, 13(13), 7129.

- Mathenjwa, J. S. (2014). *The implementation of environmental education in the Ubombo circuit schools* (Published Doctoral dissertation). University of Zululand, South Africa.
- Matshe, P. F. A. (2012). *Teachers' Views on Implementation of Environmental Education in Senior Phase Around Itsooseng* (Unpublished Doctoral dissertation). University of Johannesburg, South Africa.
- Meyer, J. C. (2000). Humor as a double-edged sword: Four functions of humor in communication. *Communication theory*, 10(3), 310-331.
- Milupi, I., Kalimaposo, K., Mubita, K., Mundende, K., & Muleya, G. (2022). Mainstreaming Environmental Education in the School and Teacher Education Curriculum in Zambia. *International Journal of Social Science and Education Research Studies*, 2(8), 366-378.
- Mokhele, M. L. (2008). *Opportunities to learn environmental education: a case study of Mpumalanga province* (Published Doctoral dissertation). University of Pretoria, South Africa.
- Motshegoa, M. E. (2006). *The Policy and Practice of Environmental Education in South African Schools* (Published Masters Mini-dissertation). University of Pretoria, South Africa.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods*. SAGE Publications, inc.
- Powers, A. L. (2004). Teacher preparation for environmental education: Faculty perspectives on the infusion of environmental education into preservice methods courses. *Journal of Environmental Education*, 35, 3-18.
- Radeiski, J. (2009). *The Implementation of Environmental Education in elementary school: A comparative study between Sweden and Germany* (Published Masters dissertation). Blekinge Institute of Technology, Sweden.
- Rahman, M. S. (2016). The Advantages and Disadvantages of Using Qualitative and Approaches and Methods in Language "Testing and Assessment" Research: A Literature Review. *Journal of Education and Learning*, 6(1), 102-112.
- Satyaraouppuleti, T. G. G. K. V. R. (2018). "Environmental Education to Mitigate Environmental Decay and Promote Sustainable Development." *International Journal of Agricultural Sciences*, 2(2),
- Shabalala, N. P. (2019). *Perceptions of Teachers and Learners towards the Integration of Environmental Education in the Classroom* (Published Masters dissertation) University of South Africa, Pretoria.
- Shah, M. (2012). The impact of teachers' collegiality on their organizational commitment in high-and low-achieving secondary schools in Islamabad, Pakistan. *Journal of Studies in Education*, 2(2), 130-156.
- Shava, G. N., & Tlou, F. N. (2018). Distributed leadership in education, contemporary issues in educational leadership. *African Educational Research Journal*, 6(4), 279-287.
- Sibanda, L. (2017). Understanding Distributed Leadership in South African Schools: Challenges and Prospects. *Issues in Education Research*, 27(3), 567-581.
- Spillane, J. P. (2005). Distributed leadership. In *The educational forum*, 69(2), 143-150.



- Spillane, J. P. (2012). *Distributed leadership*. John Wiley & Sons.
- Thanh, N. C., & Thanh, T. T. (2015). The interconnection between interpretivist paradigm and qualitative methods in education. *American journal of educational science*, 1(2), 24-27.
- The Mansfield Independent School District. (2019). *Curriculum and Instruction*. In *The Texarkana Independent School District (ed.), Curriculum Management Plan*. Retrieved from: <https://www.txkisd.net>
- Timperley, H. S. (2005). Distributed leadership: Developing theory from practice. *Journal of curriculum studies*, 37(4), 395-420.
- Tlhagale, M. P. (2005). *Environmental education as a strategy towards sustainable living for rural communities* (Published Doctoral dissertation). University of Pretoria, South Africa.
- United Nations Educational, Scientific and Cultural Organization- United Nations Environment Programme. (1978). The Tbilisi Declaration. *Connect*, 3(1), 1-8.
- Willumsen, P. L., Kadir, B. A., & Oehmen, J. (2018). How do you create buy-in in strategy implementation? In *MIT System Design & Management Symposium 2018: Characterizing the gap between strategy & implementation*.
- Yin, R. K. (2006). Mixed methods research: Are the methods genuinely integrated or merely parallel? *Research in the Schools*, 13(1), 41-47.

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## Theoretical Analysis on Caring School Leadership

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### ABSTRACT

In this study, the reflections of caring leadership on the school organization were examined in the context of teacher, student, and school leader relations. Empirical research both on the private and public sectors shows that caring leadership can support organizational learning. However, despite the growing interest in the importance of caring in education, research on caring leadership in schools focuses on narrow dyadic relationships between people. That said, caring is a very powerful concept in addressing the most urgent needs of teachers and families, and collective learning is a feature that has the power to positively affect belonging, commitment, personal well-being, and academic achievement. Recent scholarship has increasingly sought to move understanding of caring from an empty buzzword to a meaningfully defined and bounded idea. In this study, the concepts of caring and caring leadership were examined based on the literature in the context of school organization, and it was concluded that creating an effective learning environment requires establishing positive relationships, and this requires creating a caring school culture.

**Keywords:** Caring, caring leadership, caring school leadership

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## **Introduction**

Caring leadership and its effects on the school environment have been the focus of recent research in the field of educational administration (Cohen, 2012; Louis, Murphy & Smylie, 2016). It is argued that caring school leadership (CSL) can support educators' sense of collective responsibility and create bonds of trust that improve organizational learning capacity (Louis & Murphy, 2017). Caring acts as an emotional motivation that both gives meaning to school and keeps schools together in different ways (Louis, et al. 2016). School leadership that supports a caring environment contributes to the development of a supportive and empowering environment (Green, 2014). This encourages teacher development and contributes to more effective teaching and learning processes and student progress. Caring for people fulfills their basic need for belonging and connection with others and is an important factor in creating motivation (Reeve, 2006).

Caring relationships in schools are an organizational phenomenon that goes beyond the relationship between a teacher and student or between students and their peers. A caring culture in schools is a collective trait that requires balancing cognitive learning and social-emotional development for both students and adults. Students need teachers who show they care, and teachers need school principals who display caring leadership behaviors (Davis & Wilson, 2000). Therefore, it can be said that it is important to understand the actions of school leaders who are committed to creating an emotionally healthy and academically productive caring culture in schools (Sergiovanni, 1992).

CSL refers to a leadership style that prioritizes the well-being and growth of students, teachers, and staff. It involves creating a positive and supportive school culture where everyone feels valued, respected, and supported (Louis & Murphy, 2017). CSL is essential for creating a safe and nurturing learning environment where students can thrive academically, socially, and emotionally. By modeling kindness and compassion, caring school leaders can create a positive ripple effect that impacts the entire school community. Through their leadership, caring school leaders can inspire and empower others to develop their own leadership skills and become agents of positive change in their schools and communities (Louis, et al. 2016; Murphy & Torres 2014).

This study focused on the importance of caring in schools and school leadership. The concept of caring and how it functions were examined, and all components associated with caring leadership that situate leadership within this broader exposition were introduced. Results of the literature review showed that students as beneficiaries of caring, but teachers and others also stand to benefit. Finally, study explores ways that leadership might extend the interpersonal to the organization and shape the organization to support the interpersonal.

### **Theoretical Foundations of Caring**

When the literature on the concept of caring in education is examined, it is seen that this is a very powerful concept in addressing the needs of students, teachers, and families, and it is a source of belonging, commitment, personal well-being and academic success. However, the meaning of the concept of caring for schools is questionable, and ambiguous and requires the study of many unexplained aspects (Thompson, 1998). As can be understood from the definitions, the literature reveals that the beliefs and actions of school principals and teachers have a significant impact on how students will respond to caring efforts.

It is seen that there are various opinions about what caring is and how it emerges in human life. For example, Glenn, Chang & Forcey (1994) define caring as knowing, feeling, and

acting in the interests of others. Noddings (2003) defines it as any thoughtful human reaction (or lack of response) that enables others to thrive. Mayeroff (1971) conceptualizes caring for someone else as helping him grow and realize himself. All these definitions cause an emotional response that makes it easier, complicated, or questioning us to understand the word caring. This leads us to think about our sense of values and how they relate to caring.

Tronto (1994) defined caring as a social practice that can be seen as an activity of the human species that includes everything we do to maintain, protect, and repair our world so that we can live in it. Tronto states that there are four stages of the caring relationship. These are (1) attention – awareness of the other's needs; (2) responsibility – willingness to respond to and deal with these needs; (3) competence – the ability to care well and successfully; (4) responsiveness – the ability to take into account the situation of others and respond to the need to care as others see it (Tronto, 1994).

Although the concepts of caring and supporting are frequently included in the educational literature that addresses the important social relationships between students, teachers, and leadership (Murphy & Torres 2014), systematic conceptualization of these concepts is very rare. (Noddings, 2013) defined caring as "a way of relating to people, not a set of behaviors." Caring is also defined for broad purposes, such as supporting overall development, the well-being and well-being of others, the special needs of others, and increasing the capacity to care for oneself and others. In other words, the ability to care increases as one cares for and is cared for by someone (Roofey, 2006). These authors have dealt with caring from a general point of view, expressed through behavior and interaction, as the nature of the bilateral relationship. In other words, it can be said that caring is a concept expressed by the aims of those who care and are cared for.

What is common to all the definitions mentioned is the perception of caring as a relationship, and what characterizes it is interconnectedness and interdependency. This includes helping the other and allowing him/her to grow and develop. This perception is based on the ability of the individual to respond diligently to the needs of others, which includes a long-term commitment and actions based on responsibility and commitment to the well-being and empowerment of the other. Therefore, it can be said that caring theories develop primarily in charitable professions, especially in educational organizations.

### **Caring Leadership and Teacher-Student Relationship**

Caring leadership is important in schools and contributes both to the development of more effective adult cultures and the learning of students. In educational research, the focus is mostly on teacher-student relationships and the importance of building caring communities based on specific communicative conditions (Newmann, 1992; Roth and Brooks-Gunn, 2003). The nature of teacher-student relationships provides the necessary environment for the establishment of high standards and academic commitment within the classroom, both in terms of caring and academically. Because many students learn more from teachers who emphasize healthy personal relationships. Therefore, it can be said that the power of a positive teacher-student relationship is very important for learning to occur (Goodenow, 1993; Hattie, 2009). Positive relationships, on the other hand, constitute the social capital or supportive network of relationships needed for effective academic work to occur in classrooms (Ancess, 2003).

Such caring relationships affect the course of children's school experience, especially in schools where children with difficult conditions in out-of-school life are concentrated. The lack of positive social relationships and connections deprives students of the resources to develop and as a result, student outcomes are adversely affected (Croninger & Lee, 2001). So, students are more successful socially, emotionally, and academically when they perceive that they are in a safe environment and are seen as important members of their learning communities. In achieving this, the caring leadership of the school leader has an important role.

### **Organizational Characteristics That Support Caring**

It is known that students and families involved in all processes in school are more likely to be actively involved in the learning process because familiarity and stability make them more comfortable in the classroom and therefore more willing to participate actively in the learning process (Noddings, 1992). Educators who know and accept students' home environment and cultural background are more likely to respond and build caring relationships with a higher level of involvement in students' learning process. Creating a warm, personal learning environment where students are well-known and accepted by all school staff can make a difference in students' achievements. Therefore, it can be said that the importance, understanding, and sensitivity shown by educators to students in a supportive school environment is the most important effect on student learning (Perez, 2000).

Key elements and enabling conditions for creating a caring learning environment depend not only on communicativeness but also on group background. Although deep communicative caring in schools is limited, organizational experiences that bring people together in collaborative work can lead to the development of a shared understanding of a common purpose, value, and short-term, and larger task focused on meeting students' needs. To some extent, these can be thought of as the results of adults caring for one another in the school community (Murphy & Torres, 2014). For example, a particularly important support that schools and teachers can provide is a safe learning environment.

The need to be safe is very important to young people and meeting these needs is essential for their academic, social and emotional development (Rumberger & Palardy, 2005). Efforts to create safe and enjoyable spaces for students to continue their school life and develop as individuals allow schools to become shelters for some students (Ancess, 2003; Christle, Jolivet & Nelson, 2005; Joselowsky, 2007; Robinson, 2007).

### **Caring School Leadership**

With the emergence of effective research on transformational leadership in schools, it is seen that the thought of caring leadership has gradually gained its place (Leithwood & Jantzi, 1999). Although transformational leadership neglects emotions, it has rekindled interest in understanding how leaders influence the development of the school climate and culture that fosters satisfaction, engagement, and success for both adults and children (Leithwood & Jantzi, 1999; Leithwood & Sun, 2012).

The principal's ability to create a caring environment fosters strong professional relationships, staff engagement, and organizational learning (Rumberger & Palardy, 2005). Louis & Murphy, 2017). Caring leadership is both contextual and relational and is influenced by the context of the person's close social relationship, organizational setting, and policy (Smylie et al., 2016). Thus, how caring leadership serves to promote organizational learning among teachers

may vary depending on the context of the school and the relationships educators form inside and outside the school.

Looking at the main elements of caring, it is seen that three conditions must be met for leadership actions, interactions and practices to be caring. These are (Boyatzis et al. 2006):

- It is based on an understanding of what matters and the needs of those who care, based on authentic knowledge of what leaders do and adequate relevance and involvement in what matters.
- The caring actions of school leaders motivate the success and individual well-being of those who are cared for.
- Whenever possible, school leaders' caring should be recognized and acknowledged by those who are cared for.

Expressions of such knowledge, understanding and motivations can be situational, unique to different groups and individuals, and variable and dynamic as understanding and needs develop. Because much of the leadership work in schools is invisible to others, it can be difficult to achieve practical reciprocity with recommendations in the literature. In particular, students' communication with school leaders may be limited compared to their communication with teachers, and a principal's actions of caring may be relatively less noticeable to students. Teachers experience more sustained attention and interaction with school leaders in general.

Over the past quarter century, many scholars have suggested that school leaders should restructure schools as caring communities (Beck, 1992). Since it is useless to wait for caring to occur without some principles, leaders can implement some general caring tendencies or practices implied by these actions as follows (Louis, Murphy, & Smylie, 2016):

- Engaging the school community in its vision and effort to be a caring school
- Involving the school community in caring self-assessment by assessing the abilities, background, manifestations, and experiences of caring that can or should occur.
- To shape the organizational culture of the school by supporting the norms and values that make up the supporting structures, social relations, policies and the organization of the school.
- Establishing larger systems of caring relationships to which school members belong, such as partnerships or projects with school-parents associations or community organizations.

In light of these principles, leaders see teachers as colleagues, partners and simultaneous learners and friends. They also work with these groups to “build a community of learners,” an ensure that all individuals to be cared for and developed. Caring relationships in schools appear to be an organizational element that goes beyond the relationship between a teacher and a student or between students and their peers. It is possible to define caring culture in schools as a collective feature that requires balancing cognitive learning and social-emotional development for both students and adults. Therefore, it can be said that; It is important to understand the actions of school leaders who are committed to creating an emotionally healthy and academically productive culture of caring in their schools (Aness, 2003; Goodenow, 199; Hattie, 2009).

## **Essence for Caring School Leadership**

CSL is essential for creating a positive school culture and promoting student success. Some studeis (e.g., Bartlett & García, 2011; Curry, 2016) argue that when school leaders prioritize the well-being of their students and staff, they create an environment where everyone feels supported, valued, and motivated to learn and grow. Essence for CSL can be summarized in a few key points (Lumby & Azaola, 2014; Tronto, 2010; Louis, K. S., Murphy, J., & Smylie, M, 2016):

- *Visionary leadership*: A caring school leader should have a clear vision for the school, which includes a focus on student learning and well-being. The leader should be able to communicate this vision effectively to staff, students, and parents.
- *Strong communication skills*: Effective communication is critical for building trust, fostering relationships, and creating a positive school culture. Caring school leaders should be able to listen actively and communicate clearly and respectfully.
- *Empathy and compassion*: A caring school leader should be able to understand and relate to the needs of students, staff, and parents. Empathy and compassion help create a supportive and inclusive school environment where everyone feels valued.
- *Collaboration and teamwork*: Caring school leaders should work collaboratively with staff, students, and parents to create a shared sense of purpose and to achieve common goals. They should foster a culture of teamwork and encourage everyone to work together to support student success.
- *Continuous learning*: Caring school leaders should be committed to their own professional development and the ongoing learning of their staff. They should encourage a culture of continuous learning, seeking out opportunities for growth and improvement.
- *Positive role modeling*: A caring school leader should model the behavior and attitudes they expect from others. They should demonstrate integrity, kindness, respect, and a strong work ethic, setting a positive example for everyone in the school community.

By embodying these traits, a caring school leader can help create a positive school culture that fosters academic achievement, personal growth, and overall well-being.

## **Conclusion**

In this study, CSL has been examined with all its components based on the literature and it has been understood that it has significant impact on various outcomes related to the school, students, teachers, and the wider community. The study reveals that caring leadership in schools that provide a supportive environment is a collective and organizational feature that requires balancing cognitive learning with social-emotional development for both students and adults. The findings regarding the reflections of caring leadership on education in line with the literature-based analyzes are discussed below under some important headings.

Firstly, it can be argued that CSL can be a foundation for holistic approaches to developing schools as learning organizations that consistently mobilize and increase professional capital. In this study, caring leadership was not only focused on the achievement aspect but also incorporated into the emotional and social interactions of teachers and students. Therefore, it was concluded that caring leadership can affect school culture in ways based on the ability of teachers to realize their professional development through academic as well as non-academic support. These non-academic support channels appeared to be based on the contextual

characteristics of the school, not on a one-size-fits-all concept of effective teaching (Ancess, 2003; Goodenow, 199; Hattie, 2009).

Secondly, as a result of the review, it was concluded that creating a successful school learning environment requires establishing positive relationships. As some authors have stated on this regard, teachers' performance and success is weaker in schools where caring is not evident, and there are negative organizational relationships that contribute to a negative climate (Beck, 1992; Kahn, 1993). Such positive relationships underpin school success, creating a set of values based on "caring." When positive relationships develop within the school community, students feel a sense of "caring", which positively affects their desire to learn. Caring leadership based on a caring ethic is a type of leadership that is widely recognized and accepted as a way to create a caring school environment that delivers strong learning outcomes (Ellerbrock and Kiefer, 2010; Kroth and Keeler, 2009). In this regard, caring leadership can help build a caring school community that supports the academic, social and emotional needs of students, particularly those living in poverty and trauma survivors. Students are more successful socially, emotionally, and academically when they perceive that they are in a safe environment and are seen as important members of their learning community. The caring leadership of the school leader has an important place in ensuring this.

Thirdly, caring leadership achieves results in establishing a safe environment at school. CSL is often characterized by a focus on building relationships and creating a supportive environment. As stated by Pellicer (2003) and De Bruyn (2007) school management, which assumes a caring role, means the development of a supportive and empowering environment in which teachers can develop. A caring-based leader contributes to safe supportive environments for students, parents, and teachers; It embraces learning by caring for teachers, students and their families personally and viewing everyone with a positive outlook, honoring emotions and empowering teachers to change and grow. In this way, caring enhances learning when schools become communities where everyone comes to learn. As caring school leaders embrace the idea that every individual deserves the opportunity to live and learn in a supportive, nurturing environment, aspects of human relations that go beyond just the fulfillment of tasks should be emphasized (Rumberger & Palardy, 2005; Boyatzis et al. 2006):

Finally, it was concluded that caring relationships in schools are an organizational element that goes beyond the relationship between a teacher and a student or between students and their peers. Here, caring culture is defined as a collective trait that requires balancing cognitive learning with social-emotional development for both students and adults (Demerath, 2018). Therefore, it can be said that it is important to understand the actions of school leaders who are committed to creating an emotionally healthy and academically productive caring culture in their schools (Day & Leitch, 2001; Hargreaves, 2002)

In order to successfully implement CSL, it is important for leaders to receive training and support in how to cultivate a positive school culture. It may also require a shift in organizational values and a willingness to prioritize the well-being of students and staff alongside academic performance. As a concluding remark, the main focus emphasized by the authors in this study is that CSL can have a profound impact on the entire school community, creating a positive and supportive environment that promotes student success and well-being. However, it requires a significant investment of time and resources and may be challenging to implement in practice. Nevertheless, it is an important leadership style that can promote a positive school culture and foster a sense of belonging, inclusivity, and respect for diversity.



## References

- Ancess, J. (2003). *Beating the odds: High schools as communities of commitment*. New York, NY: Teachers College Press.
- Bartlett, L., & García, O. (2011). *Additive schooling in subtractive times: Bilingual education and Dominican immigrant youth in the heights*. Vanderbilt University Press.
- Beck, L. (1992). Meeting the challenge of the future: The place of a caring ethic in educational administration. *American Journal of Education*, 100, 454-496.
- Boyatzis, R. E., Smith, M. L., & Blaize, N. (2006). Developing sustainable leaders through coaching and compassion. *Academy of Management Learning & Education*, 5, 8-24.
- Christle, C. A., Jolivette, K., & Nelson, C. M. (2005). Breaking the school to prison pipeline: Identifying school risk and protective factors for youth delinquency. *Exceptionality*, 13, 69-88.
- Cohen, J. (2012). School climate and culture improvement: A prosocial strategy that recognizes, educates, and supports the whole child and the whole school community. In P. M. Brown, M. W. Corrigan, & A. Higgins-D'Alessandro (Eds.), *The handbook of prosocial education* (pp. 227–270). Blue Ridge Summit, PA: Rowman and Littlefield Publishing Group.
- Croninger, R., & Lee, V. (2001). Social capital and dropping out of high school: Benefits to at-risk students of teachers' support and guidance. *Teachers College Record*, 103, 548-581.
- Curry, M. W. (2016). Will you stand for me? Authentic cariño and transformative rites of passage in an urban high school. *American Educational Research Journal*, 53(4), 883–918
- Davis, J., & Wilson, S. M. (2000). Principals' efforts to empower teachers: Effects on teacher motivation and job satisfaction and stress. *The Clearing House*, 73(6), 349–353.
- Day, C., & Leitch, R. (2001). Teachers' and teacher educators' lives: The role of emotion. *Teaching and Teacher Education*, 17(4), 403–415. [https://doi.org/10.1016/S0742-051X\(01\)00003-8](https://doi.org/10.1016/S0742-051X(01)00003-8)
- De Bruyn PP (2007) Organisational development in schools through quality management. In: Van der Westhuizen PC (ed.) *Schools as Organisations*, 3rd edn. Pretoria: Van Schaik, 293–311.
- Demerath, P. (2018). The emotional ecology of school improvement culture: Charged meanings and common moral purpose. *Journal of Educational Administration*, 56(5), 488–503 doi:10.1108/JEA-01-2018-0014
- Ellerbrock CR and Kiefer SM (2010) Creating a ninth-grade community of care. *Journal of Educational Research* 103(6): 393–406.
- Glenn, E. N., Chang, G., & Forcey, L. R. (1994). *Mothering: Ideology, experience, and agency*. New York, NY: Routledge.
- Goodenow, C. (1993). Classroom belonging among early adolescent students: Relationships to motivation and achievement. *Journal of Early Adolescence*, 13, 21-43.

- Green, M. G. (2014). Caring leadership in turbulent times: *Tackling neoliberal education reform*. IAP.
- Hargreaves, A. (2002). The emotional geographies of teaching. *Teachers College Record*, 103(6), 1056–1080. <https://doi.org/10.1111/0161-4681.00142>
- Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. New York, NY: Routledge
- Joselowsky, F. (2007). Youth engagement, high school reform, and improved learning outcomes: Building systemic approaches for youth engagement. *NASSP Bulletin*, 91, 253-276.
- Kahn WA (1993) Caring for the caregivers: patterns of organizational caregiving. *Administrative Science Quarterly* 38(4): 539–63.
- Kroth M and Keeler C (2009) Caring as a managerial strategy. *Human Resource Development Review* 8(4): 506–31.
- Leithwood, K., & Jantzi, D. (1999). Transformational school leadership effects: A replication. *School Effectiveness and School Improvement*, 10(4), 451–479. <https://doi.org/10.1076/sesi.10.4.451.3495>
- Leithwood, K., & Sun, J. (2012). The nature and effects of transformational school leadership: A meta-analytic review of unpublished research. *Educational Administration Quarterly*, 48(3), 387–423. <https://doi.org/10.1177/0013161X11436268>
- Louis, K. S., & Murphy, J. (2017). Trust, caring and organizational learning: The leader’s role. *Journal of Educational Administration*, 55(1), 103–126. <https://doi.org/10.1108/JEA-07-2016-0077>
- Louis, K. S., Murphy, J., & Smylie, M. (2016). Caring leadership in schools: Findings from exploratory analyses. *Educational administration quarterly*, 52(2), 310-348.
- Mayeroff, M. (1971). *On caring*. New York, NY: Harper and Row.
- Murphy, J., & Torres, D. (2014). *Creating productive cultures in schools for students, teachers, and parents*. Thousand Oaks, CA: Corwin Press.
- Newmann, F. M. (1992). Conclusion. In F. M. Newmann & G. Wehle (Eds.), *Student engagement and achievement in American secondary schools* (pp. 182-217). New York, NY: Teachers College Press
- Noddings, N. (1992). *The challenge to care in schools: An alternative approach to education*. New York, NY: Teachers College Press
- Noddings, N. (2003). *Caring, a feminine approach to ethics and moral education*. Berkeley, CA: University of California Press
- Noddings, N. (2013). *Caring: A relationship approach to ethics and moral education* (2nd ed.). Berkeley: University of California Press.
- Pellicer LO (2003) *Caring Enough to Lead: How Reflective Thought Leads to Moral Leadership*. Thousand Oaks, CA: Corwin Press.
- Perez, S. (2000). An ethic of caring in teaching culturally diverse students. <http://www.parentsurf.com/p/articles/>

- Reeve, J. (2006). Teachers as facilitators: What autonomy-supportive teachers do and why their students benefit. *Elementary School Journal*, 106, 225–236.
- Robinson, V. M. J. (2007). *School leadership and student outcomes: Identifying what works and why*. Sydney, New South Wales, Australia: Australian Council for Educational Leaders
- Roffey, S. (2006). Transformation and emotional literacy: The role of school leaders in developing a caring community. *Leading & Managing*, 13, 16-30.
- Roth, J. L., & Brooks-Gunn, J. (2003). Youth development programs: Risk, prevention and policy. *Journal of Adolescent Health*, 32, 170-182.
- Rumberger, R. W., & Palardy, G. (2005). Does segregation still matter? The impact of student composition on academic achievement in high school. *Teachers College Record*, 107, 1999-2045.
- Sergiovanni, T. J. (1992). *Moral leadership: Getting to the heart of school improvement*. San Francisco, CA: Jossey-Bass Publishers.
- Smylie, M. A., Murphy, J., & Louis, K. S. (2016). Caring school leadership: A multidisciplinary, cross-occupational model. *American Journal of Education*, 123(1), 1–35. <https://doi.org/10.1086/688166>
- Thompson, A. (1998). Not the color purple: Black feminist lessons for educational caring. *Harvard Educational Review*, 68, 522-555.
- Tronto, J. (1994). *Moral boundaries: Towards a political ethic of care*. London: Routledge.

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## Perceptions and Experiences of Postgraduate Students of Educational Management vis-a-vis Academic Jealousy

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### ABSTRACT

This study intends to reveal perceptions and experiences pertaining to postgraduate students of educational management related to the concept of academic jealousy. The study is a qualitative one designed with the understanding of Phenomenology. The participants consist of 10 students who had received and were receiving postgraduate education in the area of educational management. 1 of them is an academic, 6 are teachers, 1 is a manager in a non-governmental organization, and 2 are managers in public schools. Four semi-structured questions were asked during the focus group interview held via Google Meet. Content analysis was executed to analyze the data. Through the findings, it was obvious jealousy was experienced in academic/scientific publication processes and in the context of managerial duties/promotions in academic trajectories and through the competition between individuals. Academic jealousy seemingly harmed the involved individual, and individuals became isolated on account of academic competition. Addedly, academic jealousy had relevance to the individual's personality traits, rearing, the culture of the related organization, age, and workload. It was found the feeling of academic jealousy has a complex being and should be managed well. Consequently, academic jealousy carries the potential to harm individuals and higher education institutions. Academic leaders need to take individual psychological characteristics into account in their management style knowing when to intervene in team conflicts, create opportunities for learning, provide coaching and mentoring. Respect and concern for others, positive reinforcement, and open dialogue will be effective herbicide against envy weeds in academia. These key actions will help emerging researchers grow in a more supportive environment and minimize the devastating side effects of jealousy.

**Keywords:** Academic jealousy, educational management, postgraduate education, postgraduate perceptions.

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## **Introduction**

It is observed academic structures, which are expected to be entities relatively more isolated from emotions to make (more) room for rational and scientific thought, are inevitably surrounded by emotions. The environments in which and through which educational activities are carried out, the academic performance of the immediate parties viz. learners and teachers are frequently discussed (Seibert et al., 2017) and they welcome numerous emotions and emotional states (Burić, Sorić & Penezić, 2016). Jealousy is one of the first amongst the said feelings, and expressed as one that individuals gain the most familiarity through their personal experiences since they get involved in several processes both as the subject and the object. It can herein be noted that the notion of jealousy, which is portrayed as a human emotion in a fair number of different fields such as Literature and the discipline of Psychology, has found a place in the works and studies produced throughout the course of history.

When it comes to academia, to combat with fierce academic ambitions that distance individuals from humanity (Sterne, 2011) today, certain efforts are being made and "slowing down attempts" are witnessed that are constructed with a view to eliminating competition. Howbeit, the philosophy of "publish or perish" continues to be effective. Undoubtedly, this causes the concept of jealousy to manifest itself strongly in academic circles, where individuals directly/indirectly conduct research for humans. In this way, it will make sense to investigate jealousy by placing it on an academic ground to see an up-to-date plane of what is happening in the axis in question. Performing this, primarily through students enrolled in a graduate program will make it possible to evaluate the lived experiences closely such as identity development and the perceived "depression", the desire to gain a place in the academy, and academic rise (Hemmings, Hill & Sharp, 2013) whilst making it easier to better understand the phenomenon within the framework of social sciences, an area with unique dynamics where loneliness and stress might come up (Atalay, 2018). Doing so may shed light on difficulties graduate students face, efforts, and academic motivation (Hegarty, Brasco & Lu, 2012).

### **Theoretical Framework and A Review of Literature**

To examine the phenomenon of academic jealousy in a more refined way and among academic groups, it is deemed crucial to position the referent accurately within the other academic emotional states by delving into the available studies. When we explore in detail the accumulated research in the field, the existence of an academic emotion concept set stands out first. This concept set includes feelings of satisfaction, hopelessness, anxiety, anger, and pride (Pekrun et al., 2002). As it is understood, this set formed by academic emotions is monitored in a versatile way. The labyrinth metaphor is now used when talking about the steps of a ladder for academic career development (Pason, 2011), drawing attention to that academic feelings and emotions may become so complex. In fact, Laurencelle and Scallan (2018) underpinned the self-efficacy status of students attending graduate programs is constantly changing with numerous emotions e.g., belonging, perseverance, and success.

It can be an easy orientation for researchers to isolate academic emotions, which entail a highly complicated integrity, from the large and painful discussions in the field (Lindquist et al., 2013) and examine them in two main tracks. Academic emotions are more specific to the results to be obtained, such as disappointment and hope arising from both success and failure also italicizing academic processes and depict the feelings about the progress, to wit, taking delight in working (Ketonen et al., 2017). The positive or negative burden of these emotions was recorded

(Linnenbrink & Pintrich, 2002) as a reason for being active or passive (Kleine et al., 2005). Here, academic emotions often take shape with social connections, experiences, bonds, and communications (Pekrun et al., 2002). Conceptualizations that are the subject of academic studies along with academic feelings (e.g., motivation Elliot, 2006; contexts—e.g., Harmon-Jones et al., 2016) are the ones that stem from social structures. Without doubt, the feeling(s) of academic jealousy should be approached with the premise that its social scope is vast. Academic jealousy, in which the individual gets exposed to an academic comparison with the others, causes that individual to consider their *raison d'être* under a collective roof.

There are studies in the literature that examine academic emotions with quantitative paradigms. To illustrate, Pekrun et al. (2011) found that they created the first comprehensive tool to measure students' multiple feelings of achievement through the Academic Emotions Questionnaire (AEQ) and determined that the sense of achievement was related to motivation, strategies, self-regulation, and performance. Govaerts and Grégoire (2008) with the Academic Emotions Scale (AES) they developed, and this scale is a French self-report questionnaire assessing six emotions in the context of school learning. These emotions are enjoyment, hope, pride, anxiety, shame, and frustration. Trigwell, Ellis, and Han (2012) with the help of the Students' Emotion Experiences Scale (SEEI) they brought to the area have conducted research carrying a similar scope. As a result of the research, both the experience of more positive emotions and the adoption of a deeper approach are associated with higher achievement scores. That being said, the idea that academic emotions, which are subjective and contextual, can be scrutinized in purely quantitative ways is misleading. Mattsson, Hailikari and Parpala (2020) have put forth it is of utmost importance to study these by preserving their originality in qualitative ways. Rowe, Fitness and Wood (2015) examined university students' and lecturers' perceptions of positive emotions in the learning process. As a result of the research, the themes associated with five positive emotions were revealed and the views of the participants were compared.

Dwelling upon the nature of academic jealousy can become more appropriate via accessing the foundations of the concept in a chronicle. The "Social Comparison Theory," which Festinger (1954) brought to the field has an eminent place in this sense. According to this theory, individuals make their comparisons and gain beliefs about what they own, that is, abilities, skills, and capacities, especially in the absence of criteria by which they can subject themselves to objective comparisons. Following the Social Comparison Theory, Messick and McClintock (1968) stated with the "Social Value Orientation Theory" that individuals establish a rapport with others taking a utilitarian stance. "Competitive Arousal Theory" (Ku, Malhotra, & Murnighan, 2005; Ku, Galinsky, & Murnighan, 2006) is another theory. Henderson and Milstein (1996) noted academic emotions are connected to phenomena such as academic awareness and academic perseverance. In this context, the aim of the study is to reveal perceptions and experiences pertaining to postgraduate students of educational management related to the concept of academic jealousy.

### **Importance of the Study**

It is shared by many that the concept of jealousy is hardly addressed by the researchers in the bulk of literature of Türkiye (e.g., Gunalan, 2019). Delving into academic jealousy in universities will help closely observe the situations, which are accepted as bases for the production and dissemination of accurate information (Ozdemir & Erdem, 2020). Postgraduate students are the participants of this study since there is no research focusing on the perceptions and experiences of postgraduate students in educational management toward academic jealousy. Furthermore, there

is no undergraduate degree of educational management in Turkey because it was repealed towards the end of the 1990s. Therefore, the postgraduate students were chosen as the study group.

### **The Purpose of the Study and Research Questions**

The purpose of the study is to reveal perceptions and experiences pertaining to postgraduate students of educational management related to the concept of academic jealousy. In this context, the research questions are presented below:

1. How are the 'academic feelings' of postgraduate students in the field of educational administration in their postgraduate education processes?
2. What are the competition/jealousy situations that postgraduate students in the field of educational administration are exposed/subject to during their postgraduate education?
3. How are the academic/professional career plans of postgraduate students in the field of educational administration in the short, medium and long term?
4. What is the relationship between the career plans of the postgraduate students in the field of educational administration and the academic feelings they experience and the situations of competition/jealousy?

### **Method**

#### **Pattern of the Research**

The present research is a qualitative study designed with Phenomenology (Abulad, 2007). Phenomenological research focuses on any lived experience of participants related to a phenomenon (Yuksel & Yildirim, 2015). Creswell (2012) also remarked that phenomenological research depicts the common meaning for lots of people of their lived experiences about a concept or phenomenon. In this context, the perceptions and experiences of the students who received postgraduate education in educational management and who had experiences with academic jealousy were analyzed in depth.

#### **Participants**

The participants consist of 10 students who had received and were receiving postgraduate education in the area of educational management in state and foundation universities. Bearing in mind that making informed decisions as regards sampling is indeed critical to enhancing the overall quality of research (Suri, 2011), the criteria sampling method (Patton, 2002), one of the purposeful sampling types, was resorted to in the forming of the study group, and "being a state university student/graduate, being a foundation university student/graduate" was determined as the criterion. Although opinions about the number of participants differs in the literature, this number usually varies between 4 and 10 people (Cokluk, Yilmaz & Oguz, 2011). The demographic attributes are given in Table 1.

Table 1. Demographic attributes of the participants

Variables	Groups	f	%
Gender	Female	4	40
	Male	6	60
Age	24	1	10
	28	2	20
	32	1	10
	34	1	10
	35	1	10
	38	1	10
	39	1	10
	41	1	10
Type of University where Postgraduate Education is Received	State	5	50
	Foundation	5	50
Undergraduate Program Completed	Science Teaching	1	10
	Philosophy	1	10
	Primary School Teaching	1	10
	Primary School teaching and Philosophy teaching	1	10
	Turkish Language and Literature	1	10
	Primary Education Mathematics Teaching	1	10
	English Language and Literature	1	10
	English Language Teaching	3	30
	Graduated Postgraduate Program	Educational Management (with thesis, completed)	5
Education management (with thesis, ongoing)		3	30
Educational Sciences (non-thesis, completed)		1	10
Educational Management (without thesis, ongoing)		1	10
Occupation	Academic	1	10
	Teacher	6	60
	Manager (NGO)	1	10
	Administrator (Public school)	2	20
Professional Seniority	4 years 6 months	1	10
	5 years	2	20
	9 years	1	10
	10 years	2	20
	14 Years	1	10
	16 years	1	10
19 Years	2	20	

The demographic information of the students receiving postgraduate education in the field of Educational Management can be expressed as follows: 4 (40%) are female, and 6 (60%) are male; 1 (10%) is 24 years old, 2 (20%) are 28 years old, 1 (10%) is 32 years old, 1 (10%) is 34



years old, 1 (10%) is 35 years old, 1 (10%) is 38 years old, 1 (10%) is 39 years old, 1 (10%) is 41 years old, and 1 (10%) is 42 years old.

Respecting the type of university where postgraduate education is received, 5 (50%) are public universities, and 5 (50%) foundation universities; as for the graduated undergraduate program, 1 (10%) graduated from Science Teaching, 1 (10%) graduated from Philosophy, 1 (10%) graduated from Classroom Teaching, 1 (10%) graduated from both Classroom Teaching and Philosophy teaching, 1 (10%) graduated from Turkish Language and Literature, 1 (10%) graduated from Primary School Mathematics Teaching, 1 (10%) graduated from English Language and Literature, and 3 (30%) graduated from English Language Teaching. Regarding the graduated master's program, 5 (50%) of the participants graduated from an Educational Management postgraduate program with a thesis; 1 (10%) graduated from an Educational Sciences postgraduate program without a thesis, and 3 (30%) graduated from an Educational Management postgraduate program with thesis and 1 (10%) graduated from an Educational Management postgraduate program without thesis.

When it comes to the profession of the participants, 1 (10%) of them is an academic, 6 (60%) are teachers, 1 (10%) is a manager in a non-governmental organization, and 2 (20%) are managers in public schools; and with respect to professional seniority, 1 (10%) has 4 years and 6 months, 2 (20%) has 5 years, 1 (10%) has 9 years, 2 (20%) has 10 years, 1 (10%) has 14 years, 1 (10%) has 16 years, and 2 (20%) has 19 years of professional seniority.

### **Data Collection**

The participating individuals were asked seven demographic questions posed to arrive at information pertaining to gender, age, type of university where they received postgraduate education and also to the graduated undergraduate program, graduated postgraduate program, and lastly to professional seniority through Google Forms designed by the researchers. Four semi-structured questions, which reached their final versions in light of what the 3 field experts shared for feedback purposes, were asked during the focus group interview held via Google Meet. The reason behind resorting to focus group discussions was that they help discover “the real feelings and issues that provide richer than personal interviews or surveys, because the dynamics of a group lead to more developed answers.” (Basnet, 2018: 82).

### **Data Analysis**

The focus group interview was recorded with the consent of all the participants, then the recording was transcribed by one of the researchers. Afterwards, the other researcher first went through these transcriptions and carry out a content analysis using the NVIVO qualitative analysis software. Content analysis is oftentimes recruited to comprehend any content of messages such as text, image, symbol or audio data (Gheyle & Jacobs, 2017). Codes such as P1 and P5 were given to each participant to disguise real names to abide by ethical concerns. When the opinions of the participants were analyzed, six themes were obtained: "Factors affecting academic plans," "Academic jealousy in varying contexts," "The nature of academic jealousy," "The results of academic jealousy," "The basics of academic jealousy" and "Suggestions for academic jealousy." Under the first theme “Factors affecting academic plans”, neutral direction, positive direction and negative direction as sub-themes were reached. Another theme was "the results of academic jealousy." The sub-themes that came up with this theme were: "no academic jealousy," "in the positive direction," and "in the negative direction." Under the other themes, no sub-themes were reached but reached codes and all the codes were presented in the findings in detail.

## **Trustworthiness**

To ensure the validity of the data obtained, the detailed description method was made use of. The statements were presented directly in their original form in the findings section. As for validity of the translations, one researcher who is a translator translated the transcriptions later to be checked by the other researcher. Following this, the translated transcriptions were sent to another translator, who is also a colleague and faculty member in Educational Sciences, and a cross-check was realized (McMillan & Schumacher, 2006).

For the sorting out of codes and themes, the replies were gone through by the researchers. In this direction, the reliability formula introduced by Miles and Huberman (1994) was exploited to calculate the inter-coder reliability of the research. Whereas there was a consensus between the first encoder and the researcher in 33 codes, a disagreement was spotted in 4 codes. When the calculation was made according to the given formula, the reliability was found as %89. Furthermore, there was a consensus between the second encoder and the researcher in 28 codes, yet a disagreement was detected in 9 codes. When the calculation was made according to the relevant formula, the reliability of the research was found to be %76. The reliability calculation exceeding 70% is considered reliable (Miles and Huberman, 1994). In this frame of reference, the acknowledged coding is recognized as reliable (Creswell & Plano Clark, 2007).

## **2.6. Ethics Committee Approval Process**

To attain data, an application was made to the Scientific Research and Publication Ethics Committee of Muş Alparslan University of Türkiye, and the research was found to be following ethical principles with decision No 3 made at the meeting No 1 dated 04 January 2022.

## **Findings**

The opinions seemed to gather under six themes: "Factors affecting academic plans," "Academic jealousy in varying contexts," "The nature of academic jealousy," "The results of academic jealousy," "The basics of academic jealousy" and "Suggestions for academic jealousy." For the saturation of the themes, the opinions of the participants were analyzed under the frame of the relevant interview question within the context of the content analysis and coded accordingly. Each of the interview questions were converted to themes. Since the main aim was not to make comparisons but to unearth the relevant experiences of the participants in parallel with the research paradigm we pursued, we attempted to share the lived experiences in depth as much as possible.

### **Factors Affecting Academic Plans**

The first theme determined from the focus group interview is "factors affecting academic plans." The sub-themes are: "in the neutral direction," "in the positive direction," and "in the negative direction." Under the sub-theme of "in a neutral direction," "the attitude of the faculty member did not affect my academic plans" code; under the sub-theme of "in a positive direction," "the support of my family directed me to the academy," "my belief in education familiarized me with the academy," "the approach of the faculty members, positively affected my academic plans" codes were detected. Under the sub-theme of "in a negative direction," "jealousy and grouping alienated me from the academy," "the approach of the faculty member negatively affected my academic plans," "politics and networking alienated me from the academy," "seeing the success of the academy as worthless, alienated me from the academy," "not giving importance to information, alienated me from the academy," "my characteristics, alienated me from the academy" and "lack of financial gain, alienated me from the academy" codes were figured out. These are demonstrated in Table 2 below.

Table 2. Factors affecting academic plans

<b>Opinions</b>	
1. Sub-Theme: Neutral Direction	Opinion
The attitudes of the faculty member did not affect my academic plans.	“...I criticized the professor in the class without hurting his feelings, but this caused a problem. Then things got even worse; we ended up in the court. I was sentenced to reprimand. My master's degree extended for two years. I have experienced all these; I said, ‘there will always be such people in life,’ so my determination did not increase, or my motivation did not decrease. ”
2. Sub-Theme: Positive Direction	Opinions
My parents' support led me to the academy.	It was much easier for me to get accepted to ‘.....’ (here the name of the university is revealed so it is intentionally left blank). I took the exams, and I was accepted. I think my family provided me with lots of encouragement during this process. Because we have a tradition of constantly embracing education and self-education in the family, I realized this later and asked the question: ‘So, were these really my independent choices, or was it something that all families impose on their children?’ ”
My faith in education urged me to be the academy.	"You have only one life, where would it be better to spend it? Running a business and getting rich and making money or something? I am still on this path since it is more valuable to leave something mentally, intellectually, and educationally meaningful. "
The approach of the faculty members positively affected my academic plans.	" ‘We have a supportive environment here; we will have our postgraduate degree from here’ we started talking amongst peers. From that point of view, that support acts as an extremely important parameter in the academy for people to continue. I could have left, I could never have joined the academy, I could not have applied for a master's degree after that interview, but I had a supportive environment; people were encouraged, and they wanted to do something more.”
3. Sub-Theme: Negative Direction	Opinions
Jealousy and grouping have alienated me from the academy.	<p>“You live the life once, so it would not appeal to you to give 15 hours of your 24 hours to the academic world, particularly as a result of this jealousy, and consider the environment is not peaceful.</p> <p>“I think people get tired and not turn to academia, and I am of the opinion that unqualified people; people who attend with an easier network will also prepare unqualified works, and I believe the country will be damaged owing to this. “</p> <p>“I listen to stories of jealousy, clichés, groupings, yes, I witness these, I feel as if I do not belong here, nor to the academic studies in this country, I feel like I do not belong at all... It led to such a change in my career plan. ”</p> <p>“I do not know who the jury will be when I apply for an associate professorship position in the future. After all, the Council of Higher Education is assigning these members of the jury, and when it comes to teachers who are grouped with such thoughts, ‘Will I be able to attend, even if I attend, these groupings and schism may even turn out to be mobbing afterward.’ Upon seeing such things, my motivation for academic career planning decreases. I am not sure whether I can endure all these.”</p>
The faculty member's approach negatively affected my academic plans.	"I chose to attend the course of a lecturer, and when we started the course, when he saw that I was the 81st person, not the 80th person, because he was a very grumpy lecturer, he asked ‘Why are you here?’, made other comments and he wanted to remove my name from the course. One less student would be better for him. We went to his office, and I had my name removed from the course and I saw him laughing for the first time, and he laughed because someone had just left the course. I went out, called my friends and said, ‘I do not want to be like this; should I ever want to become an academic one day, change my mind, if possible...’ ”

My friend and I applied together to the postgraduate program of a foundation university, but we encountered an extremely rude, disrespectful environment. I mean, it was crystal clear that we were not wanted. As a matter of fact, even if we got a successful result, my friend and I would not apply; we did not matriculate. We said, 'We cannot have a master's degree in this way.'

"When I got accepted to the university where I worked, one professor asked me what I was working on, I said it was Critical Pedagogy, and he said, 'I do not accept the subjects you study; you have no place here'. I was shocked hearing this in the first step of my career, of course, it actually meant a few steps back.

Politics and networking have alienated me away from the academy.	<p>"I wanted to educate myself and become an academic. Nonetheless, with networking and politics, I thought, one can resist for a certain period, but would certainly be demoralized at some point."</p> <p>"Your background and your teaching are ignored. When you utter, 'I am doing a doctorate,' people say, 'You do it with the help of money or with the help of your political connections.' It was also mirrored in publications and plagiarism acts. Some gets their theses written. There is now a perception in public just as you have a seat there thanks to your power. Inescapably, this lowers your motivation. "</p>
Success is recognized as worthless and has alienated me from the academy.	<p>"...My brother really wanted to be an academic, and he had a bad influence on me. He came first in the ALES (academic personnel and postgraduate education entrance exam) in Türkiye. He graduated from METU (Middle East Technical University) in the first place. They did not give him a chance to get his master's degree; he got his master's and doctorate degrees in US. He has been living there for 20 years. He is not intending to come, and he does not really want to come. He always gives examples of academic jealousy, envy, and alike. "</p>
The lack of emphasis on gaining knowledge has alienated me from the academy.	<p>"I applied for a master's degree, and the interviewer asks a question or something he does not know about. He is confused because he is 60-70 years old and thinks he has defeated you by doing that, but you are disappointed, even in academic interviews, knowledge is not important; hard work is not appreciated."</p>
My characteristics and the incompatibility of expectations in the academy have alienated me from the academy.	<p>"Should I continue my academic life, I have to devote my life to it thinking that I cannot go for non-quality publications just to receive a title. I need to spend most of my time and effort on this subject?. And my mind has not changed."</p>
The lack of financial gain alienated me from the academy.	<p>"I have never thought of becoming an academic. I just like reading. I like to improve myself. There is not enough money for academics, you can get a position, nevertheless the salary is not adequate. You see primary school graduates, people others tend to look down on, they earn 30-40 thousand of liras in a month. "</p>

These hint at that the attitudes of the faculty members encountered did not affect the academic plans of some. The range of these views was worthy of examination.

It is noteworthy that family support and belief in the value of education positively affect academic plans. Also, it was implied besides organizational behaviors such as jealousy and grouping, political relations and connections had adverse effects. The reduction of academic achievement, considering gaining knowledge as an insignificant outcome, the incompatibility of personal characteristics and academic expectations, and the lack of financial gain were other factors impeding academic plans.

### Academic Jealousy in Varying Contexts

The second theme reached is "academic jealousy in varying contexts." The codes are: "jealousy in the academic context," "jealousy in the context of a comparison between faculty

members," "jealousy in the context of academic publication," "jealousy in the context of managerial duty/promotion within the academy," "jealousy in the context of academic incentive allowance," "jealousy in the context of the relatively wide academic environment" and "jealousy in the context of favoritism by faculty members." The participants' opinions, themes, and codes are displayed in Table 3.

Table 3. Academic jealousy in varying contexts

Codes	Opinions
Jealousy in an academic context	<p>"There is much competition for those who graduated in our period; everyone wants to be elected by doing more than the others. I don't know; many people around me want to go abroad. Again, it is a situation brought about by the school. For instance, I think being jealous about friends going abroad for postgraduate or doctorate studies may be counted within the framework of academic jealousy. "</p> <p>"Friends who are thinking of switching to a master's degree with a thesis (from the non-thesis program) do not share their homework with peers; they talk to the professor and receive the details and feedback, but they do not tell us these. I mean, you are just a non-thesis master program student, and you will switch to one with thesis; I mean, it is not rocket science. "</p> <p>"Let's assume my advisor told me to meet up tomorrow to have dinner and let's also assume everyone in the class or in the session heard this. A classmate of mine can think 'Why did they invite him?' in fact, the professor who invited me out and I can understand this jealousy, we can both feel it. "</p> <p>"My close friends, with whom I studied for the graduate program admission examinations, are all in university now, but I still couldn't do it. Yes, this is jealousy, envy, you have just said, questioning self-efficacy; I am doing self-criticism now.</p> <p>"If there is anything to read, my peers are always ahead of for they have time, but I do not have much time. I am not sure whether it is called jealousy, but I have constantly upset myself in this situation saying 'maybe if you were not so busy, you could have studied as much as you wanted.' Metaphorically saying, as I was asleep, they made progress and yes, this is jealousy. "</p> <p>"Some postgraduate students are very talkative. They immediately express their ideas and are great at linking. One or two of my friends have such strengths, and they did not impress me much when I listened to them. An idea that many people liked was not very attractive to me, but some faculty members gave credit to those ideas, saying 'yes, it is a good idea.' I saw a close friend of mine; all his posts (on social media) were directed at a person. He writes about him. I was taken aback. He said, 'He is a doctorate student, so he may say whatever he wants. You should not be bothered by this'. They were both following each other (on social media), both were writing to each other indirectly; I was really surprised.</p>
Jealousy in the context of a comparison between faculty members	<p>"Your advisor might be a little quieter in the institution, there may even be an elderly faculty member, somehow their students get more advantageous, have more opportunities, or this may be understood as such due to jealousy. Since I had a faculty member working in different fields, I felt I had been taken to a strange position, that I had become more disadvantaged as a student, and this came with jealousy."</p> <p>"The students of the professors in the periphery come together, and these conversations between us are unavoidable: 'I do not know whose student did this great thing, did you hear, we cannot do the same'".</p>

	<p>"In institutions where there is much competition, people feel lonely and there are groupings. To exemplify, there is a team, a professor, and they have good motivation. You cannot have that motivation when working with your advisor or supervisor, and there is a state of unhappiness. I don't know whether it is jealousy or something else; a hostile atmosphere can arise. "</p>
Jealousy in the context of academic publication	<p>"When you have a friend at an equal position to yours, with more academic publications, this question materializes in my mind: 'Why didn't I have so many publications' or 'why can't I be successful, why don't I get involved in international connections like them?' thinking that I had education in an institution with powerful international connections.</p> <p>"There are two examples that surprised me, one of them is my childhood friend. We are very close, and we have ties of kinship. He went abroad-to UK for his Ph.D. There were no Turkish publications about the topic of my thesis study, once I did some research, I saw that there were a few books merely in UK. I asked him to take the books, and I told him that I would pay for them. When he came, he did not bring any books. He was so close to me, and it was a huge disappointment. I know he could have brought these from the library; or easily transferred parts to a flash memory. At that moment, I thought, he is at a better point than me academically, and I am at a lower level. "</p>
Jealousy in the context of managerial duty/promotion within the academy	<p>"We have heard 'why does this academic can always establish such a relationship with the organization, why are they always in charge, or why are these people always assigned to the executive positions?' These are maybe about academic jealousy."</p>
Jealousy in the context of academic incentive	<p>" I notice the issue of academic encouragement has an effect on faculty because it is an inexorably economic issue. I say jealousy, but please do not visualize that the professors are at each other's throats in front of the other professors; it is mostly verbal or implicative... "</p>
Jealousy in the context of the relatively wider academic environment	<p>"When collecting data, someone with the authority can reach out thousands of people with making a few phone calls. Such situations make me jealous. "</p>
Jealousy in the context of favoritism by faculty members	<p>"When we were doing face-to-face education, two students of a professor in the department were assigned to more important tasks. They took over roles in symposiums held all over Türkiye. Later, they prepared oral presentations with their professor, again to be delivered in these symposiums. That professor made everything ready. "</p>

The comments were on the ontological being of jealousy. Further, it was stressed jealousy was experienced in academic/scientific publication processes and in terms of managerial duty/promotion. Apart from these, it was underlined jealousy found a ground in academic incentive inducement or supplemental rewards, in the form of favoritism.

### **The Nature of Academic Jealousy**

The third theme is "the nature of academic jealousy." The codes are: "jealousy in every sector/study environment/work environment," "competition depending on academic environment and conditions," and "experiencing jealousy in one's academic environment.". The participants' opinions, themes, and codes can be found in Table 4.

Table 4. The nature of academic jealousy

Codes	Opinions
Being jealous in every sector/study environment/work environment	<p>"I cannot say with absolute certainty whether jealousy is more evident in our area and I think it is not unique to us (the field of Educational Management)."</p> <p>"I remembered what the professor told me. Jealousy is a phenomenon/thing that exists in human nature."</p> <p>"Jealousy may be in there somewhere, and it is unpreventable. At first, I could not believe it was true. We think of academy, science, and studying as almost sacred things. Seeing this dark side of the matter, I say, 'these people are not robots, they can have weaknesses.'"</p> <p>" Just as it happens in higher academic positions, it takes place as part of gaining a master's degree, studying in an undergraduate program, at high school, and secondary school."</p>
Competition depends on the academic environment and conditions	"Frankly, I want to go abroad for my doctorate, and I cannot ignore the effect of the dynamics of the institution I am in."
Experiencing jealousy in his/her academic environment	"You are jealous of a person at your organization, but do not get jealous of a person you do not see around. This is nonsensical; you two are in the same field, striving for publications.".

Jealousy can take shape in the individual's academic environment and can be observed through academic competitions.

### Consequences of Academic Jealousy

The fourth theme is "the results of academic jealousy." The sub-themes that came up with this theme are: "no academic jealousy," "in the positive direction," and "in the negative direction." Under the sub-theme of "no academic jealousy," "there was no one I would be jealous of academically" code; under the sub-theme of "positive," "experiencing academic jealousy around," "academic envy," "appreciating the academic achievements of friends" and "reacting to academic jealousy (greed, self-criticism, self-inquiry)" codes gathered and under the sub-theme of "negative," "feeling of failure due to academic jealousy," "feeling of injustice in academia," "harms of academic jealousy" and "exclusion due to academic competition" codes clustered. The participants' opinions, themes, and codes are shown in Table 5.

Table 5. Consequences of academic jealousy

Sub-Theme 1: No Academic Jealousy	Opinions
I have never had anyone around to be academically jealous of.	<p>"My peers were as humble as I am and having the title of doctor does not change them negatively, and since this would not change me either we may say there was no need to be jealous at all. "</p> <p>"Maybe I would have been jealous if I had attributed much meaning to earning degrees. To get the title of an associate professor, or professor should not be underestimated. These are things requiring effort, but it is not suitable for me to work too much."</p>
2. Sub-Theme: Positive Direction	
Experiencing academic jealousy around	Opinions "Should someone has publications, our goal is not to be better than them unlike what is the case with our close circle."
Academic envy	<p>"There is envy, jealousy, desire, and so on. How do we separate them? I see a professor's publications, and I say 'this professor has such good publications, I wish I could be like them' but at this point I have nothing negative against that professor, they are like a role model. I also say, 'I can do it too.' There is something positive here, something motivating."</p> <p>"There were people from other provinces commuting to attend courses and I could see they worked toward the courses more than I did. I had a desire to be like them."</p> <p>"I have friends who I think are more successful academically than me. They have worked harder than me. During the thesis stage, we went through the same stages; we experienced the same periods of indetermination, so to speak. I have a desire to be like them. We are being cooperative and this desire of mine did not affect our relationship adversely."</p> <p>" I am not jealous; on the contrary, my peers always encourage me and say, 'come on, let's finish this.' I want to be like them."</p>
Appreciating the academic achievements of friends	<p>"My friends are ahead of me because they spend more time and labor. I admire them. Because they were exhausted, they devoted much time and worked hard. While they were making an effort, concentrating, and breaking a sweat, I was in a way sitting in the shade, so it would not be right to be jealous of them. "</p>
Responding to academic jealousy (ambition, self-criticism, self-inquiry)	<p>"My very close friends, whom I studied with toward the graduate degree, are all in university now, but I still could not do it; I am trying to achieve it. This feeds my determination and ambition."</p>
3. Sub-Theme: Negative Direction	
Feeling of failure due to academic jealousy	<p>"Surely, our mental state changes occasionally. Sometimes we experience failures. "</p> <p>"I want to become a faculty so I need to work a lot, but I do not have time for this."</p>
Feeling of injustice in the academy	<p>"Sometimes we say, 'it does not have anything to do with me; it is the other party's fault,' and think it is not fair ."</p>
The harm of academic jealousy to people	<p>"I think there is nothing you can go forward with, no matter how jealous you are, other than making your life miserable. If you are not already at peace with yourself, you will find something wrong in yourself and demotivate yourself. "</p>
Exclusion due to academic competition	<p>"I don't know if this is exclusion, but we did not see each other during the pandemic. "</p>



Some evaluations signified there is no one to be jealous of in the environment. At the same time, it was spotlighted academic jealousy resulted in envy or desire, as self-criticism, and self-review. Bearing in mind academic jealousy causes a sense of failure and injustice on the part of the individual.

### Fundamentals of Academic Jealousy

The fifth theme is "the foundations of academic jealousy." The codes are: "personality-academic jealousy relationship," "organizational culture-academic jealousy relationship," "age and workload-academic jealousy relationship," and "pre-adulthood-academic jealousy relationship." The participants' opinions, themes, and codes are communicated in Table 6.

Table 6. Fundamentals of academic jealousy

Codes	Opinions
Personality-academic jealousy relationship	<p>“People worldwide have amazing publications so how could I be jealous of these people here? So will I kick my friend down the ladder?”</p> <p>“...There is an organizational culture where people have positive and strong characters and through which their personalities are developed. When a new friend without any experience joins this environment, it turns out that this friend does not bring any of the negative behavior with them”.</p> <p>"Age and position are also very effective. When I started my master's degree at the age of 33, I was an administrator for 5-6 years then, we were 7-8 friends in a postgraduate program, I think we had a much more comfortable process by supporting each other without jealousy.”</p> <p>“I think it is a personal stance from the top management to the bottom. Some people want such things like wanting their names to appear first. I think it is entirely intrinsic and personal.”</p> <p>“Some people think others should be at lower levels to get to the top, they say, ‘the lower the people around me are, the higher I will be.’ So, they make a kind of relative evaluation. People want to be more successful, they want higher positions, titles, more money with projects, and they do not want others to do what they do because of their personality. ”</p>
The relationship between organizational culture and academic jealousy	<p>“I am a sociable person. Our field matches with my personal qualities. So, you need to talk, or you need to say something in your environment. When these two are together, a friend who does not speak or is inactive can develop the feeling of jealousy. I am trying to support them when I realize this. When we support each other, the system dissolves automatically, making the organization's culture a desired one.”</p> <p>“As new people enter into any organization, they bring a soul. They improve the quality of the organization. Then, the behaviors that we think is shallow, such as jealousy, are actually minimized.”</p>
Age and workload-academic jealousy relationship	<p>“Maturation and workload are prominent parameters germane to jealousy. I am 42 years old; I have 20 years of experience and I have worked as an administrator. You get enough of some things. Let alone being jealous of your other friend, you have to help each other because your workload is too much”.</p>
Pre-adulthood-academic jealousy relationship	<p>"Competing with each other, trying to be one step ahead, and preventing others from being successful are related to the early childhood period. I mean, it is something related to psychological factors. This is not something to do with the academy. Alternatively, it may be related to genes. "</p>

Academic jealousy has relevance to the individual's personality traits, the culture of the organization, age, and workload. Moreover, an association of academic jealousy with the pre-adulthood period was made.

### Suggestions for Academic Jealousy

The sixth theme is "suggestions on academic jealousy." The codes are: "academic jealousy should be avoided," "academic jealousy should be recognized," and "academic success should be appreciated." The participants' opinions, themes, and codes are available in Table 7.

Table 7. Suggestions for academic jealousy

Codes	Opinions
Academic jealousy should be avoided	" Jealousy is not a virtuous behavior, and it is a bad thing to harm or block a person because of their success. "
The feeling of academic jealousy should be recognized	"The person should be fully aware of the feeling of jealousy. Unless they recognize it, they cannot cope with this emotion, which may have devastating consequences. If they are jealous of a person, what are the underlying reasons for being jealous? To give an instance, we may be jealous that they work hard, but we may also be jealous that they do things in a short time."
Academic achievement should be appreciated	"I wish my peers all the best, and I have never been jealous of them. I am proud of all. They became professors and reached a certain age. I never questioned myself, saying 'Why am I here?'. When the time comes, maybe I will be there. "

The participants made several suggestions in view of academic jealousy. They affirmed academic jealousy should be refrained from, being aware of whether one has this feeling is imperative and it is beneficial to appreciate achievements.

### Discussion, Conclusion and Recommendations

The views on the phenomenon of "academic jealousy" clustered under six themes: "Factors affecting academic plans," "Academic jealousy in varying contexts," "The nature of academic jealousy," "The results of academic jealousy," "The basics of academic jealousy" and "Suggestions for academic jealousy."

Academic jealousy sometimes can be harmful both for the individual and the organization, and individuals can be omitted in case of academic competition. In this frame, academia as the centres of objective thinking, may turn out to be places of fierce competition that urge academics to ever-produce. In this direction, in the organizational understanding, competition, not appreciating but ignoring success, differences in terms of statuses, duties and roles, one's need to prove their power and negative organizational behaviors are triggers of academic jealousy. Jealousy manifests itself with anger and sadness caused by not having a feature or skill (Kocak, 2019). Since it is a response to the real or imaginary behavior of others (perpetrator), frequent or intense jealousy reactions highlight one's ability to manage and control the emotions of others (Bringle, 1981). Jealous individuals incline to developing a sense of inadequacy and may spread gossip and bully towards their successful co-workers. Jealousy threatens the overall well-being of the relevant organizations (Reyna, 2021). Academic jealousy facilitates rivalry in organizations (Bayar & Koca, 2021). In this research, academic jealousy can be observed in a similar fashion. Jealousy can indeed be a stimulator to enhance the performance of the individual (Sitinjak, 2016). That said, academic jealousy might cause mental problems in the long run, negatively impacting productivity, creativity, and enjoyment of relations in the work environment. Jealous individuals

are unhappy and restless and even quit their job (Ozdemir & Erdem, 2020). Jealousy then becomes a reason of personnel turn over concerning policy making. Jealousy reduces the meta-cognitive resources required for task goals, and impair achievement (Pekrun et al., 2002) and it can create tension, damage relationships, hinder communication, make teamwork less effective blocking well-being and peace of mind (Reyna, 2021). According to Cleary, Walter, Halcomb, and Lopez (2016), the embittered, hostile person can disrupt groups. Jealousy constitutes a salient concern of managers who are to establish and sustain a positive environment. On the other hand, jealousy can be inciting for the individual to achieve in an ironic fashion. This is because it is a positive trigger that requires an academic performance ironically (Sitinjak, 2016). Arguably, optimal academic jealousy can be useful to advance in the academic world.

Aydin-Kucuk and Tastan (2019) stress emotions are impulses with highly crucial effects. Employee jealousy can result in a loss of self-confidence (Ozdemir & Erdem, 2020) and may mean losing power (Bayar, and Koca, 2021). We unveiled academic jealousy can be a comparison and it is a result of this comparison (Aydin & Bozkurt, 2022; Sitinjak, 2016; Ozdemir, 2020). Negative events can cause anger, anxiety, jealousy to be reflected in the working environment (Ozdemir, 2021). Accordingly, mental health problems may result in jealousy in academia, which is already an arena or a quagmire (Reyna, 2021). Thinking about its rather paradoxical being, jealousy in academic organizations is a point that needs special attention. As there are plentiful points that boost jealousy (competition, ambition, career, promotion, comparison, individuality, hierarchy, and alike) it is too important to be ignored for the academic world (Ozdemir & Erdem, 2020).

Jealousy can eat up the individual (Bayar & Koca, 2021) since it is an unpleasant and destructive (Ozdemir & Erdem, 2020) as well as a social emotion (Leahy, 2020). We discovered jealousy is because of the extraordinary abilities of others like what is underpinned in the literature (Masse', and Gagne', 2015). Jealousy is found socially unacceptable (Cleary, Walter, Halcomb, & Lopez, 2016) and considered a topic should not be articulated.

There exist varying types of jealousy (Bayar & Koca, 2021) and success rankings lead to jealousy in the academic world (Bayar & Koca, 2021; Hudak, 2000). The competitive nature of academia is a fertile ground for the envy weeds to grow and multiply rapidly. These are factors specific to academia that create a challenging environment (Reyna, 2021). It was unearthed in this research that jealousy can be observed in academic/scientific publication phases which looks compatible with the literature.

The terms envy and jealousy are used interchangeably (Masse', and Gagne', 2015). These two can albeit be used differently (Bayar & Koca, 2021) and whereas the phenomenon of jealousy is accepted as a compound emotion, there is no consensus about its components (Hupka, 1984). Jealousy is a psychic phenomenon (Hudak, 2000). Envy is also expected to function as a means of informing the individual about their relatively inferior position (Rentzsch, Schröder-Abé & Schütz, 2015). Talking about envy in the workplace is really talking about a certain type of relationship between people (Hudak, 2000) and envy is expected to be a prominent factor underlying the self-esteem-hostility link, related to self-esteem (Rentzsch, Schröder-Abé & Schütz, 2015). In the world of academia, academics lacking self-esteem cannot warrant healthy role models for colleagues, and more importantly, for students.

Whilst envy involves the desire for something another has and implies a dual relationship, jealousy occurs in tripartite situations (Masse', and Gagne', 2015) and jealousy is always about three people; that is, jealousy encompasses the perception that a valuable relationship is threatened by a third party (Leahy, 2020).

Academic leaders should find ways to reduce jealousy by empowering members, making work more flexible promoting self-efficacy. They need to take individual psychological characteristics into account in their management style knowing when to intervene in team conflicts, create opportunities for learning, provide coaching and mentoring. Conflict resolution skills are necessary too (Reyna, 2021). One should also come up with positive ways of coping with emotions (Bringle, 1981). Academics should not waste time thinking about what others are doing. Instead, they should concentrate on topics to research and publish (Reyna, 2021). Jealousy can be managed creatively by claiming it, expressing gratitude to the envied good object, and compensating for the damaging emotion (Mouly & Sankaran, 2002). It is normal for human beings to compare themselves to others. But the truth is people come from different backgrounds. They have different experiences, abilities, programs, and strategies for self-regulation and motivation. A healthy way to look at the competition is to fight against personal limitations, not co-workers. Self-regulation strategies that can elevate productivity and success (Reyna, 2021). Jealousy is neither just good nor just bad and then eliminating all jealousy may not be meaningful (Bringle, 1981). Respect and concern for others, positive reinforcement, and open dialogue will be effective herbicide against envy weeds in academia. These key actions will help emerging researchers grow in a more supportive environment and minimize the devastating side effects of jealousy (Reyna, 2021).

Studies to scrutinize what of academic jealousy need to delve into its eminent dimensions: gender, department, country, resilience, as a purposeful act. Prospective studies can employ face to face interviews, mixed methods, and more participants using quantitative methods.

### **Conflict of Interest**

There is no conflict of interest for the study.

### **Author Contributions**

The first author: Conceptualization, Data Collection, Writing - Original Draft, Data Analysis

The second author: Data Collection, Writing - Review & Editing, Supervision of Findings

## References

- Abulad, R. E. (2007). What is hermeneutics? *Kritike*, 1(2), 11-23.
- Atalay, S. (2018). *Academic labor process and alienation: A case study from social sciences in Turkey*, paper presented at 2nd International Conference on New Approaches in Social Sciences and Humanities, Istanbul, Turkey.
- Aydin, G., & Bozkurt, S. (2022). Investigation of academicians' perceptions of envy at the workplace through metaphors. *Ulakbilge-Journal of Social Sciences*, 70, 201-213. doi: 10.7816/ulakbilge-10-70-02
- Aydin-Kucuk, B., & Tastan, S. (2019). The examination of the impact of workplace envy on individual outcomes of counterproductive work behavior and contextual performance: The role of self-control. *Suleyman Demirel University The Journal of Faculty of Economics and Administrative Sciences*, 24(3), 735-766.
- Basnet, H. (2018). Focus group discussion: A tool for qualitative inquiry. *Researcher: A Research Journal of Culture and Society*, 81-88.
- Bayar, A., & Koca, M. (2021). The perspectives of academicians on academic jealousy. *Shanlax International Journal of Education*, 9(4), 78-90. doi: 10.34293/education.v9i4.4064
- Bringle, R. G. (1981). Conceptualizing jealousy as a disposition. *Alternative Lifestyles*, 4, 274-290.
- Burić, I., Sorić, I., & Penezić, Z. (2016). Emotion regulation in academic domain: Development and validation of the Academic Emotion Regulation Questionnaire (AERQ). *Personality and Individual Differences*, 96, 138-147. <https://doi.org/10.1016/j.paid.2016.02.074>
- Cleary, M., Walter, G., Halcomb, E., & Lopez, V. (2016) An examination of envy and jealousy in nursing academia. *Nurse Researcher*, 23(6), 14-19. doi: 10.7748/nr.2016.e1405
- Cokluk, O., Yilmaz, K., & Oguz, E. (2011). A qualitative interview method: Focus group interview. *Journal of Theoretical Educational Science*, 4(1), 95-107.
- Creswell, J. W. (2012). *Educational research: Planning, conducting and evaluating quantitative and qualitative research* (4th Ed.). Boston, MA: Pearson
- Creswell, J. W., & Plano Clark, V. L. (2007). *Designing and conducting mixed methods research* (1st ed.). Sage.
- Elliot, A. J. (2006). The Hierarchical Model of Approach-Avoidance Motivation. *Motiv Emot*, 30, 111-116. <https://doi.org/10.1007/s11031-006-9028-7>
- Festinger, L. (1954). A Theory of social comparison processes. *Human Relations*, 7(2), 117-140. <https://doi.org/10.1177/001872675400700202>
- Gheyle, N., & Jacobs, T. (2017). *Content analysis: A short overview*. Internal Research Note.
- Govaerts, S.J., & Grégoire, J. (2008). Development and construct validation of an academic emotions scale. *International Journal of Testing*, 8, 34-54.
- Guerrero, L. K., & Andersen, P. A. (1996). Jealousy experience and expression in romantic relationships. *Handbook of communication and emotion*, 155-188.

- Gunalan, M. (2019). A literature review on workplace jealousy as a negative emotion and organizational perceptions relationships. *The Journal of Social Sciences*, 43, 323-335. DOI:10.29228/SOBIDER.39758
- Harmon-Jones, C., Bastian, B., & Harmon-Jones, E. (2016). The discrete emotions questionnaire: A new tool for measuring state self-reported emotions. *PLoS ONE*, 11(8): e0159915. <https://doi.org/10.1371/journal.pone.0159915>
- Hegarty, N., Brasco, R. & Lu, F. L. (2022). What motivates students in graduate school? an empirical study. *Business Education & Accreditation*, 4(2) 39-47.
- Hemmings, J. (2011). The politics of academic labor in communication studies: A Re-Introduction. *International Journal of Communication*, 5, 1853-1872.
- Hemmings, B., Hill, D., & Sharp, J. G. (2013). Critical interactions shaping early academic career development in two higher education institutions. *Issues in Education*, 23, 35-51.
- Henderson, N., & Milstein, M. M. (1996). *Resiliency in schools: Making it happen for students and educators*. Thousand Oaks, CA: Corwin Press.
- Hudak, G. M. (2000). Envy and goodness in academia. *Peace Review*, 12(4), 607-612. <https://doi.org/10.1080/10402650020014717>
- Hupka, R. B. (1984). Jealousy: Compound emotion or label for a particular situation?. *Motivation and Emotion*, 8(2), 141-155.
- Ketonen, E. E., Dietrich, J., Moeller, J., Salmela-Aro, K., & Lonka, K. (2018). The role of daily autonomous and controlled educational goals in students' academic emotion states: An experience sampling method approach. *Learning and Instruction*, 53, 10-20.
- Kleine, M., Goetz, T., Pekrun, R. H., & Hall, N. C. (2005). The structure of students' emotions experienced during a mathematical achievement test. *International Reviews on Mathematics Education*, 37, 221-225.
- Kocak, D. (2019). Academic jealousy scale: Validity and reliability study. *Journal of Measurement and Evaluation in Education and Psychology*, 10(4), 467-479. doi: 10.21031/epod.566752
- Ku, G., Galinsky, A. D., & Murnighan, J. K. (2006). Starting low but ending high: A reversal of the anchoring effect in auctions. *Journal of Personality and Social Psychology*, 90(6), 975-986. <https://doi.org/10.1037/0022-3514.90.6.975>
- Ku, G., Malhotra, D., & Murnighan, J. K. (2005). Towards a competitive arousal model of decision-making: A study of auction fever in live and Internet auctions. *Organizational Behavior and Human Decision Processes*, 96(2), 89-103. <https://doi.org/10.1016/j.obhdp.2004.10.001>
- Laurencelle, F. & Scanlan, J. (2018). Graduate students' experiences: Developing self-efficacy. *International Journal of Nursing Education Scholarship*, 15(1), 20170041. <https://doi.org/10.1515/ijnes-2017-0041>
- Leahy, R. L. (2020). Cognitive-behavioral therapy for envy. *Cognitive Therapy and Research*, 45(3), 418-427. doi: 10.1007/s10608-020-10135-y

- Lindquist, K. A., Siegel, E. H., Quigley, K. S., & Barrett, L. F. (2013). The hundred year emotion war: Are emotions natural kinds or psychological constructions? Comment on Lench, Flores, and Bench (2011). *Psychological Bulletin*, *139*(1), 255-263.
- Linnenbrink, E. A., & Pintrich, P. R. (2002). Motivation as an enabler for academic success. *School Psychology Review*, *31*(3), 313-327.
- Massé, L., & Gagné, F. (2002). Gifts and talents as sources of envy in high school settings. *Gifted Child Quarterly*, *46*(1), 15-29.
- Mattsson, M., Hailikari, T. & Parpala, A. (2020). All happy emotions are alike but every unhappy emotion is unhappy in its own way: A network perspective to academic emotions. *Front Psychol*, *11*, 742. doi: 10.3389/fpsyg.2020.00742.
- McMillan, J. H., & Schumacher, S. (2006). *Research in education: Evidence-based inquiry* (sixth Ed.). Pearson.
- Messick, D. M., & McClintock, C. G. (1968). Motivational bases of choice in experimental games. *Journal of Experimental Social Psychology*, *4*(1), 1-25. [https://doi.org/10.1016/0022-1031\(68\)90046-2](https://doi.org/10.1016/0022-1031(68)90046-2)
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis*. Thousand Oaks, CA: Sage Publication.
- Mouly, V. S., & Sankaran, J. K. (2002). The enactment of envy within organizations: Insights from a New Zealand academic department. *The Journal of Applied Behavioral Science*, *38*(1), 36-56.
- Ozdemir, S. (2021). The phenomenon of jealousy and its reflection on academic organizations. *Suleyman Demirel University Visionary Journal*, *12*(30), 652-676. doi: 10.21076/vizyoner.806859
- Ozdemir, S., & Erdem, R. (2020). Academia's green-eyed monster: A phenomenological study on the causes and consequences of jealousy. *Qualitative Social Sciences*, *2*(1), 19-39.
- Pason, A. M. (2011). Four myths about academic labor. *International Journal of Communication*, *5*, 9.
- Patton, Q. (2002). *Qualitative research and evaluation methods*. Thousand Oaks, CA: Sage Publications, Inc.
- Pekrun, R., Goetz, T., Frenzel, A. C., Barchfeld, P., & Perry, R. P. (2011). Measuring emotions in students' learning and performance: The Achievement Emotions Questionnaire (AEQ). *Contemporary Educational Psychology*, *36*(1), 36-48. <https://doi.org/10.1016/j.cedpsych.2010.10.002>
- Pekrun, R., Goetz, T., Titz, W., & Perry, R. P. (2002). Academic emotions in students' self-regulated learning and achievement: A program of qualitative and quantitative research. *Educational Psychologist*, *37*(2), 91-105, doi: 10.1207/S15326985EP3702\_4
- Rentsch, K., Schroder-Abe, M., & Schutz, A. (2015). Envy mediates the relation between low academic self-esteem and hostile tendencies. *Journal of Research of Personality*, *58*, 143-153. doi: 10.1016/j.jrp.2015.08.001

- Reyna, J. (2021). Do we hate it when our friends become successful? Envy in educational technology. In *EdMedia+ Innovate Learning* (pp. 356-361). Association for the Advancement of Computing in Education (AACE).
- Rowe, A. D., Fitness, J., & Wood, L. N. (2015). University student and lecturer perceptions of positive emotions in learning. *International Journal of Qualitative Studies in Education*, 28(1), 1-20. <https://doi.org/10.1080/09518398.2013.847506>
- Seibert, G. S., Bauer, K. N., May, R. W., & Fincham, F. D. (2017). Emotion regulation and academic underperformance: The role of school burnout. *Learning and Individual Differences*, 60(1), 1-9. <https://doi.org/10.1016/j.lindif.2017.10.001>.
- Sitinjak, C. (2016). Envious increasing student's academic performance. In Proceeding from *the ASEAN Conference: 2nd Psychology & Humanity*, pp. 716-722.
- Suri, H. (2011), Purposeful sampling in qualitative research synthesis. *Qualitative Research Journal*, 11(2), 63-75. <https://doi.org/10.3316/QRJ1102063>
- Trigwell, K., Ellis, R., & Han, F. (2012). Relations between students' approaches to learning, experienced emotions and outcomes of learning. *Studies in Higher Education*, 37, 811-824.
- Yuksel, P., & Yildirim, S. (2015). Theoretical frameworks, methods, and procedures for conducting phenomenological studies in educational settings. *Turkish Online Journal of Qualitative Inquiry*, 6(1), 1-20.