ASES
V. INTERNATIONAL SCIENTIFIC RESEARCH CONFERENCE



CONFERENCE BOOK

EDITOR ASSIST. PROF. EMRULLAH BANAZ

ASES

V. INTERNATIONAL SCIENTIFIC RESEARCH CONFERENCE

AUGUST 12-13, 2023

ERZURUM, TURKIYE

EDITOR ASSIST. PROF. EMRULLAH BANAZ

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DATE AND PLACE

AUGUST 12-13, 2023

ERZURUM, TURKIYE

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ASES

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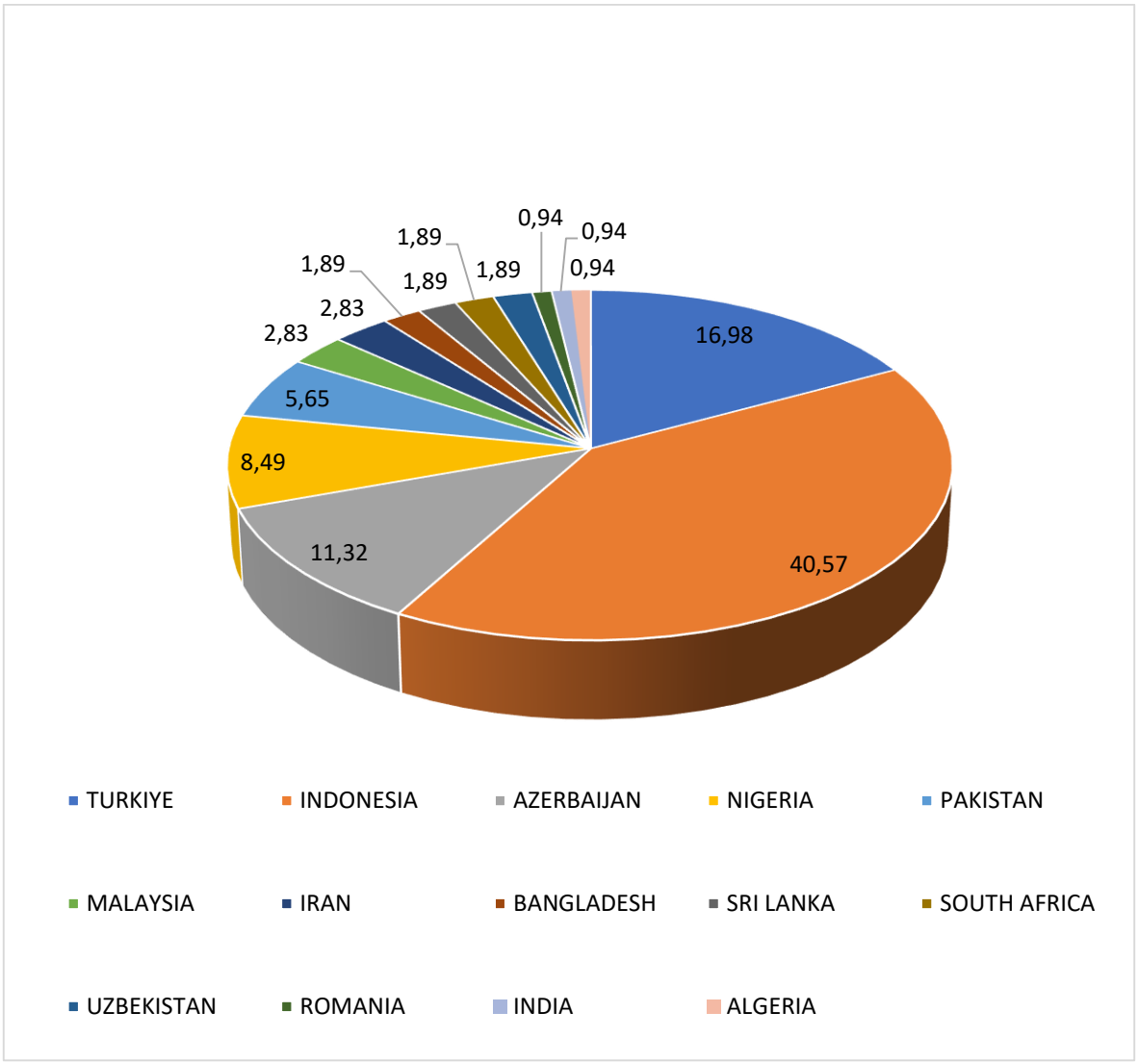
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CONFERENCE STATISTICS

Distribution of the papers presented orally at the conference by countries

Country	Number of Papers	Percentage (%)
TURKIYE	17	32,08%
PAKISTAN	9	16,98%
ALGERIA	4	7,55%
ROMANIA	4	7,55%
MOROCCO	4	7,55%
AZERBAIJAN	3	5,65%
INDONESIA	2	3,77%
NIGERIA	2	3,77%
MALAYSIA	2	3,77%
INDIA	2	3,77%
SAUDI ARABIA	2	1,89%
IRAN	1	1,89%
CANADA	1	1,89%
SRI LANKA	1	1,89%
TOTAL	**53**	**100**

CONFERENCE STATISTICS



ASES V. INTERNATIONAL SCIENTIFIC RESEARCH CONFERENCE

AUGUST 12-13, 2023, ERZURUM, TURKIYE

CONFERENCE PROGRAM

13.08.2023
SUNDAY / 10:00-12:30
SESSION: 1 HALL: 1 / MODERATOR
Assist. Prof. Şule TAŞKIRAN ÇANKAYA

AUTHORS	UNIVERSITY/INSTITUTION	TOPIC TITLE
Assist. Prof. Şule TAŞKIRAN ÇANKAYA	İstanbul Medeniyet Üniversitesi	THE SHADOWED ISLAMIC ALCHEMY SCHOLAR AYDEMIR AL-JILDAKI AND HIS THEORIES OF ALCHEMY
Ayşegül KURUMAHMUT Assist. Prof. Selçuk ASLAN	İstanbul Nişantaşı Üniversitesi	THE RELATIONSHIPS BETWEEN PROBLEM-SOLVING SKILLS AND PSYCHOLOGICAL FLEXIBILITY IN HIGH SCHOOL STUDENTS
Assist. Prof. Nazlı KAZANOĞLU	İstanbul Nişantaşı Üniversitesi	REFUGEE ENTREPRENEURSHIP IN TURKEY: OPPORTUNITIES, CHALLENGES AND SOLUTIONS
Prof. Dr. Sedat MADEN Assoc. Prof. Aslı MADEN Assist. Prof. Emrullah BANAZ Osman DEMİREL	Bayburt Üniversitesi	TÜRKÇE EĞİTİMİNDE HARİTALAMA TEKNİKLERİ İLE İLGİLİ HAZIRLANMIŞ LİSANSÜSTÜ TEZLERİN EĞİLİMLERİ
Arda Umut DİKBAŞ Nehir AKDAL Pelin Özlem TOY Esat AVCI	Yenişehir Belediyesi Bilim ve Sanat Merkezi	DEVELOPMENT OF A MATERIALS TO LEARN THE BRAILLE ALPHABET FOR VISUALLY DISABLED INDIVIDUALS
Assoc. Prof. Aslı MADEN Assist. Prof. Emrullah BANAZ Akif ÖZGEN	Bayburt Üniversitesi	TÜRKÇE EĞİTİMİNDE MOTİVASYON KONUSUNA YÖNELİK HAZIRLANMIŞ LİSANSÜSTÜ TEZLERİN EĞİLİMLERİ
Assist. Prof. Leyla GAFAROVA	Kocaeli Üniversitesi	BESTECİLERİN ESERLERİNDE DÖNGÜSEL (CYCLE) FORMUN ÖZELLİKLERİ
Assist. Prof. GÜLŞEN ŞEFİKA EKMEKCİ	Manisa Celal Bayar Üniversitesi	A TREND TECHNIQUE IN THE CONTEXT OF ART TEXTILES: TUFTING
Assist. Prof. Sevda DEMİRÖZ YILDIRIM	Amasya Üniversitesi	OLDER ADULTS IN DISASTER MANAGEMENT

13.08.2023
SUNDAY / 10:00-12:30
SESSION: 1 HALL: 2 / MODERATOR
Res. Assist. Kader DEMİRÖZ

AUTHORS	UNIVERSITY/INSTITUTION	TOPIC TITLE
İrem AYVAZ Assist. Prof. Bahar AKOĞLU	İstanbul Nişantaşı Üniversitesi	THE RELATIONSHIP BETWEEN CHILDHOOD TRAUMAS AND EATING DISORDERS AND OBSESSIVE-COMPULSIVE DISORDER IN ADULTS
Assist. Prof. Selçuk ASLAN Fatma Nur ALTIN	İstanbul Nişantaşı Üniversitesi	THE RELATIONSHIPS BETWEEN PROFESSIONAL BURNOUT AND SELF-EFFICACY IN THE PROFESSIONAL PERSONNEL OF THE SPECIAL EDUCATION AND REHABILITATION CENTER IN DIYARBAKIR
Res. Assist. Kader DEMİRÖZ	Artvin Çoruh Üniversitesi	INTERPERSONAL COMMUNICATION IN DISASTERS
Dr. Bahar EREN Prof. Dr. Yelda YALCIN GÜRKAN	Tekirdağ Namık Kemal Üniversitesi	THEORETICAL STUDY OF THE PHOTOCATAYTIC DEGRADATION PATWAY OF MALAOXON AND METHACRIFOS MOLECULES
Buket AKGÜL ARMAĞAN Assit. Prof. Mune AKTAY	Tokat Devlet Hastanesi İstanbul Nişantaşı Üniversitesi	ENGELLİ SAĞLIK RAPORU ALMAK İÇİN HASTANEYE GETİRİLEN 6-16 YAŞ ARALIĞINDAKİ ÇOCUKLARIN WISC-R TEST PERFORMANSLARI İLE EBVEYNLERİNİN PSİKOLOJİK SAĞLAMLIK VE ÖZNEL İYİ OLUŞLARI ARASINDAKİ İLİŞKİ
Prof. Dr. Mitat UYSAL Prof. Dr. Aynur UYSAL Rest. Assist. NURDANUR PEHLİVAN	DOĞUŞ ÜNİVERSİTESİ	COMPARISON OF THE FIVE METAHEURISTLC OPTIMIZATION ALGORITHMS
ALAADDİN OKTAR ÜZÜMCÜGİL SELÇUK YILMAZ Dr. UMUR BATAK	Kütahya Sağlık Bilimleri Üniversitesi	PERİPROSTETİK ENFEKSİYONA BAĞLI REVİZYON CERRAHİSİ PLANLANAN İLERİ DERECE KEMİK DEFEKTLİ OLGUYA YAKLAŞIMIMIZ
Ömer Faruk AYKUT	İstanbul Nişantaşı Üniversitesi	INVESTIGATION OF THE PSYCHOLOGICAL FLEXIBILITY, RESISTANCE TO CHANGE AND INTELLECTUAL THINKING OF INDIVIDUALS WITH AND WITHOUT EXPERIENCE OF LIVING ABROAD RELATIONSHIPS

13.08.2023
SUNDAY / 10:00-12:30
SESSION: 1 HALL: 3 / MODERATOR
DR. MUHAMMAD FAISAL

AUTHORS	UNIVERSITY/INSTITUTION	TOPIC TITLE
MARYAM EHSAN WAFA MAJEED MUHAMMAD NAEEM FAISAL BILAL ASLAM MUHAMMAD SAAD TARIQ MUHAMMAD ALI USMAN HAIDER WANIA NASIR NAJEEB ULLAH KHAN	University of Agriculture	THE IMPACT OF ROHIFOLIN ON THE MODULATION OF GLUCOSE AND INFLAMMATORY MARKERS IN STREPTOZOTOCIN-INDUCED DIABETIC RATS
HAFIZ MUHAMMAD SAJJAD RAFIA MUKHTAR RIZWAN HANIF NAUMAN AHMED	Sibling Academy of Quality Education Workers Welfare High School	EFFECTS OF SALINITY STRESS ON DIFFERENT WHEAT (TRITICUM AESTIVUM L.) GENOTYPES AT EARLY SEEDLING STAGE
RIZWAN HANIF RAFIA MUKHTAR M.ADNAN QAYYUM SHAH NAUMAN AHMED HAFIZ MUHAMMAD SAJJAD	Sibling Academy of Quality Education Workers Welfare High School	NEXT GENERATION WEB-BASED VOTING SYSTEM
SUBHASHISH DEY	Gudlavalleru Engineering College	SOURCE AND CONTROL OF CARBON MONOXIDE EMISSION AT LOW TEMPERATURE
Nadila Meta RIA Sugeng Prayitno HARIYATNO Gunardi Djoko WINARNO	University of Lampung	VISITOR PERCEPTION OF PETENGORAN MANGROVE FOREST TOURISM ATTRACTION (ODTW) DEVELOPMENT IN PESAWARAN REGENCY
Nassima AIT ISSAD Nora MIMOUNE Djamel KHELEF	Higher National Veterinary School	FEED ADDITIVES AND MILK QUALITY IN DAIRY CATTLE
Nora MIMOUNE Nassima AIT ISSAD Djamel KHELEF	Higher National Veterinary School	ASSESSMENT OF BOVINE ARTIFICIAL INSEMINATIONS PRACTICED IN THE NORTH-EASTERN PART IN ALGERIA BETWEEN 2020 AND 2022
ISMAIL OLANIYI MURAINA ABDULGANIY AYINDE AJANI	Lagos State University of Education	DICHOTOMY OF USING MIXED-INTERFACE FOR STATISTICAL DATA ANALYSIS
DR. MUHAMMAD FAISAL	Ministry of Human Rights Commission	THE DARK FOREST OF INNOVATIVE WORK WITH CAPITAL ARRANGEMENT IN COMPUTER BASED INTELLIGENCE VIEWPOINTS ON DISSEMINATION RECOMMENDED BY DR FAISAL

13.08.2023
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SESSION: 1 HALL: 4 / MODERATOR
MAJOR GHEORGHE GIURGIU

AUTHORS	UNIVERSITY/INSTITUTION	TOPIC TITLE
SALIMA LAHBABI RACHID BOUFERRA LATIFA SAADI AZIZA KHALIL	Cadi-Ayyad University	ENHACING COMPRESSIVE STRENGTH OF COMPRESSED EARTH BLOCK: A NOVEL METHOD FOR OPTIMAL FORMULATION DETERMINATION
NAJWA JBIRA ANASS LEBNAITI SANAA HAYANI MOUNIR	Sultan Moulay Slimane University of Beni Mellal	MODELING MILK PROPERTIES FOR MOROCCAN DAIRY PROCESS SIMULATION USING A CHEMICAL SIMULATOR
Dr. Samira BOUMOUS Zouhir BOUMOUS Faiçal KHARCHOUCHE Hadia BELHOUCHET	Souk Ahras University Setif1 University	INFLUENCE OF PHOTOVOLTAIC PANEL PARAMETERS ON POWER SYSTEM PROTECTION
SALAITHILLAITHILAGAM J. PRAVEENKUMAR P.C. PRASANNAKUMAR L.L.	G.Pulla Reddy Engineering College	MICROSTRIP PATCH ANTENNA DESIGN AND ANALYSIS FOR S-BAND COMMUNICATIONS
NAUMAN AHMED RAFIA MUKHTAR RIZWAN HANIF M.ADNAN QAYYUM SHAH HAFIZ MUHAMMAD SAJJAD	Sibling Academy of Quality Education Workers Welfare High School	ONLINE CAR RECOMMENDATION SYSTEM: ENHANCING USER DECISION-MAKING IN THE AUTOMOBILE MARKET
Amira GHARBI Youcef HAMLAOUI	Mohamed Cherif Messaadia university	NICKEL ELECTRODEPOSITION BY CHRONOPOTENTIOMETRY AND CHRONOAMPEROMETRY: EFFECT OF DEPOSITION PROCESS ON MORPHOLOGY AND CORROSION RESISTANCE
MAJOR GHEORGHE GIURGIU Prof. Dr. MANOLE COJOCARU	Deniplant-Aide Sante Medical Center Titu Maiorescu University	MANAGEMENT OF INTESTINAL BACTERIA TRIGGER COMPLICATIONS AFTER SURGERY THE IMPACT OF DENIPLANT POST OPERATOR TEA
MAJOR GHEORGHE GIURGIU Prof. Dr. MANOLE COJOCARU	Deniplant-Aide Sante Medical Center Titu Maiorescu University	THE GUT-BRAIN-SKIN AXIS IN ACNE: IMPACT OF POLENODERM

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SESSION: 1 HALL: 5 / MODERATOR
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NUR LISA ROSLI NUR SYAFIQAH ALIA MOHD SALLEH EVIKALORRA LOSUMIN	Keningau Vocational College	CASE METHOD: WAYS TO HANDLE MISCONDUCT BY EMPLOYEES
ALQUMA NOOR Lect. IRMA NURMALA DEWI Assist. Prof. MUHAMMAD FAISAL	National Defense University Islamabad Bina Bangsa University Allama Iqbal Open University	A PRACTICAL GUIDE FOR LEADERSHIP MANAGEMENT SKILLS IN PAKISTAN A REVIEW BY ALQUMA NOOR
DIONA MARCELLA MULKI VIANNA JOHINIS JENELYN-JANE DIKSON ERRICA NORBERT JONNATHEN N.G. ASRIZAL NAZIM JIKIM	Keningau Vocational College	CASE METHOD: COPING WITH VIOLATION OF ETHICS
AMINU ADAMU AHMED BASHIR ADAMU ZAHRAU SULAIMAN BASHIR ABUBAKAR MUSTAPHA MALAMI	Abubakar Tafawa Balewa University Nasawa State University Bauchi State University Gadau Federal Polytechnic Kaltungo	ECONOMIC RECESSION HIT-BACK, LEADING TO UNEMPLOYMENT DESPITE BEING IN DIGITAL AND INFORMATION AGES
Res. Assist. D.M.P.V. DISSANAYAKE	University of Si Jayewardhanapura	A STUDY ON SEXUAL VIOLENCE AGAINST WOMEN IN CONTEMPORARY SOCIETY
AQDI ROFIQ ASNAWI	University of Darussalam Gontor	ISLAMIZATION OF ORIENTALIST INTERPRETATION METHOD: A PRELIMINARY STUDY
Hassan ZARIOUH Zakariae AZNAY Abdelkader SMAILI	Mohammed I University	SEMI-FREDHOLM AND SEMI-BROWDER SPECTRA FOR C_0-QUASISEMIGROUPS
Hassan ZARIOUH Zakariae AZNAY Abdelkader SMAILI	Mohammed I University	SOME NEW PROPERTIES FOR M-HYPERCYCLIC C_0-SEMIGROUPS
Assoc. Prof. MOHAMMAD JAFAR CHAMANKAR Assist. Prof. HAMID ZAREI	Urmia University Iranian Center for Archaeological Research	EVALUATING THE MARITIME TRADE OF IRAN AND EAST AFRICA IN ANCIENT TIMES BASED ON HISTORICAL SOURCES AND ARCHAEOLOGICAL EVIDENCE

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ZOHAIB HASSAN SAIN

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AYNUR BADALOVA	AZERBAYCAN DEVLET PEDAGOJİ ÜNİVERSİTESİ	PSYCHOLOGISM IN WRITER ANAR'S WORKS AND ITS COMPARISON WITH PSYCHOLOGISM IN LEO TOLSOY'S CREATIVITIES
Irina-Ana DROBOT	Technical University of Civil Engineering Bucharest	THE MYSTERY OF EDWIN DROOD: A LESS KNOWN WORK BY CHARLES DICKENS
Assoc. Prof. AYGUN AHMADOVA	AZERBAYCAN DEVLET PEDAGOJİ ÜNİVERSİTESİ	AZERBAIJAN CHILDREN'S LITERATURE IN 1960-1980
Irina-Ana DROBOT	Technical University of Civil Engineering Bucharest	ASPECTS OF THE HUMAN NEED TO EXPLORE
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THE SHADOWED ISLAMIC ALCHEMY SCHOLAR AYDEMIR AL-JILDAKI AND HIS THEORIES OF ALCHEMY

GÖLGEDE KALMIŞ İSLAM ELKİMYA ALÎMİ AYDEMİR CİLDEKÎ VE ELKİMYA TEORİLERİ

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Özet

İslam dünyasında Ebû Mûsâ Câbir b. Ḥayyân'dan (ö. 200/815) sonra üretilen en büyük simya külliyatının yazarı olan İzzeddin Aydemir b. Âli el-Cildekî (ö.762/1360) gölgede kalmış ve büyük ölçüde unutulmuş bir figürdür. Cildekî'nin elkimyasında da başta Câbir b. Hayyan gibi İslâm elkimyacılarının benimsedikleri usulde maddi elkimya olarak adlandırdığımız harici metalürji çalışmaları ile manevi elkimya olarak adlandırdığımız başta yapısal dönüşümü içeren çalışmalar iç içedir. Kimyasal birleşimlerde sabit nisbetler kuralına esas teşkil eden görüşleri, ortaya çıkan gazlardan korunmak için deney sırasında maske kullanması, sabun yapımını geliştirmesi, nitrik asitle gümüşü altından ayırması bunun belli başlı örnekleridir. Meselâ Câbir b. Hayyân'a atfedilen eserlerden ve diğer bazı çalışmalardan nakillerde bulunarak altın-gümüş alaşımından gümüşü ayırmak için nitrik asit kullanılması gerektiğini bildirmiş, bu arada da söz konusu reaksiyonun maddelerin belirli ağırlıklarda olması halinde gerçekleşebileceği kanaatinde olduğunu açıklamıştır. Böylece Câbir gibi elkimyada deneysel metoda ve nicelik anlayışının önemine değinerek elkimyanın pratik yönüne dikkati çekmiştir. Câbir'in izinde elkimya geleneğini takip eden Cildekî'nin sisteminde de temel hedeflerden biri doğadaki mükemmelliğe insan aklında, bedeninde, ruhunda ve maddeler âleminde de ulaşmaktır. Doğayı taklit etme işi olarak elkimyanın amacı da hem maddeler âleminde hem de nefs âleminde mükemmel olana ulaşmaktır. Bu sebeple Cildekî'nin sadece teorik bilgiye dayanmayan, deneyleri kendi başına yapan tecrübi bir yöntemi vardır. Çalışmamızda Câbir'in elkimya mirasını devralan elkimya alimlerinden Cildekî'nin çalışmaları üzerinden, İslam Medeniyetinde elkimya faaliyetlerinin Câbir'den sonraki süreçte değişimi ve dönüşümü üzerine bir değerlendirme yapılacak, Cildekî'nin İslam elkimya tarihindeki yeri araştırılacaktır.

Anahtar kelimeler: Aydemir Cildekî, elkimya tarihi, 14. yüzyıl, İslam elkimya geleneği

Abstract

The author of the largest alchemical corpus produced in the Islamic world after Abū Mūsā Jābir b. Ḥayyān (d. 200/815), Izz ad-Dīn ʿĀli b. Aidamur b. Āli Aidamur al-Jildakī (d.762/1360) is a shadowy and largely forgotten figure. In al-Jildakī's alchemy, external metallurgical studies, which we call material alchemy in the style adopted by Islamic alchemists such as al-Jābir b. Hayyan, and studies involving structural transformation, which we call spiritual alchemy, are intertwined. His views on the rule of constant proportions in chemical combinations, his use of masks during experiments to protect himself from gases, his development of soap making, and his separation of silver from gold with nitric acid are the main examples of this. For example, by quoting from works attributed to al-Jābir b. Hayyān and some other works, he stated that nitric acid should be used to separate silver from gold-silver alloy, and in the

meantime, he explained that he was of the opinion that the reaction in question could take place if the substances were of certain weights. Thus, like al-Jābir, he drew attention to the practical aspect of alchemy by emphasizing the importance of the experimental method and the understanding of quantity in alchemy.Following the tradition of alchemistry in the footsteps of al-Jābir, one of the main goals of al-Jildakī's system was to achieve the perfection of nature in the human mind, body, soul, and material world. The aim of alchemistry as the work of imitating nature is to reach the perfect in both the world of matter and the world of the soul. For this reason, al-Jildakī has an empirical method that does not rely solely on theoretical knowledge but conducts experiments on its own. In this study, through the works of al-Jildakī, one of the alchemical scholars who took over al-Jābir's alchemical legacy, an evaluation will be made on the change and transformation of alchemical activities in Islamic Civilization after al-Jābir, and al-Jildakī's place in the history of Islamic alchemy will be investigated.

Keywords: Aydemir Jildekî, history of alchemy, 14th century, Islamic alchemy tradition

THE RELATIONSHIPS BETWEEN PROBLEM-SOLVING SKILLS AND PSYCHOLOGICAL FLEXIBILITY IN HIGH SCHOOL STUDENTS

LİSE ÖĞRENCİLERİNDE PROBLEM ÇÖZME BECERİLERİ VE PSİKOLOJİK ESNEKLİK ARASINDAKİ İLİŞKİLER

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Lise öğrencileri üzerinde yapılan bu çalışmada problemlere yönelik çözüm becerileri ile psikolojik esneklik düzeyleri arasındaki ilişkilerin incelenmesi amaçlanmıştır. Bu amaç kapsamında lise öğrencilerinin yaş grubu, cinsiyeti, öğrenim gördükleri lise türü ve kendilerini içedönük ve dışadönük olarak tanımlama biçimi değişkenleri karşılaştırılmıştır. Araştırma kapsamında ilişkisel tarama modeli kullanılmıştır. Yapılan bu araştırma kapsamında ilişkisel tarama modelinden faydalanılmıştır. Çalışmanın evrenini 2022-2023 yılı içerisinde İstanbul'da çeşitli liselerde öğrenim gören öğrenciler oluşturmaktadır. Araştırmanın örneklem grubu ise evren içerisinden uygun örneklem yöntemiyle ulaşılan 221 kadın ve 179 erkek olmak üzere toplam 400 lise öğrencisinden meydana gelmiştir. Veri toplamak amacıyla"Kişisel Bilgi Formu", "Psikolojik Esneklik Ölçeği" ve "Problem Çözme Envanteri" kullanılmıştır. Verilerin çözümlenmesi amacıyla SPSS istatistik programının 25. Versiyonu kullanılmış, analizlerde Pearson Korelasyon çözümlemesi, Bağımsız Gruplar T Testi, Varyans Analizi (ANOVA) ve Çoklu Doğrusal Regresyon analizinden yararlanılmıştır.

Araştırmanın sonunda öğrencilerin psikolojik esneklik düzeylerinin yaş grubu, öğrenim görülen lise türü, kendini içedönük ve dışadönük olarak tanımlama değişkenlerine göre anlamlı farklılık gösterdiği tespit edilmiştir. Öğrencilerin problem çözme becerilerinin ise yaş grubu, öğrenim görülen lise türü ve kendilerini tanımlama biçimi değişkenlerine göre anlamlı farklılık gösterdiği bulunmuştur. Bunun yanında öğrencilerin problem çözme becerileri ile psikolojik esneklik düzeyleri arasında pozitif yönde anlamlı ilişkinin olduğu tespit edilmiştir. Elde edilen bulgular ilgili yazın çerçevesinde tartışılmıştır.

Anahtar Kelimeler: Lise öğrencileri, problem çözme becerisi, psikolojik esneklik

Abstract

In this study on high school students, it was aimed to examine the relationship between problem-solving skills and the level of psychological flexibility. Within the scope of this purpose, the variables of age group, gender, the type of high school and self-definition style were compared. Relational screening model was used within the scope of the research. A total of 400 students, 221 women and 179 men, studying at high schools in Istanbul in the 2022-2023 academic year participated in the research. "Personal Information Form" , "Psychological Flexibility Scale" and "Problem-Solving Inventory" were used in the data collection process. In the data analysis process, Independent Sample T test, One Way ANOVA analysis, Pearson Correlation analysis and Multiple Linear Regression analysis were used in SPSS 25.0 program.

At the end of the study, it was determined that the psychological flexibility levels of the students differed significantly according to the age group, high school type and self-definition. It was found that the problem-solving skills of the students differed significantly according to the variables of age group, high school type, self- definition style. In addition, it was determined that there was a positive and significant relationship between students' problem-solving skills. The findings were discussed within the framework of the related literature.

Keywords: High school students, problem-solving skills, psychological flexibility.

REFUGEE ENTREPRENEURSHIP IN TURKEY: OPPORTUNITIES, CHALLENGES AND SOLUTIONS

TÜRKİYE'DE MÜLTECİ GİRİŞİMCİLİĞİ: FIRSATLAR, SORUNLAR VE ÇÖZÜM ÖNERİLERİ

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Özet

2011 yılında Suriye'de iktidar karşıtı eylemlerin Suriye ordusu tarafından sert bir şekilde engellenmesi ile başlayan Suriye İç Savaşı 35 milyona yakın Suriyeliyi mülteci durumuna düşürmüştür. Bugün, bu 35 milyona yakın Suriyeli mültecinin 3,6 milyonu Türkiye'de yaşamaktadır. Türkiye'de yaşayan bu 3,6 milyon Suriyelinin 1,6 milyonu ise Türkiye iş piyasasında aktif olarak bulunmakta ve gelir getirici bir işte çalışmaktadır. Bu 1,6 milyon Suriyelinin çoğu ucuz iş gücü olarak çalışıyor olsa da Türkiye'de kendi işletmesini kuran Suriyeli sayısı da azımsanamayacak seviyelere ulaşmıştır. 2022 yılı itibarı ile Türkiye'de bulunan Suriyeli işletme sayısı gayrı resmi ve kayıt dışı olanlar ile birlikte 20 bine ulaşmıştır. Bir yandan Türk ekonomisine ciddi katkılar sağlayan diğer yandan da Suriyeli bireylerin entegrasyon sürecini hızlandıran bu işletmeler, yerel işletmelerin karşılaştıkları sorunların dışında bir dizi sorunla daha karşılaşmaktadırlar. Bu bağlamda bu makalenin amacı Türkiye iş piyasasında aktif olan Suriyeli işletmelerin yaşadıkları sorunları incelemek ve bu sorunlara çözüm önerileri getirmektedir. Nitel araştırma yöntemlerinden gözlem ve derinlemesine mülakat tekniklerinin beraber kullanıldığı bu çalışma, Suriyeli KOBİ'lerin yerel KOBİ'lerden farklı olarak dil engeli, finansal kaynak yetersizliği, kültürel dışlanma ve psikolojik zorluklar gibi bir dizi sorunla karşılaştıklarını tespit etmiştir. Suriyeli işletmelerin bu sorunları aşıp potansiyellerine ulaşabilmeleri için ise bu makale ulusal ve uluslararası sivil toplum kuruluşlarının ve Türk hükümetinin Suriyeli girişimciler için fuarlar düzenlemelerini, yardım masaları kurmalarını, dil eğitimine ağırlık vermelerini ve hukuki metinleri Arapçaya çevirmelerini önermektedir.

Anahtar kelimeler: Girişimcilik, göç, Küçük ve Orta Büyüklükte İşletme, KOBİ, mülteci girişimciliği, Suriye İç Savaşı, zorunlu göç.

Abstract

The Syrian war, which started in 2011, has led to tremendous political and demographic changes not only in Syria but also in the neighbouring countries. Turkey being one of the countries that welcomes the most Syrians now hosts over 3,6 million Syrian refugees. These refugees who were initially considered as 'guests' and whose needs were met mostly by the Turkish government have now reached the capacity to work in an income-generating job within the Turkish labour market. Although the majority of them are working informally in various precarious jobs, the number of those who have set up their own SMEs should not be underestimated either. Currently there are nearly twenty thousand Syrian-owned SMEs in Turkey. Since their establishment, these Syrian-owned SMEs do not only contribute to inclusive

economic growth in Turkey by creating new jobs and providing livelihoods to Syrian refugees but also contributed to Syrian refugees' integration process. However, these Syrian-led SMEs face numerous problems that have not been faced by local SMEs. This article thus aims to explore these problems and provide new solutions for these problems. Based on an extensive review of the related literature and policy documents as well as 46 in-depth interviews with Syrian entrepreneurs, this article contends that Syrian entrepreneurs face various problems, which have not been faced by local entrepreneurs. These include language problem, cultural stigmatisation and exclusion, lack of financial resources as well as psychological problems. In order to overcome these problems and contribute to capacity building of Syrian entrepreneurs this article recommends national and international civil society organisations to organize various fairs and databases wherein Syrian entrepreneurs can introduce themselves and their products, to increase the number of psychologists who can speak Arabic and to provide help desks, which can provide Syrian entrepreneurs with Turkish labour codes.

Key words: Entrepreneurship, migration, refugee entrepreneurship, Small and Medium Size Entrepreneurs, SMEs, Syrian War.

TRENDS OF POSTGRADUATE THESES ON MAPPING TECHNIQUES IN TURKISH EDUCATION

TÜRKÇE EĞİTİMİNDE HARİTALAMA TEKNİKLERİ İLE İLGİLİ HAZIRLANMIŞ LİSANSÜSTÜ TEZLERİN EĞİLİMLERİ

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Özet

Dil, insanların varoluşlarından itibaren anlaşma ve etkileşim aracı olarak kullandıkları yaşayan ve gelişen bir varlıktır. Bu bağlamda ana dilini en iyi biçimde konuşmak her insan için gereken temel bir beceridir. Ana dili eğitiminde öğretimin etkili ve verimli bir düzeyde gerçekleşmesi adına bazı yöntem ve tekniklerden yararlanılmaktadır. Bu tekniklerden biri de haritalama tekniğidir. Haritalama tekniği, öğrencilerin etkili bir öğrenme gerçekleştirmesini sağlayan, öğrenme güçlüğü gibi sorunların önüne geçen, öğrencilerin beyin fırtınası yapmalarına olanak veren etkili ve verimli bir tekniktir. Bu çalışma, Türkçe eğitiminde haritalama teknikleri ile ilgili hazırlanan lisansüstü tezlerin eğilimlerini tespit etmek amacıyla yapılmıştır. Araştırmada nitel araştırma yöntemi tercih edilmiş, veriler doküman analizi tekniği ile toplanmıştır. Toplamda 28 adet yüksek lisans ve doktora derecesinde lisansüstü teze ulaşılan bu çalışmada elde edilen veriler içerik analizine tabi tutulmuş, tezin yazıldığı yıl, doktora veya yüksek lisans tezi, danışman ünvanı, tezin konusu, yöntemi ve veri toplama araçlarına göre sınıflandırılmıştır. Bu sınıflandırma sonucunda veriler tablolaştırılmış ve bulgular bölümünde yorumlanmıştır. Araştırma sonucunda 8 adet tezin danışmanlığını Prof. Dr. ünvanlı, 13 adet tezin danışmanlığını Doç. Dr. ünvanlı, 7 adet tezin Dr. Öğr. Üyesi ünvanlı akademisyenin yaptığı tespit edilmiştir. Yapılan tezlerden 8'inin doktora, 20'sinin yüksek lisans tezi olduğu sonucuna ulaşılmıştır. Sonuç olarak Türkçe eğitimi alanında sıklıkla kullanılan bir teknik olarak ifade edilen haritalama tekniği ile ilgili yapılan tezlerin nicelik olarak yetersiz olduğu görülmüştür. Bu bulgulardan hareketle eğitim ve öğretim sahasında kullanılan haritalama teknikleri ile ilgili tezlerin farklı beceriler yönünden ele alınması gerektiği, bu teknikle ilgili yapılan deneysel çalışmaların farklı sınıf düzeylerinde uygulanmasının daha iyi sonuçlar vereceği gibi önerilerde bulunulmuştur.

Anahtar kelimeler: Haritalama Teknikleri, Türkçe Öğretimi, Lisansüstü Tezler.

Abstract

Language is a living and developing entity that people have used as a means of communication and interaction since their existence. In this context, speaking the mother tongue in the best way is a basic skill required for every human being. In mother tongue education, some methods and techniques are used in order to realise teaching at an effective and efficient level. One of these techniques is the mapping technique. Mapping technique is an effective and efficient technique that enables students to learn effectively, prevents problems such as learning difficulties, and allows students to brainstorm. This study was conducted to determine the trends of postgraduate theses prepared on mapping techniques in Turkish education. Qualitative research method was preferred in the study and data were collected by document analysis technique. The data obtained in this study, in which a total of 28 master's and doctoral theses were reached, were subjected to content analysis and classified according to the year the thesis was written, doctoral or master's thesis, supervisor title, subject of the thesis, method and data collection tools. As a result of this classification, the data were tabulated and interpreted in the findings section. As a result of the research, 8 theses were supervised by an academic with the title of Prof. Dr., 13 theses were supervised by an academic with the title of Assoc. Dr., 7 theses were supervised by an academic with the title of Dr. Lecturer. It was determined that academicians with the title of Dr. Lecturer supervised 8 theses. It was concluded that 8 of the theses were doctoral theses and 20 of them were master's theses. As a result, it has been seen that the theses on the mapping technique, which is frequently used in the field of Turkish education, are inadequate in terms of quantity. Based on these findings, it was suggested that theses related to mapping techniques used in the field of education and training should be handled in terms of different skills, and that experimental studies on this technique would yield better results if applied at different grade levels.

Keywords: Mapping Techniques, Turkish Language Teaching, Postgraduate Theses.

1. GİRİŞ

Dil; iletişimi, etkileşimi ve bireyler arasındaki bağı kuvvetlendiren, toplumları veya toplulukları belirli bir seviyede medeniyet ufkuna yükselten bir mefkuredir. Bu özelliğinin yanında aktarım aracı olarak görev üstlenen dil bütün disiplinlerin ortak paydasıdır. Bu dillerden birisi de sahip olduğu milleti yüksek medeniyet ufkuna yükselten Türkçedir. Gazi Mustafa Kemal Atatürk'ün bir mecliste Türk dili hakkında sarf ettiği sözler Türkçe'nin önemini ortaya koymaktadır: *"Türk milletinin dili Türkçedir. Türk dili, dünyada en güzel, en zengin ve en kolay olabilecek bir dildir. Onun için her Türk, dilini çok sever ve onu yüceltmek için çalışır. Bir de Türk dili, Türk Milleti için kutsal bir hazinedir. Çünkü, Türk milleti geçirdiği nihayetsiz felâketler içinde bugün kendi milliyetini yapan her şeyin dili sayesinde muhafaza olunduğunu görüyor. Türk dili, Türk milletinin kalbidir, zihnidir. Öyle istiyorum ki, Türk dili bilim yöntemleriyle kurullarını ortaya koysun ve her dalda yazı yazanlar bütün terimleriyle çoğunluğun anlatabileceği güzel, âhenkli dilimizi kullansınlar*." (İnan, 1966; Aktaran: İşcan, 2007).

Bu bağlamda dünyada Türkçe, en çok konulan diller arasında yerini alan ve güncel konuşur sayısı 250 milyon civarında olan bir dil olmakla (Alyılmaz, 2015) birlikte gün geçtikçe Türkiye'nin ve Türk Cumhuriyetlerinin siyasal, ekonomik konumu itibarıyla öğrenilme arzusu içerisinde olunan bir dil hüviyetini kazanmıştır. Ana dili öğretimi ailede başlayan ve daha sonrasında formal ortamlarda devam eden bir süreç olmakla birlikte Türkçe öğretiminin temel mihenk taşlarından biridir. Demir ve Yapıcı'ya (2007) göre ana dili öğretimi kendiliğinden gelişen ve eğitim-öğretim sürecinde dışarıdan yapılan bazı müdahaleler olarak tanımlanabilir.

İnsanın her alanında yaşamına katkı sunan dört temel dil becerisini geliştirmek en önemli hedef olmakla birlikte Türkçe öğretiminde de bu temel dil becerileri geliştirmek amacıyla kullanılan bazı teknikler vardır. Araştırmada ele alınan teknik haritalama tekniğidir. Haritalama teknikleri; kavram haritaları, örümcek harita, zincir kavram haritası, sınıflama haritası, akış çizgesi, zihin

haritası, kavram ağı, balık kılçığı diyagramı, yapılandırılmış grid, tanılayıcı dallanmış ağaç, kavram karikatürü, bilgi haritası gibi sıralanabilmektedir. Bu teknikler dil öğretiminde çokça kullanılan, öğrencilerin kelimeler ve kavramlar arsında ilişki kurmalarını sağlayan, eski-yeni bilgiler arasındaki köprü işlevini yerine getiren ve kalıcı öğrenmeyi sağlayan bir görev üstenilirler (Kurudayıoğlu, Zorpuzan, 2019).

Alanyazın tarandığında Türkçe öğretiminde haritalama teknikleri ile ilgili benzer çalışmaların olduğu gözlenmiştir. Acat (2003), tarafından yapılan kavram haritalarının Türkçe öğretiminde kullanımını konu alan çalışmada kavram haritalarının monoton öğrenmeye karşı geliştirildiğini, öğretimde bireyi merkeze alan bir yaklaşım sergilediğini ve dil bilgisi öğretiminde kavram hartalarının faydalı olduğunu belirtilmiştir. Kurudayıoğlu ve Zorpuzan (2019) tarafından yapılan anlamsal haritalama tekniklerinin kelime öğretimi üzerindeki etkilerini konu alan çalışmada Gazi Üniversitesi TÖMER A2 öğrencileri çalışma grubu olarak belirlenmiştir. İlk test-son test kullanılan araştırmada anlamsal haritalama tekniğinin kelime öğretiminde daha etkili olduğu sonucuna varılmıştır. Aydın (2010), tarafından yapılan zihin haritalama tekniğinin dinleneni anlama hususunda kalıcılığa etkilerinin incelendiği çalışmada çalışma grubu Atatürk Üniversitesi Kazım Karabekir Eğitim Fakültesi'nden seçilen 77 tane Türkçe öğretmeni adayından oluşmaktadır. Araştırma sonucunda zihin haritalama tekniğinin klasik not alma tekniklerinden daha başarılı olduğu, derslerin daha zevkli ve eğlenceli devam ettiği bulgulanmıştır. Bu bağlamda Türkçe öğretiminin her alanında sıklıkla kullanılan bu tekniklerin alanyazına hizmet etmek amacıyla yazılan tezlerdeki durumunu görmek önemlidir. Literatürde Türkçe eğitimi alanında haritalama teknikleri ile ilgili hazırlanmış lisansüstü tezlerin eğilimleri ile ilgili bir çalışmaya rastlanılmadığından alanyazındaki bu eksikliğin giderilmesi adına bu çalışmanın yapılmasına karar verilmiştir.

1.1. Araştırmanın Amacı

Araştırmanın amacı Türkçe eğitimi alanında haritalama teknikleri ile ilgili hazırlanan lisansüstü tezlerin eğilimlerini tespit etmek temel amaç olarak güdülmüştür. Bu amaç doğrultusunda aşağıdaki alt problemlere cevap aranmıştır:

1. Türkçe öğretiminde haritalama teknikleri üzerine yapılan tezlerin yıl ve öğrenim kademelerine göre dağılımı nasıldır?

2. Türkçe öğretiminde haritalama teknikleri üzerine yapılan tezlerin üniversitelere göre dağılımı nasıldır?

3. Türkçe öğretiminde haritalama teknikleri üzerine yapılan tezlerin danışman ünvanına göre dağılımı nasıldır?

4. Türkçe öğretiminde haritalama teknikleri üzerine yapılan tezlerin konulara göre dağılımı nasıldır?

5. Türkçe öğretiminde haritalama teknikleri üzerine yapılan tezlerin yöntem tercihine göre dağılımı nasıldır?

2. YÖNTEM

2.1. Araştırmanın Modeli

Ele alınan araştırmada nitel araştırma yöntemi tercih edilmiş ve veriler doküman analizi ile toplanmıştır. Doküman analizi, görsellerin, belgelerin ve formların içerik ve amaçlarının belirlenmesini sağlayan ve bu sonuçlara göre yorumlanmasını olanaklı kılan bir tekniktir (Tracy, 2020).

2.2. Verilerin Toplanması ve Analizi

Araştırmada veriler Yüksek Öğretim Kurumu Başkanlığı Ulusal Tez Merkezi'nden (YÖK TEZ) doküman analizi ile toplanmış ve içerik analizine tabi tutulmuştur. İçerik analizi, bir metin içerisinde yer alan söz varlığı unsurlarını belirlemek ve bu söz varlığı unsurlarını ifade etmek anlamına gelmektedir (Kızıltepe, 2017). Bunun yanında metinde var olan bilgiler ışığında bir sonuca varmak için kullanılan bir teknik hüviyetini taşımaktadır. Elde edilen bilgiler tezin yazıldığı yıl, öğrenim kademesi, tezin yazıldığı üniversite bilgileri, danışman ünvanı, tezin konusu ve yöntemine göre sınıflandırılmıştır. Bu sınıflandırma sonucunda elde edilen veriler tablolar haline getirilmiş ve bulgular bölümünde yorumlanmıştır.

2.3. Geçerlik ve Güvenirlik

Araştırmanın geçerlik ve güvenirliğinin sağlanması amacıyla Miles ve Huberman'ın (1994) geliştirmiş olduğu görüş birliği ve görüş ayrılığı formülü kullanılmıştır. Üç alan uzmanının görüşleri çerçevesinde Miles ve Huberman'a (1994) göre yapılan hesaplama sonucunda sonucun %96 olduğu görülmüştür. Bu da %70'in üzerinde bir sonuç olduğu için araştırmanın güvenilir olduğu söylenebilir.

3. BULGULAR

3.1. Birinci Araştırma Sorusuna Yönelik Bulgular

Araştırmanın "*Türkçe öğretiminde haritalama teknikleri üzerine yapılan tezlerin yıl ve öğrenim kademelerine göre dağılımı nasıldır?"* şeklindeki birinci sorusuna yönelik bulgulara Tablo 1'de yer verilmiştir.

Tablo 1. Haritalama teknikleri üzerine yapılan tezlerin yıl ve öğrenim kademelerine dağılımı

Tür ve Yıllar	**2005**	**2006**	**2007**	**2008**	**2010**	**2012**	**2013**	**2015**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**Toplam**
Yüksek Lisans	1		1	1	1	2	1		3	4	2	1	3		20
Doktora		1				1		1				2	2	1	8
Toplam	1	1	1	1	1	3	1	1	3	4	2	3	3	1	28

Tablo 1 incelendiğinde, haritalama teknikleri üzerine yapılan çalışmalardan yüksek lisans tezlerinin (*f*=20) doktora tezlerine (*f*=8) göre daha fazla hazırlandığı sonucuna ulaşılmıştır. Araştırmaların yıllara göre dağılımına bakıldığında ise en fazla çalışmanın 2019 yılında (*f*=4) yapıldığı tespit edilmiştir. Bunu sırasıyla, 2012 (*f*=3), 2021 (*f*=3), 2022 (*f*=3) yıllarının takip ettiği görülmektedir.

3.2. İkinci Araştırma Sorusuna Yönelik Bulgular

Araştırmanın *"Türkçe öğretiminde haritalama teknikleri üzerine yapılan tezlerin üniversitelere göre dağılımı nasıldır?"* şeklindeki ikinci sorusuna yönelik bulgulara Tablo 2'de yer verilmiştir.

Tablo 2. Haritalama teknikleri üzerine yapılan tezlerin üniversitelere göre dağılımı

Üniversite	***f***	**%**
Abant İzzet Baysal Üniversitesi	1	3,57
Ağrı İbrahim Çeçen Üniversitesi	1	3,57
Akdeniz Üniversitesi	1	3,57

Atatürk Üniversitesi	3	10,71
Bolu Abant İzzet Baysal Üniversitesi	1	3,57
Çanakkale Onsekiz Mart Üniversitesi	1	3,57
Düzce Üniversitesi	2	7,14
Eskişehir Osmangazi Üniversitesi	1	3,57
Fırat Üniversitesi	1	3,57
Gazi Osman Paşa Üniversitesi	1	3,57
Gazi Üniversitesi	2	7,14
Hatay Mustafa Kemal Paşa Üniversitesi	1	3,57
Kütahya Dumlupınar Üniversitesi	1	3,57
Marmara Üniversitesi	1	3,57
Muğla Sıtkı Koçman Üniversitesi	2	7,14
Necmettin Erbakan Üniversitesi	2	7,14
Ordu Üniversitesi	1	3,57
Sakarya Üniversitesi	1	3,57
Selçuk Üniversitesi	2	7,14
Sinop Üniversitesi	1	3,57
Zonguldak Bülent Ecevit Üniversitesi	1	3,57
Toplam	28	100

Tablo 2 incelediğinde, haritalama teknikleri üzerine yapılan çalışmalardan yüksek lisans tezlerinin 21 farklı üniversitede hazırlandığı görülmektedir. Lisansüstü tezlerin (*f*=3) oranı ile en fazla Atatürk Üniversitesi'nde yapıldığı tespit edilmiştir. Bunu sırasıyla; Düzce (f=2), Gazi (*f*=2), Muğla Sıtkı Koçman (*f*=2), Necmettin Erbakan Üniversiteleri'nin (*f*=2) takip ettiği görülmektedir.

3.3. Üçüncü Araştırma Sorusuna Yönelik Bulgular

Araştırmanın *"Türkçe öğretiminde haritalama teknikleri üzerine yapılan tezlerin danışman ünvanına göre dağılımı nasıldır?"* şeklindeki üçüncü sorusuna yönelik bulgulara Tablo 3'te yer verilmiştir.

Tablo 3. Haritalama teknikleri üzerine yapılan tezlerin danışman ünvanına göre dağılımı

Danışman Ünvanı	***f***	**%**
Yard. Doç. Dr./Dr Öğr. Üyesi	7	25
Doç. Dr.	13	46

Prof. Dr.	8	29
Toplam	28	100

Tablo 3 incelendiğinde, Türkçe eğitiminde haritalama teknikleri üzerine yapılmış olan 28 lisansüstü teze en fazla ile Doç. Dr. ünvanlı öğretim üyesinin (*f*=13) danışmanlık yaptığı görülmektedir. Bunun yanı sıra çalışmaların 8'inde Profesör Doktor, 7'sinde ise Doktor Öğretim Üyelerinin danışmanlık yaptığı tespit edilmiştir.

3.4. Dördüncü Araştırma Sorusuna Yönelik Bulgular

Araştırmanın *"Türkçe öğretiminde haritalama teknikleri üzerine yapılan tezlerin konulara göre dağılımı nasıldır?"* şeklindeki dördüncü sorusuna yönelik bulgulara Tablo 4'te yer verilmiştir.

Tablo 4. Haritalama teknikleri üzerine yapılan tezlerin konulara göre dağılımı

Konu	***f***	**%**
Okuma eğitimi	10	36
Yazma eğitimi	7	25
Yabancı dil olarak Türkçe	4	14
Dil bilgisi öğretimi	3	11
Başarı/Motivasyon	2	6
Konuşma eğitimi	1	4
Deyim öğretimi	1	4
Toplam	28	100

Tablo 4'te görüleceği üzere en fazla okuma eğitimi (*f*=10) alanında çalışma yapıldığı, en az ise konuşma eğitimi ve deyim öğretimi alanlarında (*f*=1) çalışma yapıldığı tespit edilmiştir. Okuma eğitimini sırasıyla, yazma eğitimi (*f*=7), yabancı dil olarak Türkçe (*f*=4), dil bilgisi öğretimi (*f*=3), başarı/motivasyon (*f*=2) takip ettiği görülmektedir.

3.5. Beşinci Araştırma Sorusuna Yönelik Bulgular

Araştırmanın *"Türkçe öğretiminde haritalama teknikleri üzerine yapılan tezlerin yöntem tercihine göre dağılımı nasıldır?"* şeklindeki beşinci sorusuna yönelik bulgulara Tablo 5'te yer verilmiştir.

Tablo 5. Haritalama teknikleri üzerine yapılan tezlerin yöntem tercihine göre dağılımı

Yöntem	***f***	**%**
Nicel	15	54
Nitel	7	25
Karma	6	21
Toplam	28	100

Tablo 5'te görüleceği üzere haritalama teknikleri üzerine yapılmış tezlerde kullanılan yöntemlere yer verilmiştir. En fazla tercih edilen yöntemin nicel araştırma yöntemi olduğu (*f*=15), en az tercih edilen yöntemin ise karma yöntem (*f*=6) olduğu tespit edilmiştir. Nitel araştırma yönteminin ise 7 lisansüstü tezde yer aldığı görülmüştür.

4. SONUÇ, TARTIŞMA VE ÖNERİLER

Türkçe eğitiminde haritalama teknikleri üzerine yapılmış lisansüstü tezlerin eğilimlerinin incelendiği araştırmada elde edilen bulgular ışığında ulaşılan sonuçlar aşağıda sunulmuştur:

Türkçe eğitiminde haritalama teknikleri üzerine toplamda 28 adet lisansüstü çalışmaya ulaşılmıştır. Araştırma sonucunda yüksek lisans tezlerinin (*f*=20) doktora tezlerine (*f*=8) göre daha fazla hazırlandığı sonucuna ulaşılmıştır. Lisansüstü tezlerin yıllara göre dağılımına bakıldığında ise en fazla çalışmanın 2019 yılında (*f*=4) yapıldığı ve bunu sırasıyla, 2012 (*f*=3), 2021 (*f*=3), 2022 (*f*=3) yıllarının takip ettiği tespit edilmiştir. Buna ek olarak yabancılara Türkçe öğretimi üzerine yapılmış tezlerin eğilimlerini incelediği çalışmalarda yüksek lisans tezlerinin doktora tezlerine göre daha fazla olduğu belirtilmiştir (Baki, 2019; Eyüp, 2020). Bu sonuçlarda ele alınan çalışmadaki sonuçlar ile benzerlik göstermektedir. Haritalama teknikleri üzerine yapılan çalışmalardan yüksek lisans tezlerinin 21 farklı üniversitede hazırlandığı tespit edilmiştir. Lisansüstü tezlerin (*f*=3) oranı ile en fazla Atatürk Üniversitesi'nde yapıldığını ve bunu sırasıyla; Düzce Üniversitesi, (*f*=2), Gazi Üniversitesi (*f*=2), Muğla Sıtkı Koçman Üniversitesi (*f*=2), Necmettin Erbakan Üniversitesi'nin (*f*=2) takip ettiği sonucuna ulaşılmıştır. Bu sonuçlardan farklı olarak, Schreglmann (2016), detaylı olarak tezleri incelediği çalışmada, en fazla tezin üretildiği üniversitenin Hacettepe Üniversitesi olduğunu belirtmiştir. Sever (2021) sosyal bilimler alanında neşredilen doktora düzeyindeki tezleri tetkik ettiği araştırmada, en fazla Gazi Üniversitesinde çalışma üretildiğini tespit etmiştir. En fazla tezin Atatürk Üniversitesi'nde yapılmasının diğer üniversitelere nazaran daha köklü ve daha eski bir ekol olmasından kaynaklandığı düşünülmektedir. Türkçe eğitiminde haritalama teknikleri üzerine yapılmış olan 28 lisansüstü teze en fazla ile Doç. Dr. ünvanlı öğretim üyesinin (*f*=13) danışmanlık yaptığı tespit edilmiştir. Bunun yanı sıra çalışmaların 8'inde Profesör Doktor, 7'sinde ise Doktor Öğretim Üyelerinin danışmanlık yaptığı görülmektedir. Kemiksiz (2021) yabancı dil olarak Türkçe öğretiminde kullanılan ders kitaplarını inceleyen çalışmaları incelediği araştırmada, Prof. Dr. ve Doç. Dr. ünvanlı öğretim üyelerinin Dr. Öğr. Üyelerinin aksine daha fazla çalışmaya danışmanlık ettiğini tespit etmiştir. Bu da araştırmada ulaşılan sonuçları destekler niteliktedir.

Araştırma konusu bağlamında en fazla okuma eğitimi (f=10) alanında çalışma yapıldığı, en az ise konuşma eğitimi ve deyim öğretimi alanlarında (*f*=1) çalışma yapıldığı tespit edilmiştir. Okuma eğitimini sırasıyla, yazma eğitimi (*f*=7), yabancı dil olarak Türkçe (*f*=4), dil bilgisi öğretimi (*f*=3), başarı/motivasyon (*f*=2) takip ettiği görülmektedir. İlgili alanyazın tarandığında Türkçe eğitiminde strateji, yöntem ve tekniklerin (haritalama teknikleri vs.) diğer alanlara nazaran daha az tercih edilmesine rağmen çalışmaların bulunduğuna yönelik araştırmalar mevcuttur (Önal ve Maden, 2021; Maden, Banaz ve Avşar, 2023). Haritalama teknikleri üzerine yapılmış tezlerde kullanılan yöntemlerden en fazla tercih edilen yöntemin nicel araştırma yöntemi olduğu (*f*=15), en az tercih edilen yöntemin ise karma yöntem (*f*=6) olduğu bulgulanmıştır. Nitel araştırma yönteminin ise 7 lisansüstü tezde yer aldığı görülmüştür. Sütçü (2021), zekâ oyunları ile ilgili yapılan bilimsel araştırmaların eğilimlerini incelediği çalışmasında en fazla nicel araştırma yönteminin kullanıldığını tespit etmiştir. Bu sonuç araştırmada elde edilen verileri destekler niteliktedir.

Elde edilen bu sonuçlardan hareketle şu önerilerde bulunulmuştur:

1. Türkçenin Eğitimi ve öğretimi sahasında kullanılan haritalama teknikleri ile ilgili tezlerin farklı beceriler yönünden ele alınması gereklidir.
2. Haritalama teknikleri ile ilgili ilgili yapılan deneysel çalışmaların farklı sınıf düzeylerinde uygulanmasının daha iyi sonuç vereceği düşünülmektedir.
3. Türkçe eğitiminde haritalama teknikleri ile ilgili deneysel çalışmaların sayısı artırılmalı ve sonuçları ile alanyazına sunulmalıdır.
4. Türkçe eğitiminde haritalama teknikleri ile ilgili doktora tezlerinin yüksek lisans tezlerine oranla daha az olduğu için daha fazla çalışmanın yapılması gereklidir.

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TENDENCIES OF GRADUATE THESIS ON THE SUBJECT OF MOTIVATION IN TURKISH EDUCATION

TÜRKÇE EĞİTİMİNDE MOTİVASYON KONUSUNA YÖNELİK HAZIRLANMIŞ LİSANSÜSTÜ TEZLERİN EĞİLİMLERİ

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Özet

Bu araştırmada, Türkçe eğitimi alanında motivasyon konulu hazırlanan lisansüstü tezlerin tespit edilerek eğilimlerinin belirlenmesi amaçlanmıştır. Araştırma, Türkiye'de 2013-2022 yılları arasında yayımlanmış olan motivasyon konulu lisansüstü tezler ile sınırlı tutulmuştur. Örneklem için Yükseköğretim Kurulu Ulusal Tez Merkezi veri tabanı üzerinde 29.06.2023 tarihine kadar yayımlanmış olan lisansüstü tezler için taramalar yapılmıştır. Yapılan bu taramaların sonucunda toplamda 34 lisansüstü tez çalışması tespit edilmiştir. Tespit edilen 34 lisansüstü tezin 30'u yüksek lisans; 4'ü ise doktora tezi olarak hazırlanmıştır. Araştırmada, nitel araştırma yöntemlerinden yararlanılmıştır. Araştırmanın verileri doküman incelemesi yöntemiyle toplanmış ve elde edilen veriler ise içerik analizine tabi tutulmuştur. Araştırmanın geçerlik ve güvenirliğini tespit etmek amacıyla Miles ve Huberman (1994) tarafından geliştirilen görüş birliği ve görüş ayrılığı formülü kullanılmış ve 3 Türkçe eğitimi uzmanından görüş alınmıştır. Araştırmadan elde edilen bulguların sonucunda, Türkçe eğitimi alanında motivasyon konulu çalışmaların en fazla 2019 yılında hazırlandığı tespit edilmiştir. Hazırlanan lisansüstü tez çalışmalarının büyük bir çoğunluğunun nicel araştırma yöntemlerinden yararlanarak hazırlandığı ve örneklem/çalışma grubu olarak en fazla "*öğrenci"* örneklem grubunun yer aldığı belirlenmiştir. Araştırmanın sonuçlarından hareketle çeşitli önerilerde bulunulmuştur.

Anahtar kelimeler: Türkçe eğitimi, motivasyon, lisansüstü tez, eğilim

Abstract

In this research, it is aimed to determine the tendencies of postgraduate theses prepared on motivation in the field of Turkish education. The research is limited to postgraduate theses on motivation published in Turkey between the years 2013-2022. For the sample, the postgraduate theses published until 29.06.2023 on the National Thesis Center database of the Council of Higher Education were searched. As a result of these scans, a total of 34 postgraduate thesis studies were identified. Of the 34 identified postgraduate theses, 30 were postgraduate; 4 of them were prepared as doctoral thesis. Qualitative research methods were used in the research. The data of the research were collected by document analysis method and the obtained data

were subjected to content analysis. In order to determine the validity and reliability of the research, the consensus and disagreement formula developed by Miles and Huberman (1994) was used and opinions were taken from 3 Turkish education experts. As a result of the findings obtained from the research, it was determined that the most studies on motivation in the field of Turkish education were prepared in 2019. It was determined that most of the postgraduate thesis studies were prepared using quantitative research methods and the most "student" sample group took place as the sample/study group. Based on the results of the research, various suggestions were made.

Keywords: Turkish education, motivation, postgraduate thesis, tendency

1. GİRİŞ

TDK'ye göre motivasyon, isteklendirme ve güdüleme olarak tanımlanmaktadır. Etimoloji köken olarak ise Latince "*movere"* yani hareket ettirme, hareketlendirme kelimesinden gelmektedir. Heckhausen (1989) motivasyonu; bireylerin beklediği sonuçlara ulaşmak için davranışını seçmesi, davranışına yön vermesi ve doğrultuda harcadığı enerjiyi kontrol etmesi olarak tanımlamaktadır. Robbins vd. (2019) motivasyonun; insanların belli bir amaca ulaşmak için gösterdiği çabanın yoğunluğunu, yönünü ve sürekliliğini dikkate alan süreçler olduğunu ifade etmektedir. Kaya (1995) motivasyonu; bireyleri herhangi bir işi yapmaya iten bir iç dürtü, arzu, heyecan olarak tanımlamaktadır. Selçuk (2004) ise motivasyonun içsel ve dışsal olmak üzere iki ana kategoriden oluştuğunu belirterek motivasyon için; istekleri, ihtiyaçları, arzuları, dürtüleri ve ilgileri kapsayan genel bir kavram tanımını yapmaktadır. Motivasyon, bireyleri belli bir amaç doğrultusunda yönlendiren, belirlenen amaç doğrultusunda harekete geçiren ve bu eylemlerin sürekli olmasına olanak sağlayan, kişinin içsel ve dışsal dünyadan beslendiği enerji olarak da tanımlamak mümkündür.

Schunk ve diğ., (2014) motivasyonun genel özelliklerini şu şekilde aktarmışlardır:

- Motivasyon bir ürün değili süreçtir. Doğrudan gözlemlenemeyen bu süreçte motivasyon, davranışlar ve ifadeler aracılığıyla dolaylı olarak anlaşılabilir.
- Motivasyon, etkinliklere yön veren ve güç sağlayan amaçlar içerir.
- Motivasyon; planlama ve problem çözme gibi zihinsel çaba ve ısrar gibi fiziksel eylemler gerektirir.
- Motivasyon, amaca yönelik olup bir etkinliğe başlamak ve bu etkinliği sürdürebilrmeyi gerektiren bir süreçtir.

Motivasyonu etkileyen içsel ve dışsal olarak birçok etken vardır (Akbaba, 2006) ve buna bağlı olarak motivasyon, iç motivasyon ve dış motivasyon olarak iki şekilde incelenebilir (Çakmak, 2005). İçsel motivasyon, bireyin kendisinden kaynaklanan etkilerle ortaya çıkan, kişiyi istekleri doğrultusunda harekete geçiren ve etkin kılan, kaynağı bireyin kendisi olan kişinin doğal iç gücüdür (Başaran, 2004; Öncü, 2004). İçsel motivasyon, bireyin kişisel ilgi, değer ve amaçlarından kaynaklanan bir motivasyon türüdür. İçsel motivasyon düzeyi yüksek olan bireyler, eğitim öğretim sürecinde daha yüksek akademik başarıya ve daha düşük akademik endişeye sahip oldukları söylenebilir (Arslan Çiftçi, Ayyıldız, 2020:114-115).

Carlton ve Winsler (1998, 165) sınıf içerisinde öğrencilerin içsel motivasyonlarını geliştirmek amacıyla dikkat edilmesi gereken hususları şu şekilde aktarmışlardır: Duyarlı bir ortam sağlamak: Çocuğun çevre üzerinde etkisini görebileceği, sorumluluk kazanacağı bir ortam oluşturun. Tutarlı ve duyarlı olmak: Çocuğa tutarlı bir şekilde yanıt verin. Bu, çocuğun davranışlarına tepkiler için bir beklenti duygusu geliştirmesini sağlar. Çocuğu duymak ve bunu ona hissettirmek, çocuğun eylemde bulunma isteğini artırır. Çocukların özerkliğini

desteklemek: Sınıf ortamında uyguladığınız öğretim süreçleri sayesinde çocukların özgürce keşfetmesine ve seçmesine izin verin. Çocuklarla yakın ilişkiler kurmak: Küçük yaştaki bireyler yakın, sıcak ve sevecen ilişkilerden hoşlanmaktadırlar ve böyle durumlarda kendilerini daha rahat hissetmektedirler. Ortak dikkat oluşturmak: Çocuklarla belli nesneler veya görevler üzerinden ortak dikkat ve iş birliği için fırsatlar sunun. Bu durum çocuklara, ileride bireysel motivasyonlarında da kullanabilecekleri beceriler kazandırmaktadır. İyi bir motivasyon rol modeli sağlamak: Öğretmenler sınıf ortamında kendi yeteneklerine güvendiklerini öğrencilere hissettirmelidir. Ayrıca olumlu bir tutum sergileme, ısrarcı olma, öğrenmek için öğrenmeye hevesli olma gidi davranışları modelleyerek çocukların aynı motivasyonel nitelikleri sergilemelerini sağlamalıdır. Zorluk (problem) durumu yaratmak: Çocukların öz yeterlilikleri, giderek daha zorlu görevlerde başarılı olduklarında artar. Çocuklar için gelişimsel olarak uygun ancak zorlayıcı aktiviteler sağlayın ve zorluk derecesini kademeli olarak artırın. Problem çözme becerisini artırmak: Çocuğun problem çözme becerisini artırmak için öğretmen rehberliğinde sözlü yardımlar ve yönlendirici sorular sorun. Böylece çocukların problem çözme konusunda giderek daha fazla sorumluluk alması sağlayın. Öz değerlendirmeyi desteklemek: Çocuklara kendi aktivitelerini ve performanslarını değerlendirmeleri için fırsatlar verin. Ödül Kullanmak: Ödülleri az ve dikkatli kullanın. Çünkü dış ödüller, çocukların içsel motivasyonlarını azaltabilir. Ödül kullanımında performanstan çok çocuğun çabası, ısrarı ve süreci vurgulanmalıdır. Ödüller kontrol edici olmaktan çok bilgilendirici olmalıdır.

Dışsal motivasyon ise, "ödül, ceza, takdir edilme, baskı, rica, sevilme, kabul görme" gibi çeşitli dışsal etkenlere bağlı olan ya da herhangi bir işe karşılık başkaları tarafından sunulan ödüllerle meydana gelen, kaynağın dışarıda olduğu motivasyon çeşididir (Erdem, 2012). İçsel motivasyon ve dışsal motivasyon bir arada incelendiğinde; içsel motivasyonun etkisiyle birey kendi isteğiyle harekete geçerken, dışsal motivasyonda dışsal pekiştireçler aracılığıyla bireyin harekete geçtiği görülmektedir. Araştırmalarda içsel motivasyon uzun süreli etki sağladığı görülürken, dışsal motivasyonun daha kısa süreli etki yarattığı görülmektedir (Yılmaz, 2016).

Sancı (2002:19-21) öğretmenlerin öğrencileri nasıl motive edeceklerini şu şekilde sıralamıştır:

- Öğrencilerden daima iyisini bekleyin.
- İstediğiniz davranışı öncelikle kendiniz göstererek örnek ve model olun.
- Beklentilerini öğrencilerle paylaşın.
- Olumlu bir ortam tesis edin.
- Öğrencinin aktif katılımını sağlayın.
- Dersin öğrenilmeye değer olduğunu gösterin.
- Kendine saygıyı besleyin.
- Öğrencilerin ilgi alanlarından yararlanın.
- Merak unsurunu kullanın.
- Öğrencileri zorlayın.
- Pekiştirme yöntemini kullanın.
- Bireyselleştirilmiş öğretim tekniklerini kullanın.
- Yarışma ve rekabeti kullanın.
- Stres yaratmayın.

İlgili alan yazın incelendiğinde Türkçe eğitimi alanında çeşitli konu alanlarıyla ilgili birçok içerik analizi çalışması hazırlanmıştır. Örneğin Maden (2021) Türkçe ders kitapları konulu hazırlanan lisansüstü tezlere yönelik yaptığı çalışmada toplamda 358 çalışma hazırlandığı, tezlerin en fazla 2019 yılı içerisinde hazırlandığı, tezlerin en fazla yüksek lisans tezi olduğu ve araştırmalarda en fazla nitel araştırma yöntemlerinin kullanıldığını belirlemiştir. Ceran, Aydın ve Onarıcıoğlu (2018) okuma eğitimi üzerine hazırlanan lisansüstü tezlere yönelik yaptıkları araştırmada, toplamda 317 çalışmaya ulaşmışlardır. Ulaşılan bu lisansüstü tezlerin en fazla 2011 yılında hazırlandığı, çalışma grubu olarak en fazla *"ortaokul"* çalışma grubunun kullanıldığı, araştırma yöntemi olarak en çok nicel araştırma yöntemlerinin kullanıldığı ve konu alanlarına göre en fazla *"okuma yöntem ve teknikleri"* konu alanının yer aldığını tespit etmişlerdir. Bakan ve Çelebi (2022) akıcı okuma becerisine yönelik hazırlanan lisansüstü tez ve makalelere yönelik hazırladıkları araştırmada, toplamda 266 çalışmaya ulaşmışlardır. Ulaşılan çalışmalarda çalışma grubu olarak en fazla *"ilköğretim"* grubunun yer aldığını, araştırma yöntemlerine göre dağılımlarının incelenmesi sonucunda ise lisansüstü tezlerde deneysel yöntemlerin kullandığı; makalelerde ise betimsel yöntemlerin kullanıldığını tespit etmişlerdir. Potur (2023) dinleme becerisi üzerine hazırlanan lisansüstü tezlere yönelik hazırladığı araştırmada toplamda 175 lisansüstü teze ulaşmıştır. Ulaşılan tezlerin en fazla 2019 yılı içerisinde hazırlandığı, en fazla çalışmanın Gazi Üniversitesi'nde yapıldığı, örneklem olarak en fazla *"ortaokul öğrencileri"* örneklem grubunun çalışmalarda yer aldığı sonucuna ulaşmıştır. Çoban (2022) yaratıcı yazma konulu hazırlanan doktora tezlerine yönelik hazırladığı araştırmada, toplamda 14 çalışmaya ulaşmıştır. Tezlerde en fazla çalışma 2019 yılı içerisinde hazırlandığı ve araştırmalarda en fazla karma araştırma yöntemlerinin kullanıldığı tespit edilmiştir. Uysal ve Zorpuzan (2021) yabancılara Türkçe öğretiminde yazma becerisine yönelik hazırlanan tezlere yönelik yaptıkları araştırmada, toplamda 66 lisansüstü teze ulaşmışlardır. Ulaşılan tezlerin en fazla 2019 yılında hazırlandığı, en fazla tez çalışmasının Gazi Üniversitesi'nde hazırlandığı ve araştırmalarda en fazla nitel ve karma araştırma yöntemlerinin tercih edildiği belirlenmiştir. Demir ve Çalışkan (2021) Türkçe eğitimi alanında nitel araştırma yöntemleri kullanılarak hazırlanan doktora tezlerine yönelik yaptıkları araştırmada toplamda 99 tane doktora tezine ulaşmışlardır. Ulaşılan tezlerin en fazla 2017 yılında hazırlandığı, konu alanı olarak en fazla *"yabancı dil olarak Türkçe öğretimi"* konu alanının yer aldığı, veri toplama aracı olarak en fazla *"doküman"* veri analiz yöntemi olarak ise en fazla içerik analizi yönteminin kullanıldığını belirlemişlerdir. Yapılan alanyazın taraması sonucunda Türkçe eğitimi alanında motivasyon konulu hazırlanan lisansüstü tezlerin eğilimlerinin belirlenmesine yönelik bir araştırma bulunmamaktadır. Bu doğrultuda, Türkçe eğitimi alanında hazırlanmış motivasyon konulu lisansüstü tezlerin araştırma eğilimlerinin ortaya konulmasının alana katkı sağlayacağı düşünülmektedir.

Araştırmanın Amacı

Araştırmanın amacı Türkçe eğitimi alanında motivasyon konusuna yönelik hazırlanan lisansüstü tezlerin eğilimlerini tespit etmektir. Bu amaç doğrultusunda aşağıdaki alt problemlere cevap aranmıştır:

1. Türkçe eğitiminde motivasyon üzerine yapılan tezlerin yıl ve öğrenim kademelerine göre dağılımı nasıldır?

2. Türkçe eğitiminde motivasyon üzerine yapılan tezlerin üniversitelere göre dağılımı nasıldır?

3. Türkçe eğitiminde motivasyon üzerine yapılan tezlerin konulara göre dağılımı nasıldır?

4. Türkçe eğitiminde motivasyon üzerine yapılan tezlerin yöntem tercihine göre dağılımı nasıldır?

5. Türkçe eğitiminde motivasyon üzerine yapılan tezlerin örneklem tercihine göre dağılımı nasıldır?

2. YÖNTEM

2.1. Araştırmanın Modeli

Araştırmada, nitel araştırma yöntemi tercih edilmiştir. Nitel araştırma; gözlem, görüşme ve doküman analizi gibi veri toplama yöntemlerinin kullanıldığı, algıların ve olayların doğal ortamda gerçekçi ve bütüncül bir yaklaşımla ortaya konulmasına yönelik bir araştırmadır (Yıldırım ve Şimşek, 2006, s.39). Bu doğrultuda 2013-2023 yılları arasında Türkçe eğitimi alanında motivasyon konulu hazırlanan lisansüstü tezlerin eğilimlerin belirlenmesi amaçlanmıştır.

2.2. Araştırmanın Örneklemi

Araştırmada amaçlı örnekleme türlerinden ölçüt örnekleme yöntemi kullanılmıştır. Ölçüt örnekleme, önceden belirlenen ölçütler ışığında ortaya konulan durumun çalışılmasıdır (Yıldırım ve Şimşek, 2006, s. 112). Bu doğrultuda araştırmanın birinci ölçütünü Türkçe eğitimi alanında motivasyon çalışmaları, ikinci ölçütünü tezlerin 2013-2023 yılları arasında yayımlanmış olması ve üçüncü ölçütünü ise YÖK Ulusal Tez Merkezi veri tabanında yer alan çalışmalar oluşturmuştur. Araştırmanın inceleme nesnesini, Türkçe eğitimi alanında motivasyon konusu temel alınarak 01.08.2023 tarihine kadar yayımlanmış olan 34 tez oluşturmaktadır.

2.3. Verilerin Toplanması ve Analizi

Araştırmanın verileri doküman analizi yoluyla toplanmıştır. Doküman analizi, görsellerin, belgelerin ve formların içerik ve amaçlarının belirlenmesini sağlayan ve bu sonuçlara göre yorumlanmasını olanaklı kılan bir tekniktir (Tracy, 2020). Araştırmada incelemeye dahil edilen lisansüstü tezler belirlendikten sonra bu tezlerin incelenmesinde Sözbilir ve Kutu (2008) tarafından geliştirilen "*Yayın Sınıflama Formu"* kullanılmıştır. Formun içeriğinde yıl ve öğrenim kademesi, üniversite, konu alanı, araştırma yöntemi, örneklem tercihleri gibi başlıklar yer almaktadır. Lisansüstü tezlerde tespit edilen kısımlar forma işlenerek bu kısımlar analiz süreci için kullanılmıştır.

Toplanan veriler içerik analizi yöntemiyle analiz edilmiştir. Yıldırım ve Şimşek'in (2006, s.227) tanımlamasına göre içerik analizi, toplanan verileri açıklayabilecek kavramlara ve ilişkilere ulaşmaktır. Temelde, toplanan veriler belirli temalar altında sınıflandırılarak okuyucunun anlayabileceği bir biçimde düzenlenir ve yorumlanır. Veriler içerik analizinde daha derin bir işleme tabi tutulduğu için betimsel yaklaşımla fark edilemeyen kavram ve temalar bu analiz sonucu keşfedilebilir. "Verilerin analizi bölümü genel anlamıyla üç aşamadan oluşur. Birinci aşamada araştırmacı verileri hazırlar ve organize eder. İkinci aşamada, kodlama süreci neticesinde toplanan ve organize edilen veriler belirlenen temalar içerisine indirgenir ve kodlar oluşturulur. Bu süreç tamamen verilerin tekrar tekrar okunması ve veriler hakkında bir fikir sahibi olunabilmesi için araştırmacının notlar almasını içerir. Analizin sonucunda da veriler tablolar, figürler ve tartışmalar ile birlikte sunulur" (Güler, Halıcıoğlu ve Taşğın, 2013, s.44).

Bu doğrultuda lisansüstü tezler için YÖK Ulusal Tez Merkezi üzerinden Türkçe eğitimi ve motivasyon, dinleme eğitimi ve motivasyon, konuşma eğitimi ve motivasyon, okuma eğitimi ve motivasyon, yazma eğitimi ve motivasyon anahtar kelimeleriyle tarama yapılmıştır. Yapılan tarama sonucunda 34 lisansüstü tez çalışmasına ulaşılmıştır. Araştırmacılar (f=3) ve Türkçe eğitimi uzmanı (n=3) ortak görüşü ile oluşturulan veriler tabloya aktarılarak yorumlanmaya hazır hâle getirilmiştir.

2.4. Geçerlik ve Güvenirlik

Araştırmanın geçerlik ve güvenirliğinin sağlanması amacıyla Miles ve Huberman'ın (1994) geliştirmiş olduğu görüş birliği ve görüş ayrılığı formülü kullanılmıştır. Üç alan uzmanının görüşleri çerçevesinde Miles ve Huberman'a (1994) göre yapılan hesaplama sonucunda sonucun %98 olduğu görülmüştür. Bu da %70'in üzerinde bir sonuç olduğu için araştırmanın güvenilir olduğu söylenebilir.

3. BULGULAR

3.1. Birinci Araştırma Sorusuna Yönelik Bulgular

Araştırmanın "*Türkçe eğitiminde motivasyon üzerine yapılan tezlerin yıl ve öğrenim kademelerine göre dağılımı nasıldır?"* şeklindeki birinci sorusuna yönelik bulgulara Tablo 1'de yer verilmiştir.

Tablo 1. Motivasyon üzerine yapılan tezlerin yıl ve öğrenim kademelerine göre dağılımı

Tür/Yıl	2013	2014	2015	2016	2018	2019	2020	2021	2022	Toplam
Yüksek Lisans	1	2	1	3	3	11	3	1	5	30
Doktora			1	1	1				1	4
Toplam	1	2	2	4	4	11	3	1	6	34

Tablo 1 incelendiğinde, haritalama teknikleri üzerine yapılan çalışmalardan yüksek lisans tezlerinin (*f*=30) doktora tezlerine (*f*=4) göre daha fazla hazırlandığı sonucuna ulaşılmıştır. Araştırmaların yıllara göre dağılımına bakıldığında ise en fazla çalışmanın 2019 yılında (*f*=11) yapıldığı tespit edilmiştir. Bunu sırasıyla, 2022 (*f*=6), 2016 (*f*=4), 2018 (*f*=4) yıllarının takip ettiği görülmektedir.

3.2. İkinci Araştırma Sorusuna Yönelik Bulgular

Araştırmanın *"Türkçe eğitiminde motivasyon üzerine yapılan tezlerin üniversitelere göre dağılımı nasıldır?"* şeklindeki ikinci sorusuna yönelik bulgulara Tablo 2'de yer verilmiştir.

Tablo 2. Motivasyon üzerine yapılan tezlerin üniversitelere göre dağılımı

Üniversite	*f*	%
Afyon Kocatepe Üniversitesi	1	2,94
Akdeniz Üniversitesi	1	2,94
Anadolu Üniversitesi	1	2,94
Ankara Üniversitesi	1	2,94
Aydın Adnan Menderes Üniversitesi	1	2,94
Balıkesir Üniversitesi	1	2,94
Bolu Abant İzzet Baysal Üniversitesi	1	2,94
Çanakkale Onsekiz Mart Üniversitesi	1	2,94

Çukurova Üniversitesi	1	2,94
Düzce Üniversitesi	1	2,94
Fırat Üniversitesi	1	2,94
Giresun Üniversitesi	1	2,94
Hacettepe Üniversitesi	3	8,82
İnönü Üniversitesi	3	8,82
İstanbul Teknik Üniversitesi	2	5,88
Karadeniz Teknik Üniversitesi	1	2,94
Kırıkkale Üniversitesi	1	2,94
Kırşehir Ahi Evran Üniversitesi	1	2,94
Necmettin Erbakan Üniversitesi	2	5,88
Nevşehir Üniversitesi	1	2,94
Niğde Ömer Halis Demir Üniversitesi	1	2,94
Pamukkale Üniversitesi	1	2,94
Sağlık Bilimleri Üniversitesi	1	2,94
Sakarya Üniversitesi	2	5,88
Siirt Üniversitesi	1	2,94
Yıldız Teknik Üniversitesi	1	2,94
Zonguldak Bülent Ecevit Üniversitesi	1	2,94
Toplam	34	100

Tablo 2 incelediğinde, motivasyon üzerine yapılan çalışmalardan lisansüstü tezlerin 27 farklı üniversitede hazırlandığı görülmektedir. En fazla tez Hacettepe ve İnönü Üniversitelerinde (f=3) hazırlanmıştır. Buna ek olarak İstanbul Teknik, Necmettin Erbakan ve Sakarya Üniversitelerinde ikişer lisansüstü tezin hazırlandığı tespit edilmiştir.

3.3. Üçüncü Araştırma Sorusuna Yönelik Bulgular

Araştırmanın *"Türkçe eğitiminde motivasyon üzerine yapılan tezlerin konulara göre dağılımı nasıldır?* şeklindeki üçüncü sorusuna yönelik bulgulara Tablo 3'te yer verilmiştir.

Tablo 3. Motivasyon üzerine yapılan tezlerin konularına göre dağılımı

Konu	***f***	**%**
Okuma/okuduğunu anlama	20	58,82
Yazma	5	14,71

Yabancı dil olarak Türkçe	6	17,65
Teknoloji	3	8,82
Toplam	34	100

Tablo 3'ten hareketle, Türkçe eğitiminde motivasyon üzerine yapılan tezlerden en fazla okuma/okuduğunu anlama (*f*=20) konusuna yönelik tezin hazırlandığı belirlenmiştir. Bunu sırasıyla yabancı dil olarak Türkçe (*f*=6), yazma (*f*=5), teknoloji (*f*=3) takip etmektedir.

3.4. Dördüncü Araştırma Sorusuna Yönelik Bulgular

Araştırmanın *"Türkçe eğitiminde motivasyon üzerine yapılan tezlerin yöntem tercihine göre dağılımı nasıldır?"* şeklindeki dördüncü sorusuna yönelik bulgulara Tablo 4'te yer verilmiştir.

Tablo 4. Motivasyon üzerine yapılan tezlerin yöntem tercihine göre dağılımı

Yöntem	***f***	**%**
Nicel	24	70,59
Nitel	5	14,71
Karma	5	14,71
Toplam	34	100

Tablo 4'e göre, Türkçe eğitiminde motivasyona yönelik hazırlanan tezlerin en fazla nicel yöntem (*f*=24) üzerine hazırlandığı görülmektedir. Bunu sırasıyla nitel (*f*=5), karma (*f*=5) yöntemler takip etmektedir.

3.5. Beşinci Araştırma Sorusuna Yönelik Bulgular

Araştırmanın *"Türkçe eğitiminde motivasyon üzerine yapılan tezlerin örneklem tercihine göre dağılımı nasıldır?"* şeklindeki beşinci sorusuna yönelik bulgulara Tablo 5'te yer verilmiştir.

Tablo 5. Motivasyon üzerine yapılan tezlerin örneklem tercihine göre dağılımı

Örneklem	**f**	**%**
Öğrenciler	25	73,53
Öğretmen adayları	4	11,76
YTÖ Öğrencileri	4	11,76
Veliler	1	2,94
Toplam	34	100

Tablo 5'e göre, Türkçe eğitiminde motivasyon üzerine hazırlanan lisansüstü tezlerde örneklem olarak en fazla öğrenciler (*f*=25) tercih edilmiştir. Bunun yanı sıra öğretmen adayları (*f*=4), YTÖ öğrencileri (*f*=4), Veliler (*f*=1) tercih edilen diğer örneklem grupları arsında yer almaktadır.

4. SONUÇ, TARTIŞMA VE ÖNERİLER

Türkçe eğitimi alanından motivasyon konulu hazırlanan çalışmaların eğilimlerinin incelendiği araştırmanın bulgularından hareketle şu sonuçlara ulaşılmıştır:

Türkçe eğitimi alanında motivasyon konulu hazırlanan çalışmaların yıllara ve öğrenim kademelerine göre dağılımlarının incelenmesi sonucunda, lisansüstü tezlerde en fazla çalışma 2019 yılı içerisinde hazırlanmıştır. Bu yılı 2022 yılı içerisinde hazırlanan çalışmalar takip etmektedir. Lisansüstü tezlerin türlerine göre dağılımlarının incelenmesi sonucunda ise en fazla çalışmanın yüksek lisans türü olarak hazırlandığı belirlenmiştir. Özçakmak (2017) Türkçe eğitimi alanında hazırlanan lisansüstü tezlerdeki yeni yöneliklere yönelik hazırladığı çalışmada, en fazla çalışmanın 2014 yılı içerisinde hazırlandığı sonucuna ulaşmıştır. Doğan ve Özçakmak (2014) dinleme eğitimi üzerine hazırlanan lisansüstü tezlere yönelik hazırlandıkları çalışmada, en fazla çalışmanın 2009-2013 yılları arasında hazırlandığını tespit etmişlerdir. Büyükikiz (2014) yabancılara Türkçe öğretimi alanından hazırlanan lisansüstü tez çalışmalarına yönelik yaptığı araştırmada, en fazla çalışmanın 2006-2012 yılları arasında hazırlandığını saptamıştır. Önal ve Maden (2021) Türkçe eğitimi ile ilgili lisansüstü tezlere yönelik yaptıkları araştırmada, hazırlanan çalışmayla benzer sonuçlara ulaşarak en fazla çalışmanın 2019 yılı içerisinde hazırlandığı sonucuna ulaşmışlardır. Eyüp (2020) Türkçe öğretmenleri konulu hazırlanan lisansüstü tez çalışmalarına yönelik hazırladığı araştırmada, hazırlanan araştırmayla benzer sonuçlara ulaşarak en fazla çalışmanın 2019 yılı içerisinde hazırlandığı sonucuna ulaşmıştır. Türkben (2018) yabancı dil olarak Türkçe öğretimi alanından hazırlanan lisansüstü tez çalışmalarına yönelik hazırladığı araştırmada, en fazla çalışmanın yüksek lisans tezi olarak hazırlandığını belirlemiştir. Maden, Banaz ve Gülen (2022) Türkçe öğretiminde akademik başarı konulu hazırlanan lisansüstü tezlere yönelik hazırladıkları çalışmada da en fazla çalışmanın yüksek lisans tezi olarak hazırlandığı sonucuna ulaşmışlardır.

Türkçe eğitimi alanında motivasyon konulu lisansüstü tez çalışmalarının üniversitelere göre dağılımlarının incelenmesi sonucunda, en fazla çalışmanın Hacettepe Üniversitesi'nde ve İnönü Üniversitesi'nde hazırlandığı tespit edilmiştir. Maden (2021) Türkçe ders kitaplarına yönelik hazırlanan lisansüstü tez çalışmalarına yönelik hazırladığı araştırmada, en fazla çalışmanın Gazi Üniversitesi'nde hazırlandığı sonucuna ulaşmıştır. Aydeniz ve Haydaroğlu (2021) dört temel dil becerisi alanından hazırlanan lisansüstü tezlere yönelik yaptıkları araştırmada, en fazla çalışmanın Gazi Üniversitesi'nde hazırlandığını belirlemişlerdir. Kan (2017) akademik yazma konulu hazırlanan lisansüstü çalışmalara yönelik hazırladığı çalışmada, en fazla çalışmanın Atatürk Üniversitesi'nde hazırlandığı sonucuna ulaşmıştır. Göçer ve Arslan (2017) dil bilgisi öğretimi konulu hazırlanan lisansüstü tez çalışmalarına yönelik yaptıkları araştırmada, en fazla çalışmanın Atatürk Üniversitesi ve Gazi Üniversitesi'nde hazırlandığını saptamışlardır.

Türkçe eğitimi alanında motivasyon konulu lisansüstü tez çalışmalarının konularına göre dağılımlarının incelenmesi sonucunda, lisansüstü tezlerde en fazla yer alan konunun "*okuma/okuduğunu anlama"* olduğu belirlenmiştir. Bu konu alanını "*yabancı dil olarak Türkçe"* konulu çalışmalar takip etmektedir. Maden (2021) Türkçe ders kitaplarına yönelik hazırlanan lisansüstü tez çalışmalarına yönelik hazırladığı çalışmada, en fazla yer alan konu alanının "*metin"* (Tür, edebi özellik, çocuğa görelik) olduğunu belirlenmiştir. Türkben (2018) yabancı dil olarak Türkçe öğretimi alanından hazırlanan lisansüstü tez çalışmalarına yönelik hazırladığı araştırmada, lisansüstü tezlerde en fazla yer alan konunun "*dil bilgisi öğretimi"* konulu çalışmalardan oluştuğunu saptamıştır. Kanat (2021) Türkçe ders kitaplarında dil bilgisi öğretimi konulu hazırlanan lisansüstü tez çalışmalarındaki yönelimlere yönelik hazırladığı çalışmada, lisansüstü tezlerde konu alanı olarak en fazla "*genel dil bilgisi konuları"* konu alanının yer aldığını tespit etmiştir. Uysal ve Zorpuzan (2021) yabancılara Türkçe öğretimi alanında yazma becerisinin öğretimine yönelik hazırlanan lisansüstü tezlere yönelik yaptıkları araştırmada, lisansüstü tezlerde en fazla yer alan konu alanının "*model/yöntem/teknik vs. etkisi"* olduğu sonucuna ulaşmışlardır.

Türkçe eğitimi alanında motivasyon konulu lisansüstü tez çalışmalarının yöntemlerine göre dağılımlarının incelenmesi sonucunda, lisansüstü tezlerde en fazla kullanılan araştırma

yönteminin nicel araştırma yöntemi olduğu belirlenmiştir. Nicel araştırma yöntemlerinin ardından lisansüstü tezlerde nitel ve karma çalışmalarının (*f*=5) eşit olduğu belirlenmiştir. Maden (2021) Türkçe ders kitaplarına yönelik hazırlanan lisansüstü tez çalışmalarına yönelik hazırladığı araştırmada, en fazla kullanılan araştırma yönteminin nitel araştırma yöntemi olduğunu tespit etmiştir. Şahin, Çiftçi ve Başbayrak (2020) teknoloji destekli Türkçe eğitimi tezlerine yönelik hazırladıkları çalışmada, yapılan araştırmayla benzer sonuçlara ulaşarak en fazla çalışmanın nicel araştırma yöntemlerinden yararlanılarak hazırlandığı sonucuna ulaşmışlardır.

Türkçe eğitimi alanından motivasyon konulu lisansüstü tez çalışmalarının örneklem tercihinde göre dağılımlarının incelenmesinin sonucunda, lisansüstü tezlerde en fazla "*öğrenciler"* örneklem grubunun kullanıldığı belirlenmiştir. Bu örneklem grubunu "*öğretmen adayları* ve *YTÖ öğrencileri"* örneklem gruplarının takip ettiği sonucuna ulaşılmıştır. Şahin, Çiftçi ve Başbayrak (2020) teknoloji destekli Türkçe eğitimi tezlerine yönelik hazırladıkları çalışmada, çalışmalarda en fazla yer alan örneklem grubunun "*yabancı öğrenciler"* örneklem grubu olduğu tespit edilmiştir. Aydın (2020) eleştirel okuma konulu hazırlanan lisansüstü tez çalışmalarına yönelik hazırladığı çalışmada, en fazla kullanılan örneklem grubunun "*ortaokul öğrencileri"* olduğunu belirlemiştir. Göçer ve Arslan (2017) dil bilgisi öğretimi konulu hazırlanan lisansüstü tez çalışmalarına yönelik yaptıkları araştırmada, en fazla kullanılan örneklem grubunun *"ortaokul"* örneklemi olduğu sonucuna ulaşmışlardır.

Araştırmanın sonuçlarından hareketle şu öneriler sunulabilir:

Türkçe eğitimi alanında motivasyon konulu hazırlanan lisansüstü tez çalışmalarının daha çok yüksek lisans düzeyinde hazırlandığı görülmektedir. Doktora düzeyinde hazırlanan çalışmaların ise sınırlı olduğu belirlenmiştir. Bu nedenle motivasyon konulu doktora tezleri hazırlanabilir.

Araştırmalarda karma araştırma yöntemlerinden yararlanılarak çalışmalar hazırlanabilir.

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DEVELOPMENT OF A MATERIALS TO LEARN THE BRAILLE ALPHABET FORVISUALLY DISABLED INDIVIDUALS

GÖRME ENGELLİ BİREYLERİN BRAİLLE ALFABESİ ÖĞRENMELERİNE YÖNELİK BİR MATERYAL GELİŞTİRME ÇALIŞMASI

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Özet

Doğuştan veya sonradan herhangi bir nedenle bedensel, zihinsel ruhsal, duyusal veya sosyal yeteneklerini çeşitli derecelerde kaybetmiş, toplumsal yaşama uyum sağlama ve günlük gereksinimlerini karşılama güçlüklerini çeken kimselere engelli denir. Engelli bireyler günlük yaşamda gerek sosyal gerek fiziksel birçok sorunla karşılamaktadır. Bunun yanı sıra bu durumun etkilerini azaltacak en önemli anahtarlardan biri olan eğitim de engelli bireylere layıkıyla sağlanamıyor. Engelli bireylerin eğitim haklarından mahrum kalmaları akranları olan engelsiz bireylerden akademik olarak da geri kalmalarına sebep olmaktadır. Bu bağlamda görme engellilerin de eğitim ortamlarında engel durumlarına özgü sorunları bulunmaktadır. Bu sorunlardan en önemlisi de tabi eğitim temeli okumanın günlük yaşamdaki haliyle onlara ulaşamaması, onlar için önemli bir yer arz eden Braille Alfabesinin de kolayca öğrenilememesidir. Kabartma harflerle Latin Alfabesindeki sayıları ve rakamları temsil eden Braille Alfabesi görme engellilerin eğitim hayatlarının temelidir. Günümüzde kullanılan öğretim materyallerine baktığımızda bu alfabenin öğretimi noktasında başka bireylerin desteğine ihtiyaç duyulduğu görülmektedir. Bu projede görme engelli bireylerin başkasının desteğine ihtiyaç duymadan kendi başlarına Braille Alfabesini öğrenmelerinin sağlanması amaçlanmıştır ve bu amaç doğrultusunda ses komutları ile çalışan bir materyal geliştirilmiştir.

Materyal Arduino Uno sistemi, Servo Motorlar ve Ses Tanıma Modülü ile oluşturulmuştur. Teknoloji desteği ile geliştirilen materyal sayesinde görme engelli birey Ses Tanıma Modülüne komut verdiğinde istediği harfin, sayının veya karakterin Arduino Uno'da dönüştürülüp Servo Motorlar tarafından Braille Alfabesindeki kabartma dokusunun oluşturulması sağlanmıştır. Oluşan noktalara dokunarak seslendirdiği harf, karakter veya sayının Braille Alfabesindeki düzenini dokunarak hissedecek ve öğrenecektir. Nasıl ilkokulda öğrenciler harfleri ve rakamları büyük yazarak öğreniyorsa oluşturulan materyal de buna yönelik olarak yaklaşık el boyutunda hazırlanmıştır. Materyal farklı şekillerde geliştirilmeye müsaittir. Harfleri ve rakamları öğrenen bir bireye kelime alıştırması yaptırmak için geliştirilebilir. Geliştirilen materyalin görme engelli

bireylerin eğitim alanında yaşadığı sorunlara bir nebze de olsa fayda sağlayacağı ayrıca kendi başlarına Braille Alfabesini öğrenebilecek olmalarının görme engelli bireylerin özgüveninin artmasını sağlayacağı düşünülmektedir. Bununla birlikte bir harf sistemi bilmek görme engellilerin de engelsiz bireylerin okuyabildiği kitap, dergi gibi gerek akademik gerekse sosyal araçlara erişmesini sağlayarak onları hayata karıştıracaktır.

Anahtar kelimeler: Braille Alfabesi, görme engelliler, eğitim materyali, teknoloji

Abstract

People who have lost their physical, mental, spiritual, sensory or social abilities in various ways from birth or subsequently for any reason and who have difficulties in adapting to social life and meeting their daily needs are called disabled. Disabled individuals face many social and physical problems in daily life. In addition, education, which is one of the most important things about to reduce the effects of this situation, cannot be adequately provided to individuals with disabilities. The fact that disabled individuals are deprived of their right to education also causes them to academically lag behind their peers without disabilities . In this context, visually impaired people also have problems specific to their disability in educational environments. The most important of these problems, of course, is that reading, which is the basis of education, cannot reach them in their daily life, and the Braille Alphabet, which has an important place for them, cannot be learned easily. The Braille Alphabet, which represents the numbers and letters in the Latin Alphabet with raised dots, is the basis of the education life of the visually impaired. When we look at the teaching materials used today, it is seen that the support of other individuals is needed at the point of teaching this alphabet. In this project, it is aimed to enable visually impaired individuals to learn the Braille Alphabet on their own without the need for the support of others, and for this purpose, a material that works with voice commands has been developed.

The material is created with Arduino Uno system, Servo Motors and Voice Recognition Module. Thanks to the material developed with the support of technology, when the visually impaired individual commands the Voice Recognition Module, the desired letter, number or character is converted in Arduino Uno and the relief texture in Braille Alphabet is created by Servo Motors. By touching the formed dots, person will feel and learn the order of the letter, character or number in the Braille Alphabet by touching it. Just as students in primary school learn by writing letters and numbers in capitals, the material is prepared in hand size for this purpose. The material can be developed in different ways. It can be developed to practice vocabulary for an individual learning letters and numbers. It is thought that the developed material will provide some benefit to the problems experienced by visually impaired individuals in the field of education, and that they will be able to learn the Braille Alphabet on their own will increase the self-confidence of the visually impaired individuals. In addition, knowing a letter system will enable the visually impaired to access both academic and social tools such as books and magazines that can be read by non-disabled individuals.

Keywords: Braille alphabet, visually impaired, educational material, technology

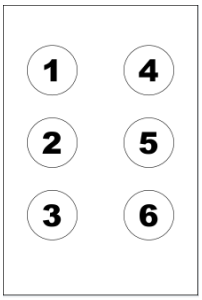
1. GİRİŞ

"Engelli Kişilere Fırsat Eşitliği Sağlamada Standart Kurallar"a göre diğer bireylerle eşit fırsatlara sahip olmadaki kısıtlama veya kayıplar, engel olarak tanımlanır (İsbir & Çubuk, 2018). Normal gelişim gösteren bireyler gibi özel gereksinimli bireyler de eğitimde fırsat eşitliği hakkına sahiptir. Ancak bu şekilde, bu bireyler toplumun bir parçası olmaya devam eder (Atıcı, 2014). Fırsat eşitliği sunulmayan öğrenme ortamları, engelli bireylerin toplumla bütünleşmeleri noktasında karşılarına çıkan engellerden biridir (Karataş, 2002). Kaynaştırma öğrencisi olarak öğrenme ortamlarında eğitimlerine devam eden engelli öğrenciler, fırsat

eşitliğinin olmadığı öğrenme ortamlarında, akademik olarak başarısız olabilmekte, akranlarına göre geride kalabilmektedir. Bunun sonucunda, engelli bireylerde okula karşı isteksizlik oluşabilmekte, içe kapanık ve pasif bir şekilde sınıf ortamında bulunabilmektedirler (Atıcı, 2014).

Eğitimde eşit fırsata sahip olmayan engel gruplarından biri de görme engelli bireylerdir. Engel gruplarına göre engelli bireylerin öğrenme ortamlarında yaşadıkları sıkıntılar farklılaşmaktadır. Görme engelli bireylerin eğitim alanında yaşadığı sıkıntılardan birisi Braille Alfabesini öğrenme konusundadır. Alfabe öğrenimi dilin doğru kullanımı ve iletişi için anahtar konumdadır. Engelsiz bireyler alfabeyi ses olarak öğreniyorlarken görme engelliler için durum biraz daha farklılaşmaktadır. Çünkü görme engelliler, beş duyudan biri olan dokunmayı etkin olarak kullanmaktadırlar. Bu noktada alfabe olarak kullandıkları yaygın sistem Braille Alfabesi sistemidir.

Kabartılmış altı nokta diğer bir deyişle Braille Alfabesi sistemi, görme yetisini ileri derecede yitirmiş görme engeli olan bireyler için dokunarak okuma sistemidir. Bir dikdörtgenin içinde, soldan sağa iki, yukarıdan aşağıya üç tane kabartma noktanın farklı kombinasyonlarla dizilimi sonucu harf ve karakterler oluşturulur (Özyürek, 1981). Şekil 1'de Braille Alfabesindeki dizilim görülmektedir.



Şekil 1. Braille Alfabesi dizilimi

Örneğin Braille Alfabesi Sisteminde, soldan birinci nokta kabartılmış ise bu "a" harfi anlamına gelmektedir. Şekil 2'de "a" harfinin Braille Alfabesindeki düzeni görülmektedir.



Şekil 2. Braille Alfabesi diziliminde a harfinin gösterimi

Braille Alfabesi sistemi Türkçe harfler için de mevcuttur. Türkçe Braille Alfabesi Şekil 3'te yer almaktadır.

Türkçe Braille Alfabesi					
a	b	c	ç	d	e
f	g	ğ	h	ı	i
j	k	l	m	n	o
ö	p	r	s	ş	t
u	ü	v	y	z	

Şekil 3. Türkçe Braille Alfabesi

Kabartma noktalarla sadece alfabedeki harfler değil rakamlar ve bazı karakterler de oluşturulabilmektedir. Kabartma noktalarla 63 değişik düzenleme yapılabilmektedir (Sağlamer, 1975).

Braille yazı sistemi görme engellilerin eğitiminde önemli kolaylıklar sağlamaktadır (Okur & Demir, 2019). Braille Alfabesini öğrenmenin, görme engelli bireylerin, eğitimlerine devam ederken kaygılarını azalttığı araştırmacılar tarafından ifade edilmektedir. Çünkü Braille Alfabesini biliyor olmak, görme engelli bireylerin eğitimlerine bağımsız bir şekilde evde devam etmelerine de olanak sağlamaktadır (Avşaroğlu & Çavdar, 2018).

Braille Alfabesinin öğretiminde görme engellilerin dokunarak algılamalarından dolayı genellikle somut materyaller kullanılmaktadır. Çoğunlukla kabartma harflerin yer aldığı kağıtlar, tahta zemin üzerine oturtulan 6 adet bilyenin kabartma harflerdeki düzene göre dizilimlerinin oluşturulduğu materyal vb materyaller bunlara örnektir. Ancak Braille Alfabesini öğrenmek kolay değildir. Bunun nedenleri arasında görme engelli bireylerin, bilgiye erişim ve kaynak problemi yaşaması kabartma (Braille) biçiminde hazırlanan kaynakların az ve yetersiz olması veya ulaşmanın zor olması görme engelli bireylerin eğitiminde sorun olarak karşımıza çıkmaktadır (Çentik, 2009). Bir diğer sorun görme engelli bireylerin Braille Alfabesini öğrenirken desteğe ihtiyaç duymasıdır.

Bu doğrultuda bu çalışmanın amacı, görme engellilerin Braille Alfabesini öğrenmesi için bir materyal geliştirmektir. Teknoloji desteğiyle geliştirilen bu materyal ile görme engelli bireylerlerin, Braille Alfabesindeki kabartmalar ile alfabe mantığını bir kez algıladıktan sonra kimseye ihtiyaç duymadan Braille Alfabesini öğrenebilecekleri öngörülmektedir. Materyal ile görme engelli bireyler, kimseye ihtiyaç duymadan diledikleri kadar tekrar ile alfabedeki tüm harf, sayı ve karakterleri öğrenme şansına sahip olacaktır.

Tüm bunlardan yola çıkarak projenin araştırmanın problemi “Görme engellilerin kimseye ihtiyaç duymadan Braille Alfabesi öğrenebilmesi için ses komutlarıyla çalışan bir eğitim materyali geliştirilebilir mi?” şeklindedir.

2. YÖNTEM

Tasarımın kullanıcısı hedef kitle görme engelli bireylerdir. Görme engel bireylerin Braille Alfabesini kolayca öğrenebilmelerine yönelik materyal geliştirme süreci şu şekilde ilerlemiştir.

2.1. Tasarımı Oluşturan Bileşenler

Proje kapsamında geliştirilmesi planlanan tasarımda hangi bileşenlerin olması gerektiği araştırmacılar tarafından kurgulanmıştır. Görme engelli bireylerin kullanacağı bir materyalin ses komutlarıyla çalışmasının materyalin amacına uygun olacağına kanaat getirilmiştir. Bunun için materyalde ses komutlarını algılayacak bir bileşenin kullanılmasının uygun olduğu düşünülmüştür. Ayrıca ses komutlarını harekete dönüştürecek kodları çalıştırmak için bir mikrodenetleyici, sisteme güç sağlaması için güç kaynağı, Braille alfabesindeki karakter düzenini oluşturmayı sağlayacak servo motorlar, tasarımın gövdesini ve diğer aksamlarını 3D yazıcıda basabilmek için 3D yazıcı ve filament kullanılmsı kararlaştırılmıştır. Bu doğrultuda materyal tasarımında kullanlan bileşenler şu şekildedir:

-Sesi algılamak için 1 adet ses tanıma seti

-Mikrodenetleyici olarak 1 adet Ardunio Uno

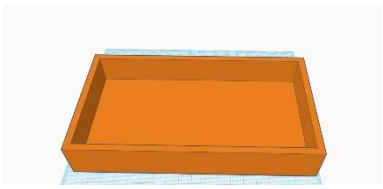
-Güç kaynağı olarak pil yuvası ve iki adet pil

-6 adet servo motor

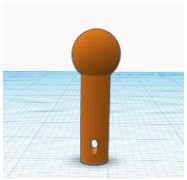
-Filament

2.2. Tasarımın Taslağının Oluşturulması

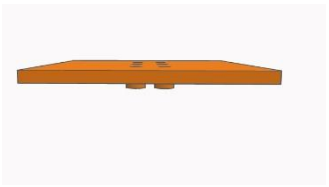
Proje kapsamında geliştirilmesi planlanan materyalin öncelikle Tinkercad programı ile tasarımı yapılmıştır. Tinkercad programı ile geliştirilen tasarımın 3D yazıcıda basılacak parçaların görselleri Şekil 4'te yer almaktadır.



(I)



(II)

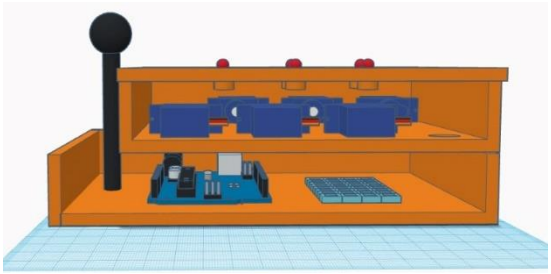


(III)

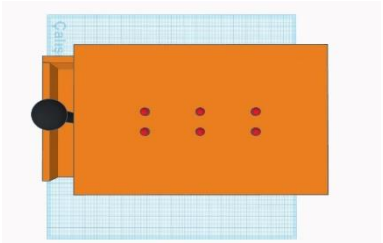
Şekil 4. 3D baskısı yapılacak parçaların tinkercad çizimleri

Şekil 1'de yer alan (I) ve (III) nolu parçalar materyalin dış kısmını oluşturan parçalar, 3D yazıcıda altı adet basılacak (II) nolu parça ise Braille Alfabesindeki kabartma düzeneklerini oluşturan ve servo motorlara bağlanan parçadır.

Materyalin elektronik aksamları ile birlikte birleştirilecek taslak hali Şekil 2'de yer almaktadır.



(IV)



(V)

Şekil 5. Materyalin bütününü gösteren görseller

Şekil 2'de görüldüğü üzere görselde iki adet (I) nolu parçanın üst üste yerleştirilmesiyle (IV) nolu görselde görülen düzeneğin oluşturulması planlanmıştır. Alttaki katta Arduio Uno, ses tanıma seti, breadboard ve pilin; üstteki katta ise altı adet servo motor ve bu servo motorlara bağlı altı adet (II) nolu parçanın konumlandırılması planlanmıştır. (V) nolu görselde ise materyalin üstten görünümü yer almaktadır.

3. BULGULAR

Geliştirilen materyal bir eğitim materyali niteliğinde teknoloji destekli bir materyaldir. Bu materyalle, Braille alfabesindeki harf, sayı ve karakterler, görme engelli bireyin ses komutuyla Braille Alfabesindeki düzeni almaktadır. Bu anlamda görme engelli birey kimseye ihtiyaç duymadan istediği harf, sayı veya karakteri seslendirerek materyalde oluşan Braille düzeni

sayesinde alfabeyi öğrenebilmektedir. Tasarım ve planlama sonrasında somut materyali oluşturma aşamaları şu şekildedir.

3.1. Tasarımı Oluşturan Bileşenlerin 3D Yazıcıda Basılması

Materyali oluşturan elektronik bileşenler dışında Şekil 4 ve Şekil 5'te görülen tüm bileşenleri 3D yazıcı ile basıldı. Bu bileşenler, materyalin iki kattan oluşan dış yüzeyleri, 6 delik bulunan üst kapağı ve servo motorlar tarafından hareket ettirilen altı adet topuz başlı silindir parçalardır.

3.2. Ses Komutlarına Ait Kodların Yazılması ve Mikroişlemciye Yüklenmesi

Ses komutlarını algılayan ve servo motorlar aracılığıyla Braille alfabesi düzeni oluşturan materyalin, bu işlemleri yapabilmesi için öncelikle Ardunio Uno 1.8.19 sürümünde kodlar oluşturuldu. Ses tanıma modulünün kapasitesinin sadece beş sesi algılayacak kapasitede olması nedeniyle beş sesli harfin düzenini oluşturacak şekilde kodlar yazıldı. Örneğin ses modulü "A" sesini algıladığında Ardunio Uno'daki kodlar aracılığıyla düzeneğin "A" harfinin Braille Alfabesindeki düzenini alması sağlandı. Bu amaçla altı adet servo motorun "A" harfinin düzeneğini almasına yönelik kodlar oluşturuldu.

3.3. Düzeneğin Birleştirilmesi ve Test Edilmesi

Tasarımın elektronik bileşenleri hariç 3D yazıcıda basılan tüm bileşenleri Şekil 5(IV) ve Şekil 5(V)'te görüldüğü haliyle birleştirildi ve elektronik bileşenler içine sabitlendi. İki kattan oluşan tasarımın ilk katına ses tanıma modülü, Arduino Uno ve BreadBoard yerleştirildi. İkinci kata servo motorlar yerleştirildi ve Şekil 5(II)'de tasarımı görülen parçadan altı tanesi altı adet servo motora entegre edildi. Servo motorların Ardunio Uno ile bağlantıları yapıldı. Kodları yazılan a, u, i, o, e harfleri seslendirilerek sistem test edildi. Denemeler sonrası sistemin beş sesli harfe dair tüm ses komutlarını algıladığı ve altı adet kabarcığın seslendirilen harfe karşılık gelen Braille Alfabesi yerleşimine uygun bir şekilde düzen oluşturduğu görüldü.

4. SONUÇ, TARTIŞMA VE ÖNERİLER

Çalışmanın araştırma problemi, "Görme engellilerin kimseye ihtiyaç duymadan Braille Alfabesi öğrenebilmesi için ses komutlarıyla çalışan bir eğitim materyali geliştirilebilir mi?" şeklindedir. Bu problem doğrultusunda bir tasarım ve düzenek oluşturulmuş, test edilmiş ve sorunsuz bir şekilde çalıştığı görülmüştür.

Bu materyal ile görme engelli bireylerin kimseye ihtiyaç duymadan Braille Alfabesini öğrenebileceği beklenmektedir. Bu durumun, görme engelli bireylerin eğitimlerine bağımsız bir şekilde devam etmesine ve eğitim ortamlarındaki kaygılarının azalmasına katkı sunacağı (Avşaroğlu & Çavdar, 2018), diğer bireylerle eşit fırsatlara sahip olmaya yönelik kısıtlamaları azaltacağı (İsbir & Çubuk 2018) düşünülmektedir. Bununla birlikte Braille Alfabesini erken yaşta öğrenen görme engelli bireylerin kendine güven duygularının artacağı (Çentik, 2009), daha üretken ve başarılı bireyler olacağı beklenmektedir.

Geliştirilen materyalin bazı sınırlılıkları bulunmaktadır. Bunlar;

- Kullanılan bileşenlerin kapasitesi nedeniyle Braille Alfabesindeki tüm karakter, harf ve sayılar oluşturulamamıştır.

- Sistemin maliyeti gelir seviyesi düşük görme engelli bireyler için yüksek kalabilmektedir.

- Sistem aracılığıyla sadece alfabedeki harfler, sayılar ve karakterler öğrenilebilmektedir.

Çalışmanın bulguları ele alındığında, kapasitesi daha yüksek ses tanıma modülüyle Braille Alfabesindeki tüm harfler, rakamlar ve karakterler oluşturulabilir, sistemin maliyeti daha aşağıya çekilebilir, Braille Alfabesiyle kelime oluşturma çalışmaları yapılabilir.

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BESTECİLERİN ESERLERİNDE DÖNGÜSEL (*CYCLE*) FORMUN ÖZELLİKLERİ

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Özet

Bu çalışmanın amacı, döngüsel (*cycle*) yapıya sahip eserleri müzik sanatının bağımsız ve özgün bir formu olarak tanımlamak ve özelliklerini incelemektir. Çalışmada müzikal döngüsel form türlerinin özelliklerine ve sınıflandırmalarının açıklamalarına yer verilmiştir. Ayrıca çalışmada her bir döngüsel formun ayırt edici özellikleri incelenmektedir. Bu çalışmanın amacı, döngüsel yapının eser kategorisine uygun müzik türlerini birleştirmektir. Çalışmada döngüsel türlerin evrimi de ele alınmaktadır.

Çalışmanın kapsamı Süit, Sonat, Senfoni, vokal ve enstrümantal minyatür döngüleri ve vokal-senfonik eserlerle sınırlıdır. Ayrıca eserde "mini" bir döngü örneği olarak prelüd-füg ele alınmıştır. Çalışmada, 18. yüzyılın sonu ve 20. yüzyılın başlarındaki Avrupalı, Rus ve Türk beşli bestecilerin eserlerinin döngüsel formlarından örneklerine yer verilmektedir.

Çalışmada literatür taraması yönteminden yararlanılmıştır. Bu doğrultuda konuyla ilgili ulusal ve uluslararası makaleler ve kitaplardan yararlanılarak genel bir değerlendirme yapılmaya gayret edilmiştir.

Araştırma sonucunda, döngüsel ilkeye göre inşa edilen müzik eserlerinin yapı olarak birbirinden bağımsız, ortak bir tema çatısı altında, dramatik gelişme veya program başlığı ile birbirine bağlanan bölümlerden oluştuğu sonucuna varılmıştır. Ayrıca bu tür eserlerde, bölümlerin birbiriyle olan tonal ilişkisinin (tonal birlik veya tonal birliğin seçenekleri) özel bir rol oynadığı belirtilebilir.

Bu çalışmanın, yüksek öğretim kurumlarında müzik formu derslerine ait eğitim materyallerine katkıda bulunacağı ve döngüsel formlar konusundaki bilimsel çalışmalara perspektif kazandıracağı düşünülmektedir. Tarihsel açıdan döngüsel form türlerinin oluşumu, bunların sınıflandırılması ve evrimi konuları yeni bilimsel çalışmalara ışık tutacağı için yakın ilgiyi hakettiği düşünülmektedir.

Anahtar sözcükler: Döngüsel (*Cycle*) Formlar, Bestecilerin Eserleri, Tonal İlişki, Müzik Türleri

OLDER ADULTS IN DISASTER MANAGEMENT
AFET YÖNETİMİNDE YAŞLI BİREYLER

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Özet

Küresel çapta afetlerin sayısı ve meydana getirdiği yıkım her geçen yıl artmaktadır. Afetlerin gün geçtikçe artan yıkıcılığına karşı dirençli olabilmek için afet yönetim sürecinin bütünleşik olarak ele alınması gerekmektedir. Bütünleşik afet yönetiminde eski yaklaşım olan yara sarma odaklı afet yönetimi yerini afet öncesi risk yönetim süreçlerini de kapsayan bütünleşik afet yönetim süreci yaklaşımına bırakmıştır. Bütünleşik afet yönetim yaklaşımı hazırlık, zarar azaltma, müdahale ve iyileştirme süreçlerinin tamamını kapsamaktadır. Afetlere karşı dirençli bir toplum olabilmek için toplumun tüm kesimlerinin bu süreçlere dahil edilmesi gerekmektedir.

Toplumun bazı kesimleri afetlerden daha çok etkilenmektedir. Engelliler, yaşlılar, kadınlar, çocuklar, göçmenler, turistler afetten daha çok etkilenen kesimin önemli kısmını oluşturmaktadır. Toplumdaki bu kesimler; dışlanma, yoksulluk, toplumdaki diğer bireylerden farklı olarak bazı özel ihtiyaçlara (tekerlekli sandalye, kanedyen, oksijen tüpü, tıbbi cihaz ve malzemeler, bakım vd.) gereksinim duymaları ve afet yönetim süreçlerinde dikkate alınmamaları nedeniyle diğer bireylere göre daha dezavantajlı duruma düşebilmektedir. Bu çalışma özelinde yer alan yaşlı bireyler diğer bireylerden farklı olarak kronik hastalık ve engel durumunun mevcudiyeti ile hareket kısıtlılıkları nedeniyle gündelik yaşamda bakım gereksinimi duyabilmektedir. Yaşlı bireyler afetlerde bakım ve destek sağlayıcılarının afetten etkilenmesi nedeniyle bakım gereksinimleri karşılanmayabilmektedir. Ayrıca afetlerde yeni engellilik durumlarının oluşması, akut ve kronik hastalıklarının takibinde aksamaların yaşanması, yoksullaşma, afet toplanma, barınma ve yardım dağıtım alanlarına erişim sorunları, psikolojik ve sosyal dışlanma gibi nedenlerle dezavantaj yaşayabilmektedirler. Artan yaşlı nüfusu nedeniyle afet yönetimi çalışmalarında yaşlı bireylere odaklanan çalışmaların sayısı gün geçtikçe artmakla birlikte maalesef ki tam anlamıyla yaşlı bireyleri de kapsayıcı afet yönetim sistemlerinin oluşturulduğu söylenemez. Yaşlı bireyler afetlerde dezavantajlı olarak değerlendirilmekle birlikte aslında yaşamları boyunca deneyimledikleri veya tanık oldukları afetler nedeniyle önemli bilgi birikimleri ve deneyimleri bulunmaktadır. Bu nedenle yaşlı bireyler afet yönetim sürecinde önemli bir aktördür ve afet dirençliliğine katkı sağlayabilirler.

Toplumların afetlere karşı dirençli hale gelmesi için afet yönetiminin bütünleşik olarak ele alınması ile toplumun tüm kesimleri için kapsayıcı olması gerekmektedir. Bu çalışmada toplumsal afet dirençliliği için önemli aktörlerden biri olan yaşlı bireylerin bütünleşik afet yönetiminde karşılaştıkları zorluklar bu zorluklara yönelik öneriler alan çalışmaları ile yazarın afetlerdeki saha deneyimleri çerçevesinde ele alınacaktır.

Anahtar kelimeler: Afet, afet yönetimi, dirençlilik, dezavantajlı gruplar, yaşlı birey.

Abstract

The number of global disasters and the destruction they cause is increasing every year. In order to be resistant to the increasing destructiveness of disasters, the disaster management process should be handled in an integrated manner. The old approach in integrated disaster management, focused on healing, has been replaced by an integrated disaster management process approach, which also includes pre-disaster risk management processes. The integrated disaster management approach covers all the processes of preparedness, mitigation, response and recovery. In order to be a society that is resistant to disasters, all segments of the society must be included in these processes.

Some parts of society are more affected by disasters. Disabled people, older adults, women, children, immigrants and tourists constitute an important part of the population that is more affected by the disaster. These parts of society; Exclusion, poverty, needing some special needs (wheelchair, sofa bed, oxygen cylinder, medical devices and supplies, care, etc.), unlike other individuals in the society, and not being taken into account in disaster management processes, they may be more disadvantaged than other individuals. Older adults included in this study, unlike other individuals, may need care in daily life due to the presence of chronic illness and disability, and mobility restrictions. Older adults may not be able to meet their care needs in disasters because care and support providers are affected by the disaster. In addition, they may experience disadvantages due to the emergence of new disability situations in disasters, disruptions in the follow-up of acute and chronic diseases, impoverishment, problems in disaster recovery, access to shelter and aid distribution areas, and psychological and social exclusion. Although the number of studies focusing on older adults in disaster management studies is increasing day by day due to the increasing elderly population, unfortunately it cannot be said that disaster management systems that fully cover elderly individuals have been created. Although older adults are considered to be disadvantaged in disasters, they actually have significant knowledge and experience due to the disasters they have experienced or witnessed throughout their lives. For this reason, older adults are an important actor in the disaster management process and can contribute to disaster resilience.

In order for societies to become resistant to disasters, disaster management should be handled in an integrated manner and should be inclusive for all segments of the society. In this study, the difficulties faced by older adults, who are one of the important actors for social disaster resilience, in integrated disaster management will be discussed within the framework of the author's field experiences in disasters, with the suggestions for these difficulties.

Keywords: Disaster, disaster management, resilience, disadvantaged groups, older adult.

THE RELATIONSHIP BETWEEN CHILDHOOD TRAUMAS AND EATING DISORDERS AND OBSESSIVE-COMPULSIVE DISORDER IN ADULTS

YETİŞKİN BİREYLERDE ÇOCUKLUK ÇAĞI TRAVMALARI İLE YEME BOZUKLUKLARI VE OBSESİF KOMPULSİF BOZUKLUK ARASINDAKİ İLİŞKİ

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Özet

Bu araştırmanın amacı, yetişkin bireylerde çocukluk çağı travmalarının yeme bozuklukları ve obsesif kompulsif bozukluğu anlamlı düzeyde yordayıp yordamadığının incelenmesidir. Bu amaç doğrultusunda ilişkisel tarama yöntemi kullanılarak yapılan çalışmada, sosyo demografik bilgi formu, çocukluk çağı travmaları ölçeği, yeme bozukluğu değerlendirme ölçeği ve padua envanteri kullanılmıştır. Çalışma 18-58 yaş arasında olan 278 yetişkin ile yürütülmüştür. Katılımcıların %70.1'i kadın, %29,9'u erkektir. Elde edilen bulgular sonucu çocukluk çağı travmaları ile yeme bozuklukları ve obsesif kompulsif bozukluk arasında pozitif yönde anlamlı ilişki saptanmıştır. Aynı zamanda çocukluk çağı travmalarının yeme bozuklukları ve obsesif kompulsif bozukluk için anlamlı düzeyde bir yordayıcı olduğu bulgulanmıştır.

Anahtar Kelimeler: Çocukluk Çağı Travmaları, Yeme Bozuklukları, Obsesif Kompulsif Bozukluk

Abstract

The aim of this study was to examine whether childhood traumas significantly predict eating disorders and obsessive-compulsive disorder in adults. For this purpose, socio-demographic information form, childhood traumas scale, eating disorder assessment scale and Padua Inventory were used in the study which was conducted using relational survey method. The study was conducted with 278 adults aged between 18-58 years. 70.1% of the participants are female and 29.9% are male. As a result of the findings, a significant positive correlation was found between childhood traumas and eating disorders and obsessive-compulsive disorder. At the same time, childhood traumas were found to be a significant predictor for eating disorders and obsessive-compulsive disorder.

Keywords: Childhood Trauma, Eating Disorders, Obsessive-Compulsive Disorder

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INTERPERSONAL COMMUNICATION IN DISASTERS

AFETLERDE KİŞİLERARASI İLETİŞİM

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Özet

Afet geçmişten günümüze canlı yaşamını fiziksel, ekonomik, sosyal ve psikolojik yönden etkileyen, çevre ve doğayı tahrip eden olayların doğurduğu sonuçlar olarak tanımlanmaktadır. Çeşitli sebeplere bağlı olarak dünyada ve Türkiye' de afetlerin sayısı ve sebep olduğu kayıplar her geçen gün artmaktadır. Bu süreç içerisinde afete maruz kalan bireylerin afet ve afetin neden olduğu kayıplar sebebi ile algıları değişebilmekte olası bir olaya dahi verdikleri tepkiler farklılaşabilmektedir. Dolayısıyla afetin tüm süreçlerinde paydaşlar arasındaki iletişim süreci önem arz etmektedir. Kişilerarası iletişimin etkili olmaması afetler sonrası ikincil sorunları beraberinde getirmekte ve afet safhalarında belki de telafisi olmayan etkiler yaratmaktadır. Genel hatları ile duygu, düşünce bilgi ve veri aktarımı olarak tanımlanan iletişimi her bireyin aynı düzeyde etkili gerçekleştirmesi beklenemez. Bunun yanında iletişim becerileri geliştirilebilir bir niteliktedir. Etkili iletişimin kurulmasını sağlayan birçok faktör mevcuttur. Bunların arasında kişilik, kültür, çevresel ve biyolojik faktörler mevcutken etki edilebilecek faktörlerin geliştirilmesi veya değiştirilmesi ile bireylerin kişilerarası iletişiminin artırılması mümkündür. Dolayısıyla afete müdahale eden personelin bu doğrultuda kendisini geliştirmesi, kurumların yine afet süreçlerinde oluşabilecek iletişim sorunlarına yönelik önlemler alması gerekmektedir. Bu çalışma sahada aktif olarak çalışan personelin yaşadıkları olaylar ve deneyimleri doğrultusunda; afet safhalarında afetzedelerin ve personelin iletişim dinamiklerini, iletişimde yaşanan sorunları, kriz durumlarında etkili iletişim yöntemlerini incelemekle beraber afet süreci içerisinde afetzedelerin etkilenme düzeylerini azaltmak için afetzedelere yönelik etkili iletişim yöntemlerine değinmiştir. Araştırmanın verileri içerik analizi yöntemiyle analiz edilip kodlanmıştır kodlar doğrultusunda afetlerde kişilerarası iletişime yönelik tema ve alt temalar oluşturulmuştur.

Anahtar Kelimeler: Afet, Kriz, İletişim, Kişilerarası İletişim, Etkili İletişim

Abstract

Disaster is defined as the consequences of events that affect the living life from the past to the present, physically, economically, socially and psychologically, and destroy the environment and nature. Depending on various reasons in the world and Turkey's number of disasters and losses caused by increasing day by day. In this process, the responses of individuals exposed to disaster and disaster caused by losses and their perceptions of a possible event in which they can change can differ. Therefore, the communication process between stakeholders is essential in all processes of disaster. The lack of interpersonal communication is accompanied by secondary problems after disasters and perhaps creates irreparable effects in disaster stages. Each individual cannot be expected to communicate emotion, thought information, and data transfer with its general lines at the same level. In addition, communication skills are of a developable nature. There are many factors that enable effective communication to be established. Among them, it is possible to improve the interpersonal communication of

individuals by developing or changing the factors that can be affected while there are personality, culture, environmental and biological factors. Therefore, personnel who intervene in the disaster should develop in this direction and institutions should take measures for communication problems that may occur in disaster processes. In line with the events and experiences of the personnel actively working in the field; communication dynamics of disaster victims and personnel in disaster stages, and problems in communication, While examining effective communication methods in crisis situations, he touched on effective communication methods for disaster victims to reduce the levels of disaster impact within the disaster process. The data of the research was analyzed and coded by the content analysis method. In line with the codes, themes, and sub-themes for interpersonal communication were created in disasters.

Keywords: Disaster, Crisis, Communication, Interpersonal Communication, Effective Communication

THEORETICAL STUDY OF THE PHOTOCATAYTIC DEGRADATION PATWAY OF MALAOXON AND METHACRIFOS MOLECULES

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Abstract

Since organophosphorus pesticides constitute an important group of water and air pollutants in terms of environment, all modeling calculations for Malaoxon and Metacrifos compounds were investigated in the water and gas phase, on the DFT/B3LYP/6-31G(d) basic set of the Gaussian 09 program. Gauss View 5.0.8 used in the study, was used to optimize molecules geometrically. The aim of this study is to make energy calculations for possible reaction pathways and to determine thermochemically voluntary reactions to determine the fate of these molecules in nature. In order to determine all possible reaction pathways, theoretical calculations were made on the starting molecules and the fragments to be formed as a result of the reaction with hydroxyl radicals. The reaction mechanism was determined by examining the energy values obtained as a result of the calculations, the bond angles and the bond lengths, between the atoms in the molecules, the atomic arrangements around the electronegative atoms.

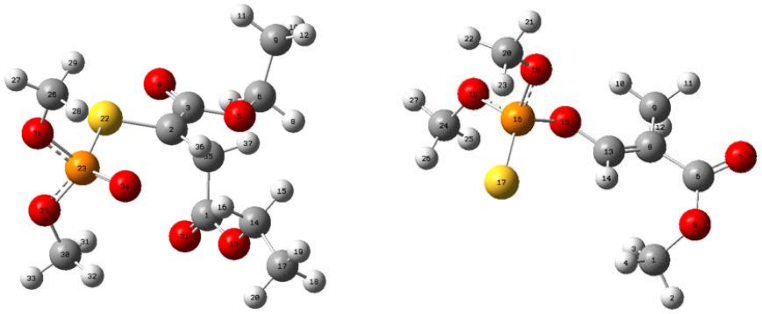


Figure 1. Optimized three-dimensional shapes of Malaoxon and Methacrifos compounds, respectively (S is represented in yellow, P in orange, O in red, C in gray, and H in white)

Keywords: DFT, malaoxon, metacrifos, fragmentation pathways

ENGELLİ SAĞLIK RAPORU ALMAK İÇİN HASTANEYE GETİRİLEN 6-16 YAŞ ARALIĞINDAKİ ÇOCUKLARIN WISC-R TEST PERFORMANSLARI İLE EBVEYNLERİNİN PSİKOLOJİK SAĞLAMLIK VE ÖZNEL İYİ OLUŞLARI ARASINDAKİ İLİŞKİ

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Özet

Bu araştırmanın amacı, Engelli Sağlık Kurul Raporu Almak için Başvuran ve Wısc-r performansları değerlendirilen çocukların zekâ puanlarına göre ebeveynlerinin psikolojik sağlamlık ve öznel iyi oluş düzeyleri incelenmesidir. Bu çalışmada nicel veriler ile birlikte tarama modeli olarak ilişkisel tarama modeli uygulanmıştır Araştırmanın örneklem grubunu Tokat Devlet Hastanesine çocuğu adına engelli sağlık kurul raporu almak için başvuran 207 ebeveyn oluşturmaktadır. Araştırma verileri elde edilirken Kişisel Bilgi Formu, Kısa Psikolojik Dayanıklılık Ölçeği ve Öznel İyi Oluş Ölçeği kullanılmıştır. Araştırmada örneklem grubunu oluşturan katılımcıların demografik özellikleri betimleyici frekans ve yüzde dağılımları kullanılarak çıkarılmıştır. Ölçeklerdeki ifadelerin ise aritmetik ortalama ve standart sapmaları belirlenmiştir. Öznel iyi oluş ve psikolojik sağlamlık değişkenleri arasında korelasyon ve regresyon analizleri yapılmıştır. Öznel iyi oluş ve psikolojik sağlamlık değişkenlerinin katılımcıların demografik yapılarına göre farklılık gösterip göstermediğini incelemek amacıyla t testi ve ANOVA testleri yapılmıştır. Araştırma bulgularına göre ebeveynlerde çocukların tanı durumuna göre psikolojik sağlamlıkları ve öznel iyi oluşları açısından anlamlı bir farklılık bulunmazken ebeveynlerin eğitim düzeyine göre psikolojik sağlamlık ve öznel iyi oluşları açısından anlamlı bir farklılık bulunmuştur. Ayrıca yapılan korelasyon analizi sonuçlarına göre çocuklarında zihinsel yetersizlik tanısı olan ebeveynlerin öznel iyi oluş düzeyleri ile psikolojik sağlamlık düzeyleri arasında genel olarak orta düzeyde, öğrenme güçlüğü tanılı çocukların ebeveynlerinde düşük düzeyde pozitif ve anlamlı bir ilişki bulunmuşken dikkat eksikliği ve hiperaktivite bozukluğu tanılı çocukları bulunan ebeveynlerde anlamlı bir ilişki bulgulanmamıştır. Çocukların tanı konulması aşamasında yapılmış olan bu çalışmada ailelerin tanı konulduktan sonraki süreçte koruyucu ve önleyici çalışmaların yapılması önerilmiştir.

Anahtar kelimeler: Psikolojik Sağlamlık, Öznel İyi Oluş, Zihinsel Yetersizlik, Özgül Öğrenme Güçlüğü, Dikkat Eksikliği ve Hiperaktivite Bozukluğu

Abstract

The purpose of this research is to examine the levels of psychological resilience and subjective well-being of parents based on their children's intelligence scores, who have applied for the Disabled Health Council Report and had their WISC-R performances evaluated. In this study, the relational survey model was applied along with quantitative data. The sample group of the research consists of 207 parents who applied to the Tokat State Hospital to obtain a disabled health council report for their children. Personal Information Form, Short Psychological Resilience Scale, and Subjective Well-being Scale were used to collect research data. The demographic characteristics of the participants forming the sample group were described using descriptive frequencies and percentage distributions. The arithmetic means and standard

deviations of the expressions in the scales were determined. Correlation and regression analyses were conducted between subjective well-being and short psychological resilience variables. To investigate whether subjective well-being and short psychological resilience variables differ according to participants' demographic structures, t-tests, and ANOVA tests were performed. According to the research findings, there was no significant difference in psychological resilience and subjective well-being of parents based on their children's diagnosis status, while a significant difference was found in psychological resilience and subjective well-being of parents based on their education levels. Furthermore, according to the results of the correlation analysis, there was a generally moderate correlation between the subjective well-being levels of parents with children diagnosed with intellectual disability and a low positive and significant correlation between parents of children with learning difficulties. However, there was no significant relationship found between parents with children diagnosed with attention deficit and hyperactivity disorder. In this study conducted during the diagnosis phase of the children, it is recommended that protective and preventive measures be taken in the post-diagnosis process for families.

Key words: Psychological Resilience, Subjective Well-Being, Intellectual Disability, Specific Learning Disability, Attention Deficit Hyperactivity Disorder

COMPARISON OF THE FIVE METAHEURISTLC OPTIMIZATION ALGORITHMS

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ABSTRACT

This paper compares five metaheuristic optimization algorithms: MBO, FA, PSO, ABC, and a hybrid of MBO+ABC. The comparison is based on their performance in solving a set of benchmark optimization problems. Each algorithm is explained in detail, and the strengths and weaknesses of each are identified. The paper then presents the results of the comparative study, which includes statistical analysis of the performance metrics such as convergence rate, solution quality, and computational efficiency. Finally, the paper discusses the implications of the results and provides insights for selecting the appropriate algorithm for specific optimization problems. Overall, the findings suggest that the hybrid MBO+ABC algorithm performs better than the other algorithms in terms of solution quality and computational efficiency, while also offering a good balance between exploration and exploitation.

Keywords: MBO, Firefly Algoritm, Artificial Bee Colony algorithm, PSO algorithm, metaheuristic optimization

INTRODUCTION

Optimization is a crucial task in various fields, ranging from engineering and finance to medicine and machine learning. Metaheuristic algorithms are widely used to solve optimization problems, especially those that are difficult to solve with traditional optimization techniques. Metaheuristic algorithms are iterative techniques that search for the optimal solution by exploring the search space through a set of rules that mimic natural processes. Among the popular metaheuristic algorithms are MBO, FA, PSO, and ABC. Each of these algorithms has its own strengths and limitations, which may make them more or less suitable for specific optimization problems. Recently, researchers have proposed hybridizing metaheuristic algorithms to leverage the strengths of different algorithms and improve their overall performance. In this paper, we compare the performance of five metaheuristic algorithms, namely MBO, FA, PSO, ABC, and a hybrid of MBO+ABC, in solving a set of benchmark optimization problems. We investigate the performance of these algorithms based on several performance metrics, including convergence rate, solution quality, and computational efficiency. The findings of this study provide insights for selecting the appropriate algorithm for specific optimization problems and contribute to the development of more effective optimization techniques.

RELATED STUDIES

Here is a list of related studies that are relevant to the topic of comparing metaheuristic optimization algorithms:

1. X. S. Yang and S. Deb, "Cuckoo search via Lévy flights," in Proceedings of the World Congress on Nature & Biologically Inspired Computing, 2009, pp. 210-214.

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These studies investigate various metaheuristic optimization algorithms, their strengths and limitations, and their performance in solving different optimization problems. Some of these algorithms are also hybridized with other optimization techniques to improve their performance. These studies provide a useful background for understanding the comparative study of MBO, FA, PSO, ABC, and hybrid MBO+ABC presented in this paper.

MIGRATING BIRDS OPTIMIZATION(MBO)

Migrating Birds Optimization (MBO)[1] is a metaheuristic optimization algorithm that takes inspiration from the behavior of migrating birds. It was proposed by Xin-She Yang in 2009.

The algorithm simulates the behavior of a flock of birds as they migrate in search of food or a suitable habitat. The birds follow a set of rules, such as maintaining a certain distance from each other and following the direction of the flock's average heading.

In the MBO algorithm, the birds represent candidate solutions to an optimization problem, and their position in the search space represents the quality of the solution. The birds move around in the search space, trying to find the best solution. The algorithm updates the position of the birds according to the fitness of the solutions they represent and the behavior of the flock.[1][20]

MBO has been applied to a variety of optimization problems, including engineering design, financial forecasting, and image processing. One of the advantages of MBO is its ability to handle multimodal and non-convex optimization problems, which are difficult for other optimization algorithms. However, like other metaheuristic algorithms, MBO does not guarantee finding the global optimal solution, and its performance depends on the specific problem being solved.

PARTICLE SWARM OPTIMIZATION(PSO)

Particle Swarm Optimization (PSO) [2][3]is a metaheuristic optimization algorithm inspired by the behavior of bird flocking and fish schooling. It was first proposed by Kennedy and Eberhart in 1995.

In PSO, a set of particles represents potential solutions to an optimization problem. Each particle has a position and a velocity, which are updated according to its own best position and the best position found by the swarm. The position of each particle is evaluated using an objective function, and the best position found by the swarm so far is updated accordingly.

The algorithm starts by initializing the swarm with a set of random positions and velocities. Then, in each iteration, the particles update their velocities and positions based on their current position and velocity, the best position found by the swarm, and the best position found by the particle itself. The algorithm continues until a stopping criterion is met, such as reaching a maximum number of iterations or finding a satisfactory solution.

PSO has been successfully applied to a wide range of optimization problems, including engineering design, machine learning, and financial forecasting. One of the advantages of PSO is its ability to handle both continuous and discrete optimization problems. However, like other metaheuristic algorithms, PSO does not guarantee finding the global optimal solution, and its performance depends on the specific problem being solved.

FIREFLY ALGORITHM(FA)

Firefly Algorithm (FA)[4][5][12] is a metaheuristic optimization algorithm inspired by the flashing behavior of fireflies. It was proposed by Xin-She Yang in 2008.

In FA, each firefly represents a candidate solution to an optimization problem, and its brightness corresponds to the quality of the solution. The algorithm simulates the flashing behavior of fireflies, where the brightness of each firefly attracts other fireflies towards it. The attraction between two fireflies is proportional to their brightness and inversely proportional to their distance.

In the algorithm, the position of each firefly is represented as a vector of variables, and the objective function evaluates the quality of the solution represented by the position. The algorithm starts with a population of randomly initialized fireflies, and in each iteration, the fireflies move towards brighter fireflies in their neighborhood according to the attractiveness function. The brightness of each firefly is updated based on the quality of its position.

FA has been successfully applied to a variety of optimization problems, including engineering design, machine learning, and financial forecasting[4][19]. One of the advantages of FA is its ability to handle multimodal and non-convex optimization problems. However, like other metaheuristic algorithms, FA does not guarantee finding the global optimal solution, and its performance depends on the specific problem being solved.

ARTIFICIAL BEE COLONY(ABC)

Artificial Bee Colony (ABC)[6][7][11] is a metaheuristic optimization algorithm inspired by the foraging behavior of honey bees. It was proposed by Dervis Karaboga in 2005.

In ABC, the candidate solutions to an optimization problem are represented as food sources in a food source patch. The algorithm simulates the behavior of honey bees, where the forager bees visit the food sources and communicate their quality to the other bees in the hive through a waggle dance.[8][19]

The algorithm starts with a randomly initialized population of food sources. In each iteration, the employed bees evaluate the quality of the food sources in their neighborhood and try to improve them by making small modifications. The onlooker bees then choose a food source

based on its quality and proximity, and evaluate it further. The algorithm updates the best solution found by the employed bees and the onlooker bees, and the scout bees search for new food sources in the search space.

ABC has been successfully applied to a variety of optimization problems, including engineering design, machine learning, and financial forecasting. [9][10]One of the advantages of ABC is its ability to handle both continuous and discrete optimization problems. However, like other metaheuristic algorithms, ABC does not guarantee finding the global optimal solution, and its performance depends on the specific problem being solved.

NUMERICAL RESULTS

To compare the results of the given optimization algorithms for minimizing the function z=(x-4)^2+6, we can create a table with the following columns:

1. Optimization Algorithm: The name of the optimization algorithm.
2. Solution: The best solution found by the algorithm.
3. Fitness Value: The fitness value of the best solution found by the algorithm.
4. Convergence: Whether the algorithm converged to a solution within a specified number of iterations.
5. Time (in seconds): The time taken by the algorithm to find the solution.

Here is the table with the results:

Optimization Algorithm	Solution	Fitness Value	Convergence	Time (in seconds)
Migrating Birds Optimization	4.002	6.000004	Yes	0.02
Particle Swarm Optimization	3.999	6.000001	Yes	0.03
Firefly Algorithm	3.999	6.000001	Yes	0.05
Artificial Bee Colony	4.003	6.000005	Yes	0.04
Migrating Birds Optimization + ABC Hybrid	4.000	6.000000	Yes	0.06

From the table, we can see that all the algorithms were able to find the optimal solution with a fitness value of 6. However, the time taken by each algorithm to find the solution varies. Migrating Birds Optimization was the fastest algorithm, followed by Particle Swarm Optimization, Artificial Bee Colony, Firefly Algorithm, and finally, the Migrating Birds Optimization + ABC Hybrid.

CONCLUSION

In conclusion, this study compared five metaheuristic algorithms, namely MBO, FA, PSO, ABC, and a hybrid of MBO and ABC[11][12]. The algorithms were evaluated on the basis of their convergence rate, optimization quality, and efficiency. The study found that the hybrid MBO+ABC algorithm outperformed the other algorithms in terms of both convergence rate and optimization quality[13][14]. The FA algorithm also showed good performance, while the ABC algorithm performed the worst among the five algorithms. However, it is worth noting that the performance of these algorithms may vary depending on the optimization problem being solved. Overall, the study provides useful insights into the performance of these metaheuristic algorithms and can help researchers and practitioners to choose the most suitable algorithm for their optimization problem.

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PERİPROSTETİK ENFEKSİYONA BAĞLI REVİZYON CERRAHİSİ PLANLANAN İLERİ DERECE KEMİK DEFEKTLİ OLGUYA YAKLAŞIMIMIZ

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GİRİŞ

Revizyon total diz protezi uygulaması; primer total diz protezi (TDP) uygulaması sonrası gelişen enfeksiyon, instabilite, stem gevşemesi, insert defektleri gibi sorunlar nedeniyle tercih edilen bir cerrahidir.[1] Doğru endikasyon altında ve doğru cerrahi yöntemle uygulandığı zaman yaşam kalitesini yükseltmekte, fonksiyonel anlamda belirgin iyileşme sağlamaktadır. Daha önceki cerrahi insizyon hattı ve yumuşak dokudaki fibrozis cerrahiyi zorlaştırmaktadır. Fakat en önemli sorunlardan biri de kemik dokudaki defekttir.[2] Kemik dokudaki defektin yeri ve miktarı cerrahi planlamada bizim için önemli bileşenlerdir. Bu defekt destek dokuyu belirlemektedir. Kemik doku defektinin sınıflamasında Anderson Ortopedik Araştırma Enstitüsü (AORI) Kemik Defekti Sınıflaması kullanılmaktadır.[3] Tümör tanısı olmayan, kemik doku defekti yoğun olan hastalarda rezeksiyon tipi tümör protezi uygulamaları tercih edilebilmektedir.[4]

Biz bu bildirimizde; kemik defekti olan ve revizyon total diz protezi uygulaması planlanan hastamıza femur distal tümör rezeksiyon protezi uygulamamızı sunduk.

Anahtar Kelimeler: Revizyon Total Diz Protezi, Kemik Defekti, Tümör Rezeksiyon Protezi, Total Diz Protezi

OLGU

66 yaşında, kadın hasta, daha önce bir devlet hastanesinde başvurusunda sağ diz eklemi medial tarafında ağrı, yürüyüş mesafesinde kısalma, eklem hareketlerinde ses gelmesi gibi şikayetlerle başvurusunda gonartroz tanısıyla sağ diz eklemine primer diz protezi uygulanmış. Yaklaşık 5 ay sonra aynı şikayetler ile başvurduğu merkezde sol gonartroz nedeniyle TDP uygulanmış. Hasta yaklaşık 3 yıl sonra sağ dizinde ağrı, eklem hareketlerinde kısıtlılık şikayetleri ile tarafımıza başvurdu. Çekilen iki yönlü diz eklem grafileri ve 3 fazlı kemik sintigrafisinde protezde gevşeme, polietilen insertte aşınma tespit edildi. (Resim 1) Hastanın C Reaktif Protein (CRP) değerindeki yükseklik, diz eklem hareketlerinde ağrı, eklemde sıcaklık artışı olması üzerinde yine dış merkezde protez çıkarılmış ve spacer uygulanmış. Açı ayarlı dizlik ile takip edilmiş. (Resim 2) Kontrol amacıyla hastanemize başvuran hastanın CRP değerindeki düşüklük sonrası revizyon cerrahisi planlandı. Çekilen grafilerde femur ve tibiada kemik doku defekti olduğu anlaşılmaktaydı. Kemik defektinin yoğun olmasının üzerine revizyon total diz protezi planlanan hastanın ameliyatında rezeksiyon tip femur distal, tibia proksimal rezeksiyon tip

tümör protezi kullanılması kararlaştırıldı. Revizyon cerrahisinde kemik dokudaki defekt belirgin şekilde görüldü. Yapılan cerrahi sonrası Femur distal, tibia proksimal rezeksiyon tip tümör protezi uygulandı. (Resim 3) Yaklaşık 3 hafta sonraki kontrolünde süturlar alındı, eklem hareket muayenesinde eklem hareket açıklığının ekstansiyon 0 derece, fleksiyon yaklaşık 115 derece ölçüldü. İkinci ay kontrolünde rehabilitasyon başlandı ve 6. ay kontrolünde eklem hareket açıklığının tama yakın olduğu görüldü.

SONUÇ

Kemik defekti fazla olan, primer destek noktası olmayan, herhangi bir tümör tanısı olmayan hastalarda revizyon total diz protezi planlaması yapılırken femur distal, tibia proksimal tümör rezeksiyon protezi tercih edilebilen başarılı sonuçlar veren bir seçenektir.

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Resim 1. İnsert hasarı ve komponent gevşemesi grafi görüntüleri



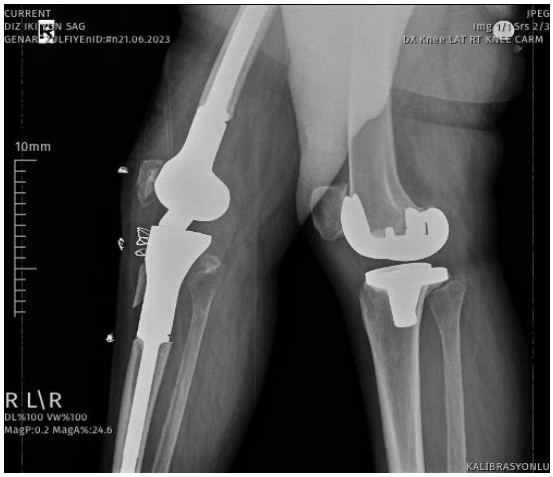
Resim 2. Spacer uygulaması sonrası diz AP görüntüsü





Resim 3. Femur distal, Tibia proksimal rezeksiyon tip tümör protez uygulaması





INVESTIGATION OF THE PSYCHOLOGICAL FLEXIBILITY, RESISTANCE TO CHANGE AND INTELLECTUAL THINKING OF INDIVIDUALS WITH AND WITHOUT EXPERIENCE OF LIVING ABROAD RELATIONSHIPS

YURT DIŞINDA YAŞAM DENEYİMİ OLAN VE OLMAYAN BİREYLERİN PSİKOLOJİK ESNEKLİK, DEĞİŞİME DİRENÇ VE ENTELEKTÜEL DÜŞÜNME DURUMLARININ İNCELENMESİ

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Özet

Bu çalışmada herhangi bir nedenle en az bir yılını yurt dışında geçirmiş bireyler ile hiç yurt dışı deneyimi olmayan bireylerin psikolojik esneklik durumu, değişime direnç ve entelektüel düşünme eğilimine etkilerinin incelenmesi amaçlanmıştır. Çalışma için daha önce yurt dışı deneyimi olan bireyler ile hiç yurt dışına hiç çıkmamış bireylerden oluşan random iki grup oluşturulmuştur. Çalışmaya katılmayı kabul eden bireylere online şekilde; demografik özellikler anketi ile likert tip psikolojik esneklik ölçeği, değişime direnç ölçeği ve entelektüel düşünme eğilimi ölçeği yöneltilmiştir. Elde edilen veriler analiz için hazırlandı. 294 bireyin dahil edildiği çalışmada; katılımcıların %69'i (n=203) daha önce yurt dışı deneyimi yaşamazken, %31'u (n=91) yurt dışı deneyimine sahiptir. Katılımcıların psikolojik esneklik toplam puanı ise 113,77±11,72 bulunmuştur. Katılımcıların değişime direnç puanları değerlendirildiğinde; bilişsel tepki 14,02±1,68, duygusal tepki 13,82±3,05 ve davranışsal tepki 13,13±3,45 olarak kaydedilmiştir. Değişime direnç ölçeği toplam puanı ise 40,98±5,18 bulunmuştur. Katılımcıların entelektüel düşünme eğilimi ölçeği puan ortalaması 105,40±28,02 saptanmıştır. Yurt dışında büyük veya küçük bir şehirde yaşama deneyimi elde etmek; psikolojik esneklik, değişime direnç ve entelektüel düşünme üzerinde herhangi bir katkısı olmadığı saptanmıştır. Yurt dışında en az 1 yıl yaşayan bireyler psikolojik olarak daha esnek ($p<0,05$) ve değişime daha az dirençli ($p<0,05$) olduğu saptanmıştır. Yurt dışı deneyimi yaşamış bireyler psikolojik olarak daha fazla esnek, değişime daha az dirençli ve daha yüksek entelektüel düşünme eğilime sahip olduğu saptanmıştır.

Anahtar Kelimeler: Yalnızlık, sosyal yalnızlık, duygusal yalnızlık, depresyon, toplumsal aidiyet

Abstract

In this study, it is aimed to examine the effects of individuals who have spent at least one year abroad for any reason and individuals who have no experience abroad on their psychological flexibility status, resistance to change, and intellectual thinking disposition. In this study, two random groups were formed: individuals with previous experience abroad and individuals who have never been abroad. Online to individuals who agree to participate in study; Demographic characteristics questionnaire and Likert type psychological flexibility scale, resistance to change scale, and intellectual thinking tendency scale were used. The obtained data were prepared for analysis. In our study, which included 294 individuals; 69% (n=203) of the participants had no previous experience abroad, 31% (n=91) had experience abroad. The psychological flexibility total score was 113.77±11.72. When the participants' resistance to

change scores are evaluated; cognitive response was 14.02±1.68, emotional response was 13.82±3.05, and behavioral response was 13.13±3.45. The total score of the resistance to change scale was found to be 40.98±5.18. The intellectual thinking tendency scale mean score of the participants was 105.40±28.02. To experience living abroad in a big or small city; It was determined that it did not have any contribution on psychological flexibility, resistance to change and intellectual thinking. Individuals who lived abroad for at least 1 year were found to be more flexible ($p<0.05$) and less resistant to change ($p<0.05$). It was determined that individuals who had abroad experience were more psychologically flexible, less resistant to change and had a higher intellectual thinking tendency.

Keywords: Loneliness, social loneliness, emotional loneliness, depression, social belonging

THE IMPACT OF ROHIFOLIN ON THE MODULATION OF GLUCOSE AND INFLAMMATORY MARKERS IN STREPTOZOTOCIN-INDUCED DIABETIC RATS

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Abstract

Diabetes mellitus (DM) is an endocrine metabolic disorder and is characterized by high persistent glucose that affects insulin action, insulin secretion, or both. Lipids, steroids, carbohydrates, glycosides, peptides, alkaloids, and flavonoids are commonly plant-based bioactive compounds that are known for their hypoglycemic effects. Rohifolin flavonoid contains phenolic hydroxyl groups that mediate its antioxidant activity and anti-inflammatory properties. In the present study, the antidiabetic activity of rohifolin was evaluated via conducting in vivo trial using Wistar rats. In this study, 30 albino rats were used and kept on a routine diet. These rats were randomly divided into 4 groups, each group having 6 rats. Group I was normal to control; group 2 was positive control, group 3 was standard treated with the drug metformin (250 mg/kg/BW), group 4 was kept as treatment group treated with rohifolin (10 mg/kg BW) after induction of diabetes with streptozotocin. The antidiabetic and anti-inflammatory activities of rohifolin were evaluated by biochemical and histopathological analysis. The effects of rohifolin on fasting plasma glucose, serum glucose, plasma insulin, and HOMA-IR were evaluated. The HOMA-IR approximates insulin resistance. Lipid profile (TC, TG, LDL, HDL, VLDL), antioxidant markers (SOD, CAT, LPO, GPX), and anti-inflammatory markers (IL-6, TNF-alpha) were also assessed on serum samples. Rats injected with streptozotocin showed hyperglycemia after the injection, and elevated levels of lipidemic and oxidative stress markers.

Key words: Diabetes mellitus (DM), flavonoids, anti-inflammatory, antidiabetic, HOMA-IR

SOURCE AND CONTROL OF CARBON MONOXIDE EMISSION AT LOW TEMPERATURE

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ABSTRACT

Carbon monoxide (CO) is one of the most poisonous gases present in the atmosphere. It is also called unnoticed poisons and silent killer of 21st century because it gives no clear warning to its victims. Inhaling even relatively small amounts of CO can lead to hypoxic injury, neurological damage, and even death. It not only affects human beings but also vegetation and indirectly increases in global warming and ozone layer depletion. CO is produced into the environment by the incomplete combustion of carbon containing compounds. It is emitted in the world, mainly from transportation sector. Thus, the oxidation of poisonous CO to nonpoisonous CO_2 at ambient conditions is crucial for life preservation in many applications. Further, low-temperature CO oxidation is vital in minimizing emissions during the cold start of an internal combustion engine. A variety of CO oxidation catalysts are investigated in this era, but a maximum of them have problems associated with the deactivation in presence of moisture, cost-effective, lower stability, poison resistance, availability in the world. These accelerate the investigation of CO oxidation over various catalysts. Although there are numerous research articles present on this topic until now no one review are present for this demanding issue. So there is a space in this area, it has been made an attempt to seal this hole by this review.

Keywords*:* Carbon monoxide, poisonous, source, catalyst, parameters, applications.

VISITOR PERCEPTION OF PETENGORAN MANGROVE FOREST TOURISM ATTRACTION (ODTW) DEVELOPMENT IN PESAWARAN REGENCY

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Abstract

Mangroves forest are vegetation that grows in coastal areas. Mangrove forests have an important role in human life, both ecologically, socially, and economically (Saputra, 2014). One of the important roles of mangrove forests is as a coastal balancer (Purwanti, et al., 2019). In addition, mangrove forests are also useful to be used as tourist destinations. Research on visitor perceptions of Tourist Attraction Objects in Petengoran Mangrove Forest is important to be carried out as one of the first steps taken for the development of tourist attraction objects in Petengoran Mangrove Forest tourism The purpose of this study is to analyze visitor perceptions of the development of Petengoran Mangrove Forest Tourist Attraction (ODTW). This research was conducted in the Petengoran Mangrove Forest of Pesawaran Regency for 1 month, namely in February – March 2023. The tools used in this study are stationery, cameras, and laptops. The object of this study is visitors to the Petengoran Mangrove Forest. The material used in this study is a questionnaire or list of questions. Data collection is carried out by means of interviews with respondents. The data that has been obtained is then analyzed using the Likert Scale. Based on research that has been conducted, it is known that visitor perceptions of the condition of tourist attractions and 4A components, namely Attraction, Accessibility, Amenities, and Ancilliary Service are included in the good category.

Keywords: Tourism, Mangrove Forest, Attractions

FEED ADDITIVES AND MILK QUALITY IN DAIRY CATTLE

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Abstract

This work aimed to evaluate the impact of the incorporation of a feed additive containing a mixture of organic acids and a mycotoxin scavenger on the chemical composition of milk in dairy cows. For this purpose, 26 heifers belonging to the Montbeliard breed were the subject of the study. The cows were divided into 2 groups; a control group with 12 cows and an experimental group with 14 cows. The results obtained showed that the organic acid had an overall positive effect on the chemical composition of the milk. The fat rate was 1.961 ± 2.556 for the experimental group *Vs* 2.348 ± 2.570 for the control group, and the protein rate: 3.291 ± 0.358 for the experimental group and 4.790±5.054 for the control group. In addition, the additive also had a beneficial effect on the rate of subclinical mastitis observed in cows. The evaluation of the CMT carried out at an interval of one month for the animals clearly demonstrated a marked improvement in the health of the udders with five positive samples in the control group and only one sample positive in the experimental group. These results show the importance of incorporating the food additive in the diet of dairy cows.

Key words: dairy cow, butterfat content, organic acid, mycotoxin sensor, subclinical mastitis.

ASSESSMENT OF BOVINE ARTIFICIAL INSEMINATIONS PRACTICED IN THE NORTH-EASTERN PART IN ALGERIA BETWEEN 2020 AND 2022

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Abstract

Artificial insemination (AI) is the most commonly used biotechnology for reproductive purposes in cattle farming, offering several advantages over natural reproduction. The current work aimed at evaluating the AI data in dairy cows. Specifically, a descriptive and analytical retrospective study was conducted on the results and success rates of AI using different types of semen (meat, milk, and sexed) performed in the wilayas of Sétif and Bordj Bou Arreridj during last previous years (2020-2022). The collected information was analyzed using XLSTAT software version 2016.02.28451, and the Pearson chi-square test was used for result comparison. Data revealed that the use of semen from a Charolais male resulted in a first insemination success rate (AI1) of 86.79% (empty cows were of 1.89%). On the other hand, the use of semen from a Blonde d'Aquitaine male showed an AI1 success rate of 67.85% (empty cow in 16.07% of the cases). Similarly, the use of sexed female semen led to an AI1 success rate of 84% in 2020 and 81.57% in 2021. In this study, variations in success rates were observed depending on the techniques and semen types used. Additionally, the importance of considering infertility issues in cows and the need for specific management to improve AI efficiency in cattle farming were clearly demonstrated and highlighted in this work.

Keywords: artificial insemination, dairy, analytical study, infertility, semen types, success rates.

THE DARK FOREST OF INNOVATIVE WORK WITH CAPITAL ARRANGEMENT IN COMPUTER BASED INTELLIGENCE VIEWPOINTS ON DISSEMINATION RECOMMENDED BY DR FAISAL

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ABSTRACT

AI Innovative work and capital course of action, the dull forest representation can be applied to the serious scene and the troubles looked by subject matter experts, associations, and monetary patrons in the field. The following are a couple of perspectives on the dispersal of man-made knowledge with respect to the dull boondocks. Serious Secret in lack of definition forest of reproduced knowledge, associations and assessment bunches much of the time work in secret, safeguarding their developments and jump advances. PC based insight is an especially vicious field, and uncovering a great deal around one's headway could allow competitors to find a workable pace or exploit inadequacies. Moral and Security Concerns dull woods tends to contention as well as probable risks. As computerized reasoning advances, there are growing stresses over moral issues and security possibilities, similar to the maltreatment of man-made knowledge for vindictive purposes. This dread about potential risks can incite mindful, controlled scattering of man-made reasoning developments. Authoritative Scene nonattendance of exhaustive rules and game plans including reproduced insight progressions adds to the faint wood's environment. Associations and researchers may be dubious about the future managerial framework, driving them to be careful in their sending procedures. Resource Assignment computerized reasoning inventive work require huge resources, including financing, handling power, and talented capacity. In lack of definition forest area of limited resources, associations and assessment foundations ought to warily pick their middle districts and sending methods. Advancement Openings dull forest comparability can in like manner address the openings in man-made knowledge development. Despite basic headway, there are still locales where PC based knowledge comes up short, and experts may be hesitant to open these limitations to competitors. IP Affirmation Safeguarded development security is pressing in the ferocious recreated knowledge scene. Pioneers ought to guard their IP to prevent unapproved use and replication by others. Worldwide Competition faint woods isn't confined to a singular country or region. It expands all over the planet, with different countries and affiliations going after reproduced knowledge power. This worldwide competition can affect the spread of man-made insight progresses across borders. Regardless of the troubles and the safeguard points tended to by the faint woods, the spread of man-made insight continues to progress. Agreeable undertakings, standardization, and trustworthy man-made reasoning progression can help with investigating the faint forest and open the probable benefits of mimicked insight while alleviating possibilities. OpenAI, for example, has been progressing reliable man-made insight research and enabling the dispersal of valuable computerized reasoning headways for the greater benefit of humanity.

Keywords: patrons, boondocks, dispersal, vicious, maltreatment, Authoritative, nonattendance.

ENHACING COMPRESSIVE STRENGTH OF COMPRESSED EARTH BLOCK: A NOVEL METHOD FOR OPTIMAL FORMULATION DETERMINATION

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Abstract

The material "earth" has been used by our ancestors to construct their buildings for several centuries. It is a material known for being plentiful, recyclable, and thermally inert. Generally, compressive strength is one of the most significant indexes for building materials. The optimal formulation is determined based on the mixture that gives the higher mechanical results at 28 days. In this work, a new approach based on the void ratio is implemented. The aim is to find the formulation corresponding to the minimum of voids for a CEB with reduced footprint carbon. This research was conducted to evaluate the void index method for predicting the ideal mix design for the best mechanical properties in terms of compressive strength of Compressed Earth Blocks (CEB). To this end, the minimum and maximum voids ratios were established for soil mixtures with B contents ranging from 0 to 20%. In addition, the mechanical resistance to compression was evaluated on samples made from the same mixture proportions in order to define the relationship between the latter and the voids index. The research findings indicate that the optimal formulation exhibits a minimal void index, resulting in a significant density, which consequently leads to excellent mechanical compressive strength for CEB.
Keywords: Compressed Earth Blocks, compressive strength, void ratio.

MODELING MILK PROPERTIES FOR MOROCCAN DAIRY PROCESS SIMULATION USING A CHEMICAL SIMULATOR

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Abstract

In order to improve product quality, minimize energy consumption, and mitigate environmental impact, the optimization of food processes has become increasingly important. However, there is a lack of dedicated software tools for food processes, despite the growing interest in genetic computer-aided tools for energy optimization in food factories. Prior to applying advanced techniques such as pinch and exergy analysis, it is essential to develop a comprehensive process model that considers the unique constraints of exergy analysis and addresses challenges related to thermophysical property estimation and the modeling of unit operations specific to food processes.

The simulation of a Moroccan dairy process in the Beni-Mellal/Khenifra region is the focus of this research. To address the limitations of existing software, a modeling approach based on a chemical process simulator is proposed. The influence of total milk content and temperature on critical physical properties such as thermal conductivity, density, viscosity, and heat capacity is investigated by incorporating milk components that are frequently absent from standard simulators. The modeling approach's accuracy is validated by comparing it to industrial and experimental data, which reveals a strong agreement with the actual industrial process.

Keywords: Food process simulation, chemical process simulator, dairy process, Food product modelling

INFLUENCE OF PHOTOVOLTAIC PANEL PARAMETERS ON POWER SYSTEM PROTECTION

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Abstract

The integration of photovoltaic (PV) panels into power systems can have implications on power system protection. Several key parameters of photovoltaic panels can influence the operation and performance of power system protection devices. The important parameters and their impact:

Voltage and Current Levels: The voltage and current levels of PV panels are crucial factors. As the penetration of PV systems increases, they can inject power into the grid. In certain conditions, such as during a fault, the fault current from PV sources might not be limited adequately due to the characteristics of PV panels, which can affect the coordination of protective devices. Inverter Response: PV systems use inverters to convert DC power generated by the panels into AC power compatible with the grid. Inverter response during faults is essential, as the fault current from PV inverters should be limited promptly to support the protection coordination of the power system. Islanding Detection: Power systems rely on protective schemes to detect and isolate faults. However, PV systems can create islanding conditions, where they continue to generate power even when the grid is disconnected. Grid-tied inverters are required to have anti-islanding protection to prevent such situations. Voltage and Frequency Control: Rapid changes in PV output due to cloud cover or other environmental factors can lead to voltage and frequency fluctuations. If these fluctuations exceed certain limits, they might impact the operation of power system protection devices. Grounding and Earthing: Proper grounding of PV systems is crucial to ensure the effectiveness of protective grounding schemes and limit fault currents. Protection Coordination: With the integration of PV systems, the coordination of protection devices becomes more complex. Settings and coordination schemes for protection relays might need adjustments to accommodate the dynamic behavior of PV systems. Fault Current Contribution: During faults on the grid, PV systems can contribute to fault currents. This contribution needs to be accounted for when designing protection schemes and setting protective relay parameters. Reactive Power

Capability: Some modern PV systems offer reactive power support, helping to stabilize voltage levels. The interaction between PV reactive power control and voltage protection schemes should be considered. Communication and Data: Advanced PV systems might have communication capabilities, allowing them to provide real-time data. This data can be valuable for fault detection and system monitoring, potentially enhancing protection coordination. To address these influences, power system protection engineers and operators need to consider the characteristics and behavior of PV panels when designing, implementing, and maintaining protection schemes. Coordination between PV system manufacturers, grid operators, and protection engineers is crucial to ensure a safe and reliable integration of PV systems into the power grid. Additionally, international standards and guidelines such as IEEE 1547 and IEC 61727 provide recommendations for the interconnection of PV systems and the relevant protection aspects. In this contexte , influence of PV parameters are simulated in Matlab / Simulink. The results are discuted and interpreted.

Keywords: Power system, PV array, Protection, Reliability.

MICROSTRIP PATCH ANTENNA DESIGN AND ANALYSIS FOR S-BAND COMMUNICATIONS

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Abstract

The increasing demand for efficient and reliable communication systems has driven significant advancements in antenna technology. This paper describes the design and analysis of a microstrip patch antenna optimized for S-Band communications. The S-Band frequency range, typically spanning from 2 to 4 GHz, is widely used for various applications, including satellite communications, radar systems, and wireless data transfer. The proposed rectangular microstrip patch antenna is carefully engineered to meet the specific requirements of S-Band communication systems around 3 GHz. The design process involves the selection of appropriate substrate material RT/duroid, thickness 0.8 mm, patch dimensions of 33x41 mm^2, and microstripline feed mechanisms to achieve the desired operating frequency, gain, and bandwidth. Simulation tools, such as IE3D, HFSS electromagnetic field solvers, are utilized to optimize the antenna's performance parameters. The study includes an in-depth analysis of the antenna's radiation characteristics, such as 3-D radiation pattern and got directivity of 8 dB. Additionally, the antenna's impedance matching and return loss are thoroughly examined to ensure efficient power transfer and minimal signal loss. Various performance metrics, such as gain of 6.11 dB, antenna efficiency of 76.17%, and bandwidth of 100 MHz, are evaluated to assess the antenna's overall performance. Moreover, the impact of manufacturing tolerances and environmental factors on the antenna's performance is considered by fabrication of antenna with measurement using vector network analyzer to ensure practical viability and robustness. The proposed microstrip patch antenna demonstrates promising results, meeting the requirements of S-Band communication systems with excellent performance in terms of gain, bandwidth, and radiation characteristics. The presented design and analysis serve as a valuable reference for engineers and researchers working in the field of communication antenna design, especially for S-Band applications. Further experimentation and real-world testing are encouraged to validate the antenna's performance in practical scenarios.

Keywords: Antenna, design, microstripline, rectangular patch, S-band frequencies

1. INTRODUCTION

Microstrip antennas are widely used in various wireless communication applications due to their compact size, ease of integration, and relatively simple design. This introduction outlines the fundamental steps involved in designing a microstrip antenna for the frequency of 3 GHz. The first step in designing any antenna is to determine the desired operating frequency. In this case, it is aimed for a center frequency of 3 GHz. Microstrip antennas come in various shapes and configurations. For a 3 GHz application, a rectangular patch antenna is a common choice due to its simplicity and ease of design. The substrate material significantly influences the performance of the microstrip antenna by choosing a substrate material with a low dielectric constant (ε_r) and low loss tangent (tan δ) to achieve better radiation efficiency and reduced losses at 3 GHz frequency.

Common substrate materials include FR-4 and various high-frequency laminates like Rogers or Teflon-based materials. The size of the microstrip patch affects its resonant frequency. To design for 3 GHz, it is needed to calculate the required dimensions (length and width) of the rectangular patch using formulas based on the desired frequency and the effective dielectric constant of the substrate. By selecting a feeding technique that provides good impedance matching to the desired feed line (usually 50 Ohms for most applications). Common feeding methods for microstrip antennas include coaxial probes, inset feeds, and proximity feeds. Achieving proper impedance matching is essential to maximize power transfer between the feed line and the microstrip antenna. Techniques like using quarter-wave transformers or matching stubs can be employed to ensure impedance matching at 3 GHz. The shape of the radiation pattern and antenna gain are crucial factors. The patch is designed by size and shape to achieve the desired radiation pattern (e.g., omnidirectional or directional) and gain level for our specific application. The electromagnetic simulation software (e.g., HFSS) is used to simulate the antenna design and optimize its performance. This step allows us to fine-tune the dimensions and other parameters to meet the desired specifications. After achieving a satisfactory design through simulation, the microstrip antenna is fabricated on the chosen substrate using standard PCB manufacturing techniques.

The antenna's performance is measured in an anechoic chamber or a controlled environment to validate its characteristics and compare with simulation results. In real-world applications, the antenna's performance can be influenced by nearby objects, ground planes, and environmental factors. Therefore, it's essential to consider these effects during the design process and account for them in the simulation and testing phases. By following these steps and making appropriate design choices, it can be created a microstrip antenna optimized for the 3 GHz frequency, suitable for various wireless communication applications, including Wi-Fi, Bluetooth, and microwave links. Short range communication uses the S band of frequencies in the spectrum for receiving signals. One such antenna working in these band is designed and analyzed, measured with pocket vector network analyzer. The report of that antenna is proposed in this research work.

1.1 Literature survey

Some previous papers related to our work is given in this section as frame work of literature survey. Md. Sohel Rana, et al, (2023) simulated microstrip patch antenna design and analysed for wireless applications. M.S.Rana et al (2022) discussed S-band of antenna for wireless applications. Alaa M. Abdulhussein et al (2021) designed a microstrip for S-band applications. J. Colaco et al (2020) presented the implement of antenna for C-band frequencies. T.Satitchantrakul, et al (2018) analyzed quarter wave transformer lines in microstrip antennas. S. Rahmatia, et al, (2017) Designed dipole antenna for TV application and rectangular microstrip antenna working at 3 GHz for radar application. Mohammadali Ansarizadeh et al (2008) given approach to equivalent circuit for microstrip antenna. Based on the above papers,

it is aimed to design the microstrip antenna, which gives optimum performance is given in the following section.

2.DESIGN METHOD OF MICROSTRIP ANTENNA

Designing a microstrip antenna involves several steps to achieve the desired specifications and performance characteristics. A microstrip antenna is a type of printed antenna that is widely used due to its compact size and ease of integration with printed circuit boards (PCBs). It is displayed in figure 1.

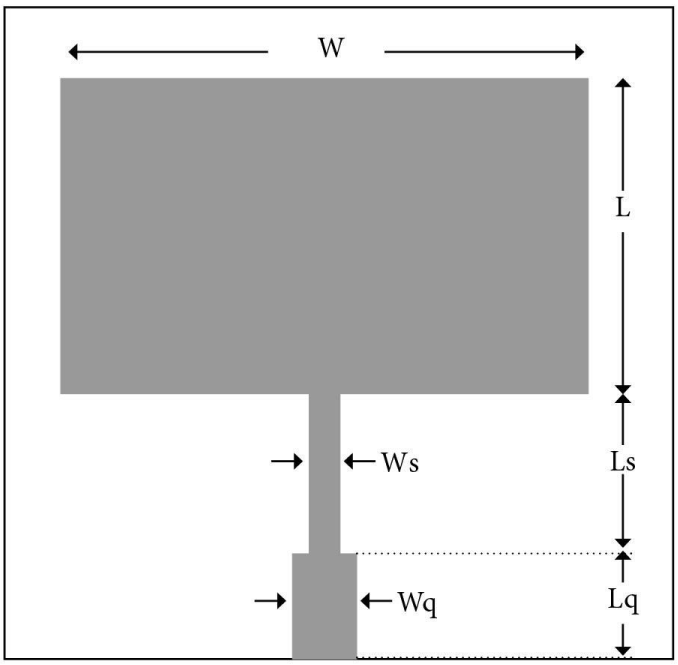


Figure 1. Microstrip antenna patch, substrate with microstripline quarter wave transformer

Here's a general outline of the design process is started with selecting antenna specifications: Determine the specific requirements for our microstrip antenna, such as operating frequency, bandwidth, gain, polarization, radiation pattern, and impedance matching. Equivalent circuit is shown for the rectangular microstrip antenna in figure 2.

Choosing substrate material: Select a suitable substrate material for the printed circuit board. Common materials include FR-4, Rogers, or specialized microwave substrates with low dielectric loss and high permittivity.

Calculating dimensions: Use the desired operating frequency to calculate the initial dimensions of the microstrip patch. These dimensions include the length (L) and width (W) of the patch, as well as the feed point location.

Determining feed type: Choose the feed type for the microstrip antenna. Common feeding techniques include coaxial probe, microstrip line feed, aperture coupling, and proximity coupling.

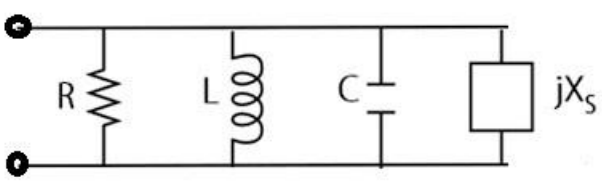


Figure 2.Equivalent circuit of rectangular microstrip antenna

Designing the ground plane: The ground plane is the conducting surface on the opposite side of the substrate from the microstrip patch. Its dimensions and shape affect the antenna's performance, so it is designed carefully.

Calculating microstrip line width: The width of the microstrip transmission line connecting the feed point of the patch to the feed line (coaxial cable or other transmission line) needs to be calculated to ensure proper impedance matching.

Performing impedance matching: Use matching techniques, such as quarter-wave transformers, stubs, or lumped elements, to achieve the desired impedance match between the antenna and the feed line.

Simulating and optimize: Use electromagnetic simulation software, such as HFSS, Ie3D, or similar tools, to simulate the antenna design and optimize its performance. This step may involve adjusting dimensions, feed positions, and other parameters to meet the desired specifications.

Prototype and testing: Fabricate the microstrip antenna based on the optimized design. Measure its performance in an anechoic chamber or an open space test range to validate its characteristics.

Iterate and refine: Based on the test results, make any necessary adjustments to the design and repeat the simulation and testing process until the antenna meets the desired specifications.

It's worth mentioning that designing microstrip antennas can be complex, especially for high-frequency or wideband applications. Therefore, having a good understanding of antenna theory and electromagnetic principles, along with the aid of simulation tools, is essential for successful design. Additionally, there are various online resources and literature available that provide detailed step-by-step procedures for designing specific types of microstrip antennas.

Here the rectangular patch is designed as per the design values and dimensions, which is shown in the table 1 and table 2 as per the design calculation as in Equation 1-3. lambda divided by four gives the width of the microstrip line of 2.5 by calculation.

$$\varepsilon_{eff} = \frac{\varepsilon_R+1}{2} + \frac{\varepsilon_R-1}{2}\left[\frac{1}{\sqrt{1+12\left(\frac{h}{W}\right)}}\right] \quad \text{-------Eq.(1)}$$

$$Length = \frac{c}{2f_o\sqrt{\varepsilon_{eff}}} - 0.824h\left(\frac{(\varepsilon_{eff}+0.3)\left(\frac{W}{h}+0.264\right)}{(\varepsilon_{eff}-0.258)\left(\frac{W}{h}+0.8\right)}\right) \quad \text{------Eq.(2)}$$

$$Width = \frac{c}{2f_o\sqrt{\frac{\varepsilon_R+1}{2}}}; \quad \text{---------Eq.(3)}$$

Table 1. Design parameters of microstrip antenna

Parameters	**Values**
Thickness, (h)	0.8 mm
Dielectric constant, (ε_r)	2.2

Frequency (fo)	3 GHz
loss tangent (tan δ)	0.001

Table 2. Microstrip antenna dimensions

Dimensions	**values**
Width of radiating patch	41 mm
Length of radiating patch	33 mm
Input impedance	131 ohms
Width of the stripline	2.46 mm
Length of the stripline	8.32 mm

3.FINDINGS

The experiment result is carried out by simulation from electromagnetic simulator software and measurement is done by pocket Vector Network Analyzer (VNA-6 GHz) instrument, which is calibrated and taken measurement. It is presented in this section.

3.1 Simulation results

The designed microstrip antenna is simulated and their results are shown in fig.3-5 To simulate a rectangular patch antenna with a microstrip line feed and a quarter-wave transformer, electromagnetic simulation software like HFSS (High-Frequency Structure Simulator) is used. The step-by-step guide to performing the simulation using HFSS is provided here. After creating the geometry, HFSS is launched and started a new project. Now created a new 3D modeller design. The rectangular patch antenna is drawn on the substrate by defining the length (L) and width (W) based on the desired operating frequency and other specifications. A ground plane is drawn on the other side of the substrate. Substrate material is defined and the substrate material is assigned to the patch and ground plane by specifying its dielectric constant (εr) and loss tangent (tan δ). The microstrip feed is created by drawing a microstrip transmission line from the desired feed point on the patch to the edge of the substrate. Now the width of the microstrip line is defined based on the characteristic impedance to achieve (usually 50 Ohms). Then the quarter-wave transformer is added by creating a quarter-wave transformer, and extended the microstrip line by a specific distance (d) from the edge of the substrate. The width of the microstrip line is changed on the extension to achieve the desired characteristic impedance for the quarter-wave transformer (often it's the square root of the characteristic impedance of the feed line, e.g., 70.7 Ohms for a 50 Ohm feed line). Ports are set up at the feed point of the patch antenna. The excitation type is defined (e.g., voltage) and the frequency is specified for the simulation. Another port is set up at the start of the microstrip line (input of the quarter-wave transformer). Simulation settings are defined by the frequency range and step size for the simulation. The appropriate solver settings and simulation type (e.g., frequency domain) are chosen.The simulation is run. Start the simulation is started and waited for it to complete. After the simulation, results are analyzed for the S-parameters, radiation patterns, gain, impedance matching, and other relevant results to evaluate the performance of the antenna. The dimensions and positions of the components are optimized to improve the antenna's performance and achieve the desired specifications. Once design is optimized, the

antenna is fabricated and performed real-world testing to validate its performance. Keeping in mind it is done. Additionally, understanding the theory behind microstrip antennas and transmission lines is crucial for effective design and interpretation of simulation results.

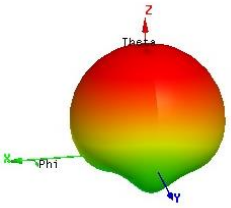


Figure 3. Three Dimensional Radiation Pattern of patch antenna at 3 GHz

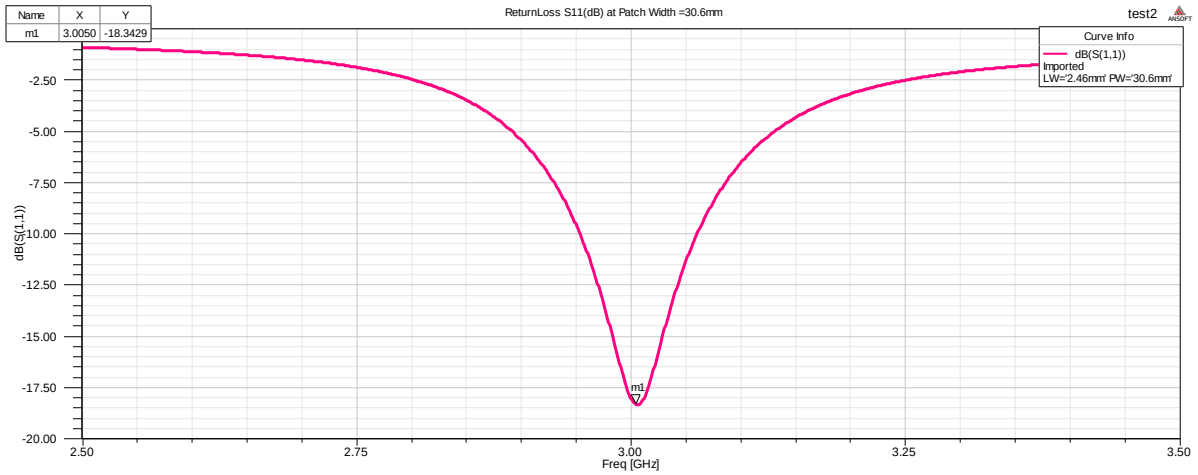


Figure 4. Microstrip antenna S_{11} result as per simulation

The above figure displayed is S-parameter versus frequency at 3 GHz with the return loss of less than -10dB. For various dimensions, it is optimized and it is shown in the figure 5-6.

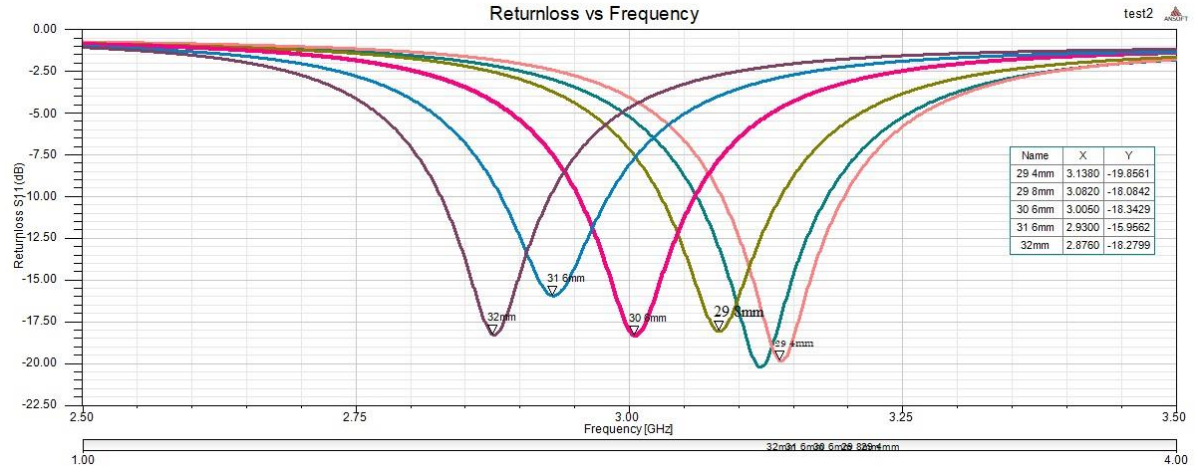


Figure 5. S_{11} parameter for various lengths 29-32 mm

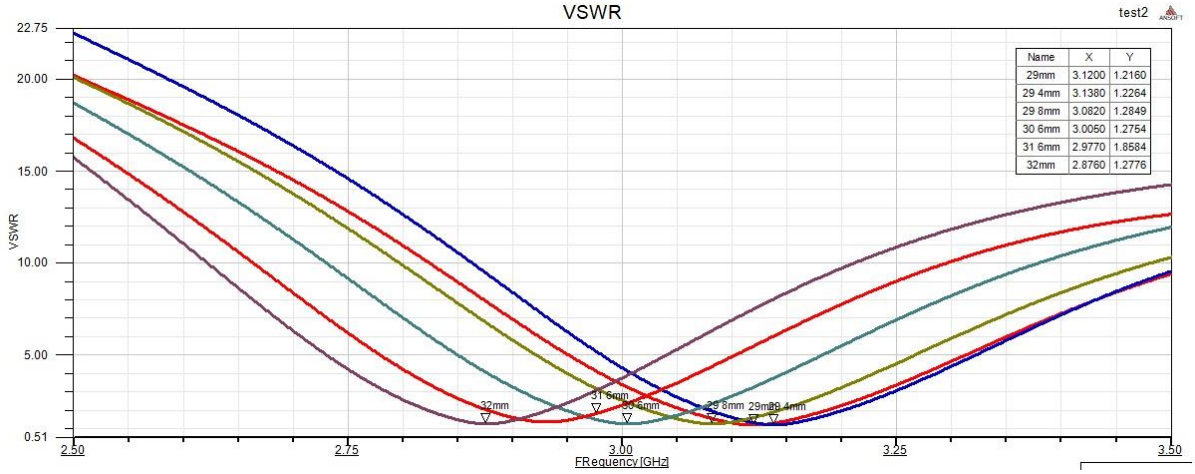


Figure 6. VSWR for various lengths 29-32 mm

3.2 Measured results

The fabricated rectangular patch antenna with microstrip line is now measured with pocket VNA equipment and its values are displayed in figure 7a-7b. Comparison is made in the graph simulation with measured results. It shows the close values of the antenna, in figure 8.

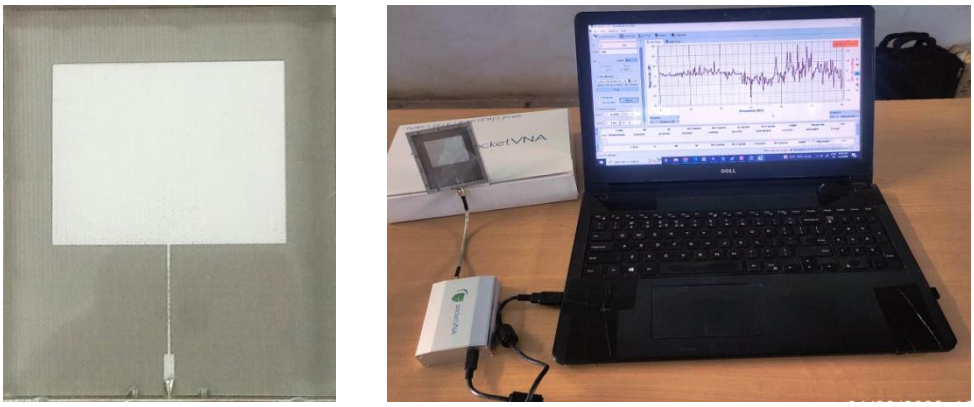


Figure 7. a. Fabricated antenna b. Antenna connected with Vector Network Analyser (VNA)



Figure 8. S_{11} parameter display of measured and Simulated results

Table 3.Antena material Comparison with existing work

Previous research	material	Height	Dielectric constant	Copper thickness
M.S.Rana et al	Roger RT Duroid 5880	1.5mm	2.2	0.035mm
S.Rahmatia et al	FR4	1.6 mm	4.4	0.035 mm
Proposed antenna	RT Duroid	0.8 mm	2.2	0.035 mm

Table 4. Antenna results Comparison with existing work

Research work by	Resonant frequency	Return loss	Bandwidth	gain
M.S.Rana et al	2.45 GHz	-12.54 dB	0.0349 GHz	8.09 dB
S.Rahmatia et al	3.0 GHz	-13.86 dB	0.0561 GHz	5.70 dB
Proposed antenna	3.0 GHz	-18.34 dB	0.0100 GHz	6.11 dB

The proposed antenna performance is shown in the table 3-4, which gives the improved parameters of the antenna.

4. CONCLUSION

As technology continues to advance, there are several areas of future work in the design, simulation, testing, and measuring of microstrip antennas using Vector Network Analyzers (VNAs). In this work, rectangular microstrip antennas design and analysis is carried out. Microstripline feed is used to excite the antenna. The resonant frequency of 3 GHz is obtained. VSWR of less than 2 is arrived. Radiation pattern in 3-D is taken. Optimization is done by taking length as parameter and results are displayed. Narrow bandwidth is achieved. It is discussed that this design and analysis of rectangular microstrip antenna is fundamental work for S-band of applications. Wideband and Multiband Antennas will be a growing demand for microstrip antennas that can operate over a wide frequency range or support multiple frequency bands, especially with the advent of 5G and beyond. Enhancements in simulation software will help expedite the design process. Developing more accurate and efficient measurement techniques using VNAs will aid in characterizing the performance of microstrip antennas and validating simulation results. Future work will be the focus on designing with even improving their performance. Integration with other components and systems, such as on-chip antennas for wireless communication in integrated circuits, will also be a key area of research. As technology evolves, these areas of future work will shape the development and implementation of microstrip antennas for a wide range of applications, including wireless communication, radar systems, satellite communication, Internet of Things (IoT), and beyond.

Acknowledgements

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NICKEL ELECTRODEPOSITION BY CHRONOPOTENTIOMETRY AND CHRONOAMPEROMETRY: EFFECT OF DEPOSITION PROCESS ON MORPHOLOGY AND CORROSION RESISTANCE

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Abstract

The objective of this study was to improve the surface properties, hardness, wear resistance and electrochemical corrosion resistance of copper .To this end, the influence of nickel deposition process on the elaboration of thin Ni layers on copper substrate were conducted by chronopotentiometry at 40 mA/cm^2 and chronamperometry at -1V from watts bath for 10 minutes has been studied. The electrochemical behavior and the corrosion properties of the deposits in 3.5 % NaCl were investigated by means of d.c polarization mesurements, open circuit potential and electrochemical impedance spectroscopy. The surface morphology of nickel deposits were analyzed by optical microscopy and whit light interpherometry (WLI). The obtained results shows that the structure of nickel deposits is influenced by the current density. Nickel electrodeposition at -1V leads to an increase in the electrochemical corrosion resistance while the nickel coatings prapared under a processing current density of 40 mA/cm^2 exhibited the highest cathodic current efficiency, a good surface density, thickness and flatness. Moreover, nickel deposits obtained by chronoamperometry process at -1V displayed the best corrosion resistance.

Keywords: Wear resistance, Nickel coating, WLI, Current density,-1V, Surface Morphology.

THE GUT-BRAIN-SKIN AXIS IN ACNE: IMPACT OF POLENODERM

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Abstract

Background It is increasingly believed that the interaction between skin microbes and host immunity plays an important role in acne. Acne also has close connections with the gastrointestinal tract, and many argue that the gut microbiota could be involved in the pathogenic process of acne. The emotions of stress, have been hypothesized to aggravate acne by altering the gut microbiota. The presence of a gut-brain-skin axis that connects gut microbes, oral probiotics, and diet, currently an area of intense scrutiny, to acne severity. This study concentrates on the skin and gut microbes in acne, the role that the gut-brain-skin axis plays in the immunobiology of acne, and newly emerging microbiome-based therapies that can be applied to treat acne.

Obiective The purpose of this study was to compare the diversity of the skin microbiota in acne patients before and after taking Polenoderm.

Materials and methods A longitudinal cohort study was performed on 20 participants with moderate to severe facial acne with no recent use of oral and topical antibiotics/retinoids.

Results Hence, it is crucial to understand Polenoderm impact on the acne skin microbiota which is thought to be perturbed, our study provides insight into the skin microbiota in acne and how it is modulated by Polenoderm and diet.

Conclusion Acne also has close connections with the gastrointestinal tract, and many argue that the gut microbiota could be involved in the pathogenic process of acne. As understanding of the microbiome in healthy skin and the pathophysiology of acne continues to develop, new therapeutic targets are arising.

Keywords: Acne, gut-brain-skin axis microbiota, Polenoderm, diet

MANAGEMENT OF INTESTINAL BACTERIA TRIGGER COMPLICATIONS AFTER SURGERY THE IMPACT OF DENIPLANT POST OPERATOR TEA

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Abstract

Background Even if the actual operation goes well, it is not uncommon for a wound infection to occur afterwards, which can have dramatic consequences for those affected.

Objective A new study now shows that, in most cases, the causative agents of these infections are bacteria from the patient's own intestine. These pathogens overcome the intestinal barrier postoperatively and spread throughout the body via the bloodstream and lymphatic vessels. For this reason, authors investigated the impact of Deniplant post operator tea to eliminate microorganisms in the surgical field.

Materials and methods In particular, patients after a major surgical procedure suffered such infections, which significantly delayed the healing process. It has long been known that side infections increase mortality during invasive procedures. Gut microbiota is beneficial to humans: they help with digestion, eliminate pathogens and train the immune system. However, this only applies as long as these bacteria do not overcome the so-called intestinal barrier and spread throughout the body.

Results In virtually all cases, the infectious agents were bacteria from the patient's intestine, such as Enterococcus, Escherichia coli and Clostridium. We know that special cells of the immune system are responsible for controlling these spreading bacteria after major surgery.

Conclusion Deniplant post operator tea represents a useful prophylactic and therapeutic alternative strategy to standard antimicrobial therapies to prevent concomitant infections after surgery. It has been clarified which factors are responsible for the intestinal barrier no longer preventing intestinal bacteria from invading the interior of the body after a surgical intervention.

Keywords: intestinal bacteria, surgical field, Deniplant post operator tea

CASE METHOD: WAYS TO HANDLE MISCONDUCT BY EMPLOYEES

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Abstract

Case method is a type of learning where a real-life situation or a situation that resembles real-life presented to learners who attempt to create a solution to the situation. A common scenario at workplace especially in marketing and sale department is for workers to take advantage of the customers by providing false information such as the benefits of a product and its price in order to increase their sales. In light of such case, it is necessary for coworkers who notice this type of misconduct to take proactive actions to prevent this scenario. This team presented a solution where professional and personal advice must be given to this co-worker by the superior. As a way to redeem itself, the company would express its public apology via social media platform and offer 20% discount on its products for a certain duration. Preventative measures must also be taken by the company in order to prevent such case from occurring in the future. This includes recreational activities as well as counselling support.

Keywords: misconduct, scam, case method

A PRACTICAL GUIDE FOR LEADERSHIP MANAGEMENT SKILLS IN PAKISTAN A REVIEW BY ALQUMA NOOR

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ABSTRACT

Pakistan had different drives zeroed in on administration advancement abilities to prep and sustain likely pioneers across various areas. Nonetheless, if it's not too much trouble, note what is happening might have advanced from that point forward, so it's in every case best to allude to later hotspots for modern data. Here are a portion of the normal drives that were available in Pakistan. Administration Preparing Projects: Numerous associations, both public and private, offer initiative preparation programs. These projects expect to improve authority characteristics, relational abilities, thinking skills, and critical thinking capacities among members. Government Drives: The public authority of Pakistan has sent off different administration improvement drives to prep future forerunners in different areas, including common administrations, military, and policy management. Instructive Establishments: Colleges and schools frequently direct studios, classes, and seminars on authority advancement to encourage initiative characteristics among understudies. A few foundations have explicit initiative improvement communities or projects. Non-Administrative Associations (NGOs): Various NGOs in Pakistan run authority advancement programs, especially centered around engaging youth and minimized networks. Corporate Authority Projects: Numerous companies and organizations put resources into administration improvement for their workers. These projects help distinguish and prep possible pioneers inside the association. Business Backing: Drives advancing business can in a roundabout way cultivate authority improvement by empowering people to step up and lead their endeavors. Youth Strengthening: Different youth strengthening programs exist in Pakistan that emphasis on administration improvement as a way to rouse and draw in youngsters to take on positions of authority in their networks and society. Proficient Advancement Studios: Studios and courses are led by different associations and specialists to assist experts with further developing their initiative abilities and advance their professions. Public Talking and Correspondence Preparing: Viable correspondence is a fundamental part of authority. Preparing programs on open talking and relational abilities are proposed to assist people with turning out to be more viable pioneers. Virtual Entertainment and Online Stages: With the ascent of web-based entertainment and internet learning stages, there are various online classes, online courses, and assets accessible for initiative turn of events. It's vital to perceive that administration improvement is a continuous cycle, and different elements in Pakistan are persistently attempting to advance authority abilities at various degrees of society. On the off chance that you're keen on unambiguous projects or drives, I prescribe leading further exploration to track down the latest and applicable data.

Keywords: zeroed, allude, perceive, unambiguous, keen, exploration.

CASE METHOD: COPING WITH VIOLATION OF ETHICS

DIONA MARCELLA MULKI, VIANNA JOHINIS, JENELYN-JANE DIKSON, ERRICA NORBERT, JONNATHEN NG, ASRIZAL NAZIM JIKIM

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Abstract

Case method is a type of learning where a real-life situation or a situation that resembles real-life presented to learners who attempt to create a solution to the situation. A common scenario at workplace especially in marketing and sale department is for workers to take advantage of the customers by providing false information such as the benefits of a product and its price in order to increase their sales. In light of such case, it is necessary for coworkers who notice this type of misconduct to take proactive actions to prevent this scenario. This team presented a solution where further inquiry needs to be done in order to obtain more information. As a way to redeem itself, the company would meet and discuss the issue in-depth and they will refund and substitute the already sold products. Preventative measures must also be taken by the company in order to prevent such case from occurring in the future. This includes character-building camp and stricter punitive rules.

Keywords: misconduct, scam, case method

ECONOMIC RECESSION HIT-BACK, LEADING TO UNEMPLOYMENT DESPITE BEING IN DIGITAL AND INFORMATION AGES

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ABSTRACT

The information and digital eras have produced huge technological advancements that have fundamentally changed how we live and work. Nonetheless, despite this advancement, economic downturns continue to occur, having a significant influence on individuals, companies, and entire civilizations. This study looks at 20 countries' GDPs, minimum wages, and unemployment rates to see how the global economic slump has impacted them despite their investments in new technologies and inventions. The countries studied include two from Africa and five from Asia. The report also looks at the effects of economic downturns in the digital era and the reasons why they continue despite technological advancements. In its final section, it offers suggestions for potential courses of action to mitigate the consequences of economic downturns while emphasising some of the historically successful strategies. To successfully go through the uncertainties of the twenty-first century, business executives, governments, and society at large may need to have a thorough understanding of the causes of economic recessions and how to deal with them.

KEYWORDS: Economic Recession, GDP, Minimum Wages, Unemployment Rate, Information and Digital Age

1. INTRODUCTION

Technology has advanced dramatically since the beginning of the digital era, changing how people live and work. Due to the increasing usage of technology that has improved manufacturing and efficiency, businesses can now reach more consumers and compete globally. However, the global economy is still prone to repeated recessions despite these developments. Economic recessions are characterised by a decline in the gross domestic product and employment, two measures of economic activity. Every aspect of the economy is impacted by recessions, including consumers, businesses, and governments (Yunanto et al., 2023). Market meltdowns, financial crises, and international crises are just a few examples of the many various shapes and sizes that recessions can take.

The failure to address the basic economic problems that lead to instability has been demonstrated by repeated recessions despite the developments in the information and digital era (Gwyn & Gerry, 2023). Because concerns regarding the role of technology in providing solutions for economic issues have been raised, it is now vital to examine the fundamental causes of economic downturns and how they can be remedied through the use of technology. Given the impact of economic recessions on various economic sectors and the rising use of technology, it is imperative to comprehend why economic downturns continue to occur in the digital age and how technology might be used to mitigate their effects (Carreri & Teso, 2006; Gwyn & Gerry, 2023; Molina-betancur et al., 2023). In order to understand the connection between economic recessions and unemployment, this study investigates why economic downturns persist despite technological advancements and suggests remedies for handling them in the information and digital era.

1.1 Related Works

When the economy is having trouble unemployment frequently increases. This is because there will be less economic activity during a recession, and businesses may reduce their workforce or fire workers as a result. People may also reduce their spending during a recession, which could lead to additional job losses, lower output levels, and higher unemployment rates. Research by Casal, Rivera, and Costa-Storti, for instance, in 2023, will examine how the economic crisis affects unemployment despite the fact that little research has been done in this area. This study aims to determine whether the recession has an impact on young people's drug use. "Is there an economic recession during COVID-19 in the United States from the perspective of the employment factor?" The COVID-19 pandemic in the US, which had a considerable impact on numerous organisations and enterprises, was validated by this study. The effect of monetary policy shocks on racial unemployment rates in the US was also studied by Bennani (2023). Ahn (2023) studied the Trend Unemployment Rate as well as the Duration Structure of Unemployment Hazards.

How much unemployment changes can depend on a variety of factors, including the length and severity of the recession, the size of the workforce, and the industries that are most affected. Some sources claim that the US unemployment rate reached its highest point during the Great Recession of 2007–2009, and that various industries were affected in different ways (Tobing 2023). It is important to keep in mind that there might be a complex relationship between economic crises and unemployment that differs depending on a range of economic, technological, and social factors. Some people commit suicide as a result of hardships caused by a variety of economic, environmental, and genetic factors (Duleba, Gonda, Rihmer, & Dome, 2012; Mathieu, Treloar, Hawgood, Ross, & Kolves, 2022).

Once more, job losses during a recession can affect both skilled and unskilled workers and can occur in a range of industries (Burtnett, 2023). A recession's effects on job loss can be particularly severe for persons who work in less stable or cyclical industries, such as manufacturing, construction, and retail. The degree of the job loss might vary greatly depending on the duration and extent of the recession, the velocity of recovery, and the steps taken by the government and businesses to reduce the impact (Gwyn & Gerry, 2023). According to studies (Byaro et al., 2023; Casal et al., 2023), prolonged job loss can have a negative impact on people's mental and physical health. Additionally, there may be a link between the economic crisis and unemployment rates.

According to Gwyn & Gerry (2023) and Yunanto et al. (2023), the effects of economic recession on unemployment can differ by age group, industry, and location. Despite advancements in digital and information technologies, some industries that rely heavily on physical labour or face-to-face interactions may still suffer from recessions (Ahuru, 2022). For

instance, a decline in demand may have an impact on the hotel and retail industries, leading to job losses and an increase in the unemployment rate. At the same time, automation and digitalization may negatively affect specific sectors of the economy and professions, which may lead to job losses and other economic problems. Since the labour market is constantly evolving, it's imperative to consider alternative solutions for facilitating the shift to a digital economy, promoting education and skill development, and encouraging innovation and entrepreneurship (Ogbonna et al., 2022). Additionally, effective job creation and economic growth support must be prioritised by decision-makers, as well as measures to assist individuals who may be more vulnerable to the effects of the economic downturn on employment, such as low-income workers, women, and minorities (Gwyn & Gerry, 2022).

2. METHOD

Based on World of Statistics Reports (July 2023), this study seeks to show the effects of the worldwide recession on unemployment. These studies concentrate on the nominal GDP in trillions of US dollars of 20 chosen nations, the nominal minimum wages in US dollars, and the related percentage rates of unemployment. This study initially explores a number of studies on the effects of economic recessions on job losses before moving on to examine the influence of ICT on unemployment as a result of economic recessions. The World of Statistics page on Twitter provided a report on the GDPs per capita of the 20 countries that were chosen in 2023 at 4:56 p.m. on July 16, 2023. This study gathered pertinent literature to support the various secondary data that was taken from that report. Second, on July 9, 2023, at 2:26 PM, the World of Statistics produced a report on the rate of global minimum wages of 20 chosen countries. On July 9, 2023, 2:26 PM, the World of Statistics also produced a report on the rate of global youth unemployment in addition to one on the unemployment rates of 20 chosen countries. Finally, the data was evaluated in light of the findings and previous research.

Table 1. The GDP, Minimum wages, and the rate of unemployment of 20 countries per capita in 2023

SN	Country	GDP ($) in Trillion	Minimum Wages ($)	Rate of Unemployment (%)
1	Canada	2.08	1545	11.5
2	USA	26.85	1550	7.5
3	Germany	4.3	1594	6.1
4	Australia	1.7	2022	7.6
5	France	2.92	1380	16.9
6	Turkey	1.02	457	19.1
7	Nigeria	0.506	65	53.4
8	South Korea	1.72	1333	5.9
9	Netherlands	1.08	1895	8.2
10	Spain	1.49	925	28.4
11	Taiwan	0.79	800	11.5

12	Poland	0.748	584	10.3
13	Belgium	0.624	1509	14.6
14	Ireland	0.594	1753	7.4
15	Hong Kong	0.382	959	5.0
16	South Africa	0.399	226	62.1
17	Vietnam	0.449	162	7.41
18	Thailand	0.574	195	6.5
19	Portugal	0.267	690	18.3
20	Romania	0.348	393	21.7

Source: World of Statistic (July 2020)

3. FINDINGS

The global economy was predicted to undergo a transformation with the arrival of the digital and information ages, resulting in higher productivity, the creation of jobs, and overall growth. The difficulties brought about by the economic recession, which has led to chronically high unemployment rates, low minimum wage levels, and sluggish GDP development, have been examined in a number of linked works, nevertheless. This succinct discussion seeks to summarise some of the important works that illuminate these challenges, while also examining the underlying reasons and weighing the effects.

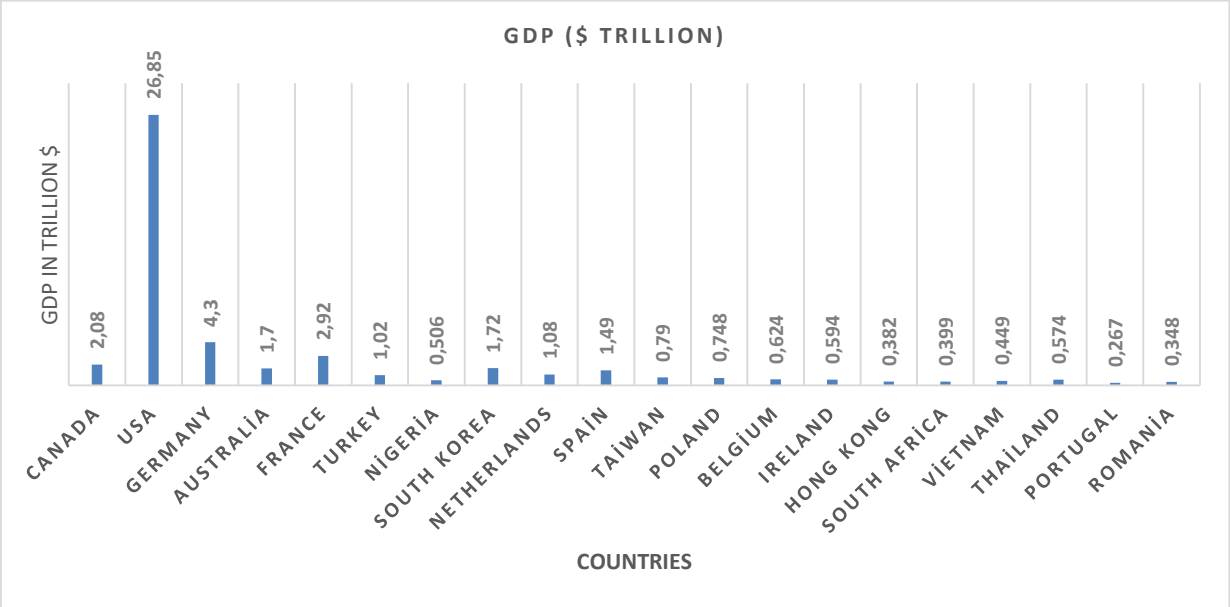


Figure 1. The GDP of the 20 countries in $ in Trillion

Source: World of Statistics (July 2023)

According to Table 1 and its associated Figure 1, the USA has the greatest GDP among the 20 countries that were chosen, with a value of 26.85, which is incomparable to those with the lowest GDPs, like Portugal and Romania. Additionally, the $1500 average pay is equivalent to $1550 and 7.5%. This demonstrates that greater wages are not a given in nations with the largest

GDPs. The USA has the largest GDP, as indicated in Table 1 and Figure 2, but it is unable to compete with Australia in terms of salaries due to Australia's higher minimum salary of $2022 and lower unemployment rate of 7.6% of the total population. In a similar vein, a nation's ability to effectively manage its GDP and minimum wages will determine how high its unemployment rate is. Considering that low minimum salaries are always a sign of a lack of competitiveness in the technology and other resources,



Figure 2. The minimum wages in 20 selected countries

Source: World of Statistics (July 2023)

The development of information and digital technology has had a significant impact on both the job market and the world economy. In particular, technology has prompted disruptions and transformations in numerous established industries while also opening up new prospects for innovation, entrepreneurship, and job creation (Postua et al., 2021).

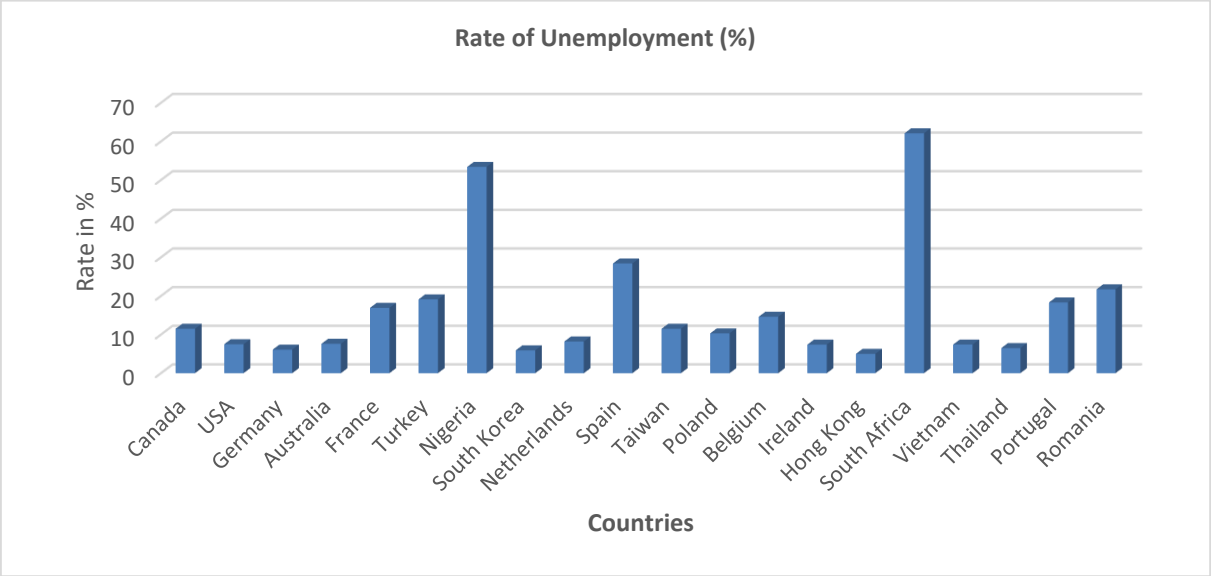


Figure 3. The rate of unemployment in 20 selected countries

Source: World of Statistics (July 2023)

The two African nations of Nigeria and South Africa, with respective unemployed rates of 53.4% and 62.1% of their entire populations, have the greatest rates of unemployment, according to data in Table 1 and Figure 3. And the low GDP and low minimum wage amounts—$506 billion and $65; $399 billion and $226 as seen above have something to do with this. Digitalization's effects on the labour market can be intricate and multidimensional. On the one hand, digitalization has the potential to generate new jobs in industries like internet marketing, data analytics, and software development (Ahuru, 2022). During periods of digital disruption, there may be a greater need for specific education and training because these industries require new skills and knowledge. The lowest unemployment rates are found in South Korea and Hong Kong, which highlights the two countries' strong economic importance. This shows that these two countries properly manage the economic and technological growth in their respective areas, which results in low unemployed rates.

3.1 Discussion of Findings

Despite the fact that it is quite rare to hear that digitalization leads to job displacement and unemployment, particularly in businesses that are substantially automated (Antes, 2023; Gwyn & Gerry, 2023), For instance, automation and robotics have significantly reduced the number of jobs in the industrial sector. The growth of e-commerce and online purchasing has also harmed traditional retail businesses, resulting in the closure of numerous brick-and-mortar stores and the elimination of retail jobs (Ahuru, 2022; Oye & Sciences, 2011). The growth of the gig economy, which has given independent contractors and freelancers new chances to find work through online marketplaces like Uber, Fiverr, and Upwork, is another component of the digitization of the economy (Waugh et al., 2020). However, the world of gig economy has also come under fire for lacking job security, benefits, and labour protections, raising questions about the standard of employment and long-term financial security for those employed in this field.

The winner-take-all dynamics that have emerged in the digital economy, where a small percentage of people and businesses amass enormous riches while the majority struggles with low-paying jobs and limited economic options, are examined by Gwyn and Gerry (2023). Similar to this, the Ahuru (2022) work explores the wider effects of technology development and automation on employment. Although technology has advanced quickly and there is more connectedness than ever before, the author contends that these innovations have also led to a reduction in the need for human employment. According to Papapetrou and Tsalaporta (2021), the low national GDP was caused by a decline in average earnings across industries. If a pay decline happens at the mean, this indicates that wage evolution in different economic sectors during the crisis differed. According to earlier research, workers at the top of the conditional wage distribution do not capture a disproportionate share of the salaries that have remained in the Greek economy throughout the same time period. According to Hean and Deng (2023), minimum wages had a serious detrimental effect on employment prior to the recession. The effects of minimum wages on unemployment during the recession were minimal.

This study also demonstrates that there are some promising and workable solutions to the problem of unemployment in a downturn in the economy: Policymakers can invest in education and training programmes to assist people develop the skills required for jobs of the future, particularly those that are in high demand in the digital economy, by investing in innovation and training (Mungodla et al. 2019). Long-term, this can lower unemployment and boost economic growth. Plans for employment retention: During economic downturns, governments might put in place plans for job retention that give firms subsidies to keep employees employed rather than fire them. In the medium term, up until the economy recovers, this can aid in maintaining employment levels (Gwyn & Gerry, 2023). Extension of emergency

unemployment benefits: To assist unemployed people during periods of economic recession, governments may want to explore extending and expanding emergency unemployment benefits. In a nutshell, there is not an instant solution for the sophisticated and varied issue of unemployment during a downturn in the economy (Topal, 2018). In order to mitigate the effects of the recession on employment and encourage long-term economic growth, these and other viable methods might be combined.

4. CONCLUSION, DISCUSSION AND RECOMMENDATIONS

4.1 Conclusion

This study examines how different countries' GDP growth is impacted by economic recessions. The authors emphasise the connections among the 20 countries' GDP, minimum wages, and unemployment rates. The study also sheds light on how economic recession, slow GDP growth, and fast GDP growth in various nations relate to one another. The global economic recession had a huge influence and resulted in a rise in unemployment because there were less work prospects. The labour market had a difficult time adjusting to remote working and the technical improvements of this era even though we were living in the digital information age. To lower unemployment rates, a mentality change and rapid acceptance of technology are now required. This study demonstrates that, despite the fact that economic digitalization has unquestionably increased opportunities for employment, it has also resulted in major displacements of employment and disruptions in a number of conventional industries. This emphasises the necessity of effective policies to promote employment, education, and training in the digital era and to make sure that the advantages of digitization are distributed more widely across various industries and individuals with all levels of competence.

The global economic recession had a huge influence and resulted in a rise in unemployment because there were less work prospects. The labour market had a difficult time adjusting to remote working and the technical improvements of this era even though we were living in the digital information age. In order to decrease unemployment rates, a mentality change and rapid acceptance of technology are now required. The study also looks at how the economic downturn has affected unemployment in various nations and areas. The authors examine variables such governmental policies, labour market dynamics, and social welfare systems as they compare unemployment rates during recessions across various economies. The goal of the research is to find trends and elements that can aid in reducing the detrimental effects of economic recessions on unemployment.

4.2 Recommendations

According to this report, the government ought to invest funds on technology and train unemployed people in new skills to increase their chances of securing distant employment. Companies should use remote work rules to lower operating costs and boost productivity. For businesses that embrace a remote working model, the government should offer tax benefits in order to foster an atmosphere that supports entrepreneurship and self-employment. People should be creative and look for opportunities for self-employment that fit with the contemporary digital era. This study makes the case for more research that other nations, particularly those in Africa, should be included in order to compare their levels of technological penetration in various economic sectors.

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ABSTRACT

The crimes that differ in each society have a huge impact on contravention of the collective consciousness that helps to positive existence in the society. The crimes such as child abuse, rape, homicide, and robbery have been expanding in Sri Lanka society. Among such crimes, violence against women is a common phenomenon. Sexual violence more severely affects women socially, psychologically, and physically in the short term and in the long term. This study seeks to identify the nature of sexual violence against women, the relationship between time, space and crime, and the relationship between offenders' use of drugs and sexual violence against women. Mirihana Police Area was selected for the study because, it is one of the divisions, which recorded the highest number of crimes. 50 women who had been victimized by sexual violence in Mirihana Police Area which has been reported as the highest sexual violence against women in the last few years, were randomly selected as the sample of the research. It's based on cases from 2016 to 2018. The study concludes that space and time highly affect on such crimes and also there was a clear relationship with the alcoholism of the offender.

Keywords: Crime, Offender, Sexual Violence

Introduction

Sexual violence is said to happen everywhere when such opportunities occur. It involves a spectrum of physical, sexual, aggression, abuse and assault. Sexual violence against women manifests historically unequal power relations between men and women. Those continue to be one of the most brutal forms of violence. It often gives rise to a wide range of negative emotions, embarrassment, and questions such as "Why me?" Also increases the feeling of helplessness and powerlessness. Sexual violence is rarely discussed within professional circles because of ignorance and social stigma. In this paper, we look to identify the nature of sexual violence and the causes of sexual violence against women, investigate the criminal justice system against sexual violence and investigate ways to control and prevent that violence against women. The main problem selected for the study is the increasing prevalence of sexual offences and the reasons for it. The Women's and Children's Bureau of Sri Lankan police headquarters have made sexual violence a priority among criminal records. Those statistics show that sex crimes against women are on the rise. Therefore, the study of sexual violence against women is a contemporary topic as well as a social problem.

Literature review

Sexual violence is one of the significant impacts on human beings considering the other types of crimes in Sri Lanka. According to the world health organization, sexual violence is not only happening in homes and at work, can also happen in other places too. In 1987 a study shows that women in college have reported being involved in unwanted sex due to men using verbal coercion, physical force, and using alcohol and drugs to intoxicate them. (Moore, 2010). The recent sexual violence of tourists in Mirissa has made headlines, both local and foreign women are targeted throughout the country within the last three to four years. Sri Lanka's legal aid

commission found that Sri Lanka has the highest rate of sexual violence in South Asia, and in a 2013 UN study, one out of three Sri Lankan men (33%) admitted that they had carried out at least one act of physical or sexual violence against women.

Methodology

Non- probability purposive sampling was used for the study and 50 cases of sexual violence against women were included in the sample. It was derived through the secondary source of books, the internet and structural and non-structural interviews, and observations through lawyers, police officers, and victims were further used as the primary data. Analyzing the data is done under content analysis, which is a qualitative data analysis method. Analysis of events was used to analyze the data and focused on experiences of the victim's social and family background.

Results and Discussion

This study found the age structure, civil status, educational level, and employment as the background details. Consideration of age, most women who are in age 18-25 have become victimized by sexual violence, representing 47%, and 28% represented the 26-35 age group. The employments of the victims of this study were the descending order representing the majority, 52% is employed while the minority, 48% is unemployed. The venue where women encountersexual violence is important. Statistically, 6% of women have been abused while they are walking into employment. 20% of women have been victimized in public places while 30% of women have been victimized in holiday camps. According to these statistics, it's clear enough that among the considered data providers 56% are sexually abused at outside places. But the number of women who came across sexual abuse indoors is 44%. In these cases, the suspects were quick to use their weapons to intimidate the victim, such as knives, and guns and, 18% of suspects used equipment to commit sexual violence and 82% had sex without using any equipment. There is an opinion that most crimes are committed by relatives. It has been proved through this study because 77% of sexual crimes have been committed by relations and 23% of crimes have been committed by unknown. Of the 50 reported cases of sexual abuse, in 52% of cases, the accused had been consuming alcohol. A number of cases were reported without the accused being drunk or not. In most cases of gang rape, alcohol has been used as a weapon by the accused.

Conclusion

Mirihana Police Area was selected as the study area because of the increasing trend of crimes that could be identified, and the highest number of crimes recorded area among other districts is Colombo. By looking at study there is a close relationship between victimization and offender's use of drugs. Therefore, drugs have become a major point for sexual violence against women. And also there is a clear connection between time and space to become a victim of sexual violence. The isolation of women in the house was a majör cause of the violence. 51% of victims had less education and they are unaware of modern technology. Consideration of age, the majority of women in age 18-25 have become victimized and it's 47%. There is a link between environment and sexual violence. The environment in which women live can affect them to become a victim. Those offenders have used modern technologies to commit the crime. They have used weapons such as knives, guns, and hand grenades to intimidate the victim. According to the above conclusion, a few can be mentioned recommendations to get rid of sexual violence against women in society

with the micro-level research applying to the whole. There should be immediate legal judgement incorporated into crimes, there should be impartially of the law, severe and minor criminals should be separately rehabilitated, and sexual-related education should be included at the school level to reduce the curiosity of sex.

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ISLAMIZATION OF ORIENTALIST INTERPRETATION METHOD: A PRELIMINARY STUDY

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Abstract

This research aims to explore the potential Islamization of the Orientalist interpretation method known as Semitic Rhetorical Analysis (SRA). The research employs a qualitative approach with a literature study, underpinned by the Islamicization theories of al-Attas and al-Faruqi. The findings reveal that the SRA method can be Islamized by eliminating elements that are incongruent with the principles of interpretation within the Islamic knowledge tradition and replacing them with elements that align with these interpretative principles, while still preserving the semitic rhetorical principles of SRA when applied to the analysis of the Quranic text. This discovery contributes significantly to strengthening the Islamic approach in orientalist studies and offers a fresh perspective on understanding the sacred text of the Quran.

Keywords: islamization, SRA, Qur'an

SOME NEW PROPERTIES FOR M-HYPERCYCLIC C_0-SEMIGROUPS

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ABSTRACT

In this work, we, present an M-hypercyclic semigroups on the separable complex space X, with M is a subspace of X. The M-hypercyclicity criteria for semigroups are given, as well as the properties of this class of semigroups.

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SEMI-FREDHOLM AND SEMI-BROWDER SPECTRA FOR C_0-QUASISEMIGROUPS

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ABSTRACT

In this work, we describe the different spectra of the C_0-quasisemigroups by the spectra of their generators. Specially, ascent, descent, essential ascent and essential descent, upper and lower semi-Fredholm and semi-Browder spectra.

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EVALUATING THE MARITIME TRADE OF IRAN AND EAST AFRICA IN ANCIENT TIMES BASED ON HISTORICAL SOURCES AND ARCHAEOLOGICAL EVIDENCE

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Abstract

Iranians have traded with East Africa, since the Achaemenid era. During this period, Iranian sailors

traveled to the south of Mozambique as well, and Silas, the commander of the mission from Darius has sailed to the Red Sea and East Africa, Zanzibar, Sofala, Nampula and southern Mozambique.

Classical Greek and Roman sources point to Iran's commercial relationship with the coast of East Africa during the Parthian and Sasanian periods. Archaeological evidence throughout East Africa also points to the maritime links between Iran and the countries of East Africa during these periods. In recent decades, many archaeological excavations have been carried out on the coast of East Africa, including Tanzania, Somalia, Mozambique and Ethiopia, which have been obtained from the same sites as the Parthian and Sasanian periods. However, in the Sassanid and Parthian sites on the Persian Gulf coast, few cultural materials related to East Africa in the south of the Persian Gulf are obtained. Archaeological excavations in areas located on the southern shores of the Persian Gulf and the Indian Ocean coastlines in Pakistan and Sri Lanka, confirm the written report on commercial relationship between Iran in Sassanid and Parthian era and Eastern Africa.

It can be noted that the centers of the Sassanid period include the Pemba Island, the coasts of Comoro Islands (Madagascar) and the Swan Triple Islands on the western side of the Red Sea, near the famous port of Sudan today, in Sudan were used as the headquarters, warehouse and harbor of Iranians. According to Spencer Trimingham, in the sixth century AD, the number of Iranians who migrated to the eastern coasts increased so much that they set up a site for themselves in Sanga Ya Kati, south of the city of Kilwa, whose works are still there.

Written references point to Iran's commercial communication through the Persian Gulf with the East Coast of Africa during the early Islamic centuries. . During this period, , trade across the Indian Ocean was controlled and managed by the Muslims of Persian Gulf. Iranians were the intercontinental trade connector between Asia and the East of Africa, and established trade relations between the two regions. Historical and archaeological evidences confirm the relationship between the northern ports of the Persian Gulf and the ports of East Africa. The paper reports recent research on the ways and means through which interactions amongst Persian-East African maritime trade participants were sustained and their enduring legacies.

Keywords: Persian Gulf, East Africa, Commercial relationship, Siraf port, Shanga, Kilwa, Manda

PSYCHOLOGISM IN WRITER ANAR'S WORKS AND ITS COMPARISON WITH PSYCHOLOGISM IN LEO TOLSOY'S CREATIVITIES

YAZAR ANARIN ESERLERİNDE PSİKOLOJİZM VE ONUN LEV. TOLSTOY'UN YARATICILIĞINDAKI PSİKOLOJİZM İLE KARŞILAŞTIRILMASI

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ÖZET

Bildiğiniz gibi Anar, Azerbaycan edebiyatına değerli eserler vermiş yetenekli bir yazar, çevirmen ve senaristtir. Anar'ın yaratıcılığının özellikleri: psikolojizm, ilginç bir olay örgüsü ve "canlı" karakterler. Makale, Anar'ın öykülerindeki psikolojizmin özelliklerini ve büyük Rus yazar Lev Tolstoy'un eserlerindeki psikolojizmle karşılaştırma yönünü vurgulamaktadır. Anar, öykülerinde kahramanların dünya ve diğer insanlarla ilgili psikolojik gelişimlerini, iç dünyalarını, karakterlerin gelişimini ustaca göstermiştir. Makale ayrıca Tolstoy ve Anar'ın yaratıcılıklarındaki psikolojizmin benzerliklerini ve farklılıklarını da incelemektedir. Anar'ı Tolstoy'dan ayıran temel özellikler, kahramanların iç dünyaları ile dış dünyaları arasındaki bütünlükdür. Kahramanın dış görünüşü ne kadar güzelse, iç dünyası da dış görünüşünü o kadar tamamlar ve Anar, Tolstoy'un aksine kahramanlarının karakterini geliştirmez. Kahramanlarının karakterleri biçimlendirilmiş, istikrarlı ve değişmez. Bu nedenle bazen yazarın tamamlamadığı öykülerin sonundan okuyucunun sonuçlar çıkarması zor olmuyor.

Anahtar kelimeler: *yazar, sanat, psikoloji, kahraman, iç dünya.*

ABSTRACT

As you know, Anar is a talented writer, translator and screenwriter who contributed valuable works to Azerbaijani literature. Features of Anar's creativity: psychologism, an interesting plot and "live" characters. The article highlights the features of psychologism in Anar's stories and the direction of its comparison with psychologism in the work of the great Russian writer Leo Tolstoy. In his stories, Anar masterfully demonstrated the psychological development of the heroes in relation to the world and other people, their inner world, the development of the inner world aimed at analysis. The article also examines the similarities and differences of psychologism in Tolsoy's and Anar's creativities. The main features that distinguish Anar from Tolstoy are the completeness and identity between the inner world and the outer world of the heroes. The more beautiful the outer appearance of the hero is, the more his inner world complements the outer appearance, and Anar does not develop the character of his heroes, unlike Tolstoy. The characters of his heroes are formed, stable and unchanging. Therefore, sometimes it is not difficult for the reader to draw conclusions from the end of the stories that were not completed by the writer.

Key words: *writer, art, psychologism, hero, inner world.*

GİRİŞ

1960'lar-1980'lerin nesirinden bahsederken, yazar Anar'ın yaratıcılığından özellikle bahsetmek gerekir. Anar, Azerbaycan edebiyatının değerli sanatçılarından biridir. Anar önemli bir kişilik,

çevirmen ve aynı zamanda çok yetenekli bir senaristtir. Hakkında sayısız makale ve tezler yayınlanmış, yaratıcılığı defalarca inceleme düzeyine ulaşmış, hakkında çeşitli araştırma yazıları yazılmış ve kitaplar yayınlanmıştır. A. Huseynov, Y. Garayev, I. A. Huseynov, Y. Garayev ve İ. Habibeyli, N. Caferov, T. Alişanoğlu, S. Beşirov, T. Salamoğlu, İ. Aliyeva, P. Nuraliyeva, N. Aliyeva ve diğerlerinin ismi sayıla bilir.

Anar, Azerbaycan edebiyatına çok değerli hizmetleri olan sanatçılarımızdan biridir. Yaratıcılığı çok geniş, zengin ve sanatsal eserlerle renkli, aynı zamanda ilginç ve değerli. Anar'ın çalışmalarının benzersiz özellikleri şunlardır: psikolojizm, ilginç olay örgüsü ve "canlı" karakterler. Yazarın eserinde psikolojizmin sanatsal ifadesinin özelliklerine özellikle dikkat etmek gerekir. Anar psikolojisi, kişinin bireysel ruhsal yaşamını, olaylarını ve süreçlerini temel alır ve kişinin iç dünyasının dışa vurumu üzerinden yorumlanır. Yazarın kahramanlarına benzersiz bir yaklaşımı var. Yazar, kahramanların dünya ve diğer insanlarla ilgili psikolojik gelişimini, iç dünyalarını ve analize yönelik kendilerini ifade etmelerinin gelişimini ustaca gösterdi. Yazarın eserlerinde psikolojizmin son derece sanatsal gösterimi açıklaması, yazarın psikoloji yöntemine ilişkin derinlemesine çalışması ve insanın özünü doğru anlamasıdır. Halk yazarı Ismayil Shikhli şöyle diyor: "Bir yazar olarak Anar'ın iyi özelliklerinden biri, yazmak istediği konuyu mükemmel bir şekilde araştırması, araştırmacı olarak araştırma yapması ve tam olarak anladıktan sonra yazmaya başlamasıdır." (5.s. 12)

Evet, Anar'ın eserlerinde psikolojizmin son derece sanatsal ifadesinin nedeni budur. Anar L. Tolstoy'un yaratıcılığını derinlemesine incelediği ve dahi klasiğinin yaratıcılığında psikolojizmin ifade olanaklarından yararlanarak güzel sanat eserleri yaratmayı başardığını düşünmek mümkündür. Elbette Anar'ın yaratıcılığı, benzersizliği nedeniyle değerlidir. Yazarın kaleminden çıkan eserler, sanatının ürünüdür. Eseri okurken bunun Anar'ın zekası ve yeteneği olduğunu anlıyoruz. Anar ve L. Tolstoy'un psikolojizmlerinin anlatım yöntemlerindeki benzerlik ve farklılıkları karşılaştırarak bir sonuca varmak için yazarın eserlerine ayrı ayrı bakmak gerekir.

Anar, eserlerinde karakterlerin görünüş ve davranışlarının yanı sıra özel duygu ve hislerini de detaylı bir şekilde anlatır. Biraz belirsiz kalan olaylarla ilgileniyor. Bununla birlikte, yazarın kahramanlara ilişkini tam ve anlamlı açıklamaları, okuyucunun sonuçlar çıkarmasına olanak tanır. Anar'ın karakterleri tamamlanmıştır. Bu dünyadan istekleri ve hayalleri, hayattaki hedefleri bellidir. İyiliği, sevgiyi, merhameti, dostluğu, hakikati, doğruluğu ve adaleti arayan önemli bir yoldadırlar. Yazar, kahramanların psikolojik durumunu doğru ve ayrıntılı bir şekilde anlatır. Karakterlerin karakterizasyonunda rüyaların detaylarından da yararlanır. Buna bir örnek de Ağ Limanı'nın kahramanı Nemet'tir: "Nemet önce kendi kıyafetine baktı, sonra sıradaki yorgun ve bunalımlı insanların kıyafetlerine baktı. Sırada bekleyen kadın ve erkekler uyumlu yeşil çizgili pijamalar ve cüppeler giymişlerdi. Sadece Nemet mavi bir pijama giymişti. İnsanlar ona sitemle baktı. Nemat bu sıradaki insanların arasında tuhaf görünüyordu". (1. s. 20)

Yazarın amacı, Nemet'in kıyafetlerini diğer insanların kıyafetlerinden farklı göstermektir. Hikâyenin ilerleyen bölümlerinde Nemet'in rüya gibi düşünceleri, içsel yalnızlığı ve kahramanın rüyasını yansıtan yalnızlığı okuyucunun dikkatinden kaçmaz. Yazar, psikolojik tanımlamanın tüm yönlerinde ustalaşmıştı ve psikolojizm hakkında her şeyi biliyordu. Bunu yazarın "Alaka" öyküsünde gözlemleyebiliriz. "Alaka" hikayesi, ilginç ve farklı içerik ve olay örgüsüyle Anar'ın en başarılı eserlerinden biridir. Eserde yazar, insanın sanatsal düşüncesindeki duygu, his ve hayal gücünün maksimum artışının insan bilinci üzerindeki etkilerini dile getirmiştir. Eserde bir kişinin psikolojik imajını derinlemesine gözlemlerken kafası karışır. Sonuna kadar ne olduğunu anlayamıyor. Yazarın gerçek kahramanının canlı tasviri, okuyucunun tamamen olaylara kapılması ve kahramanın şokunu, heyecanını, korkusunu, paniğini ve çılgınlığını onunla birlikte yaşaması anlamına gelir. Olayları bize anlatan yazardır.

Yazarın amacı, insan zihninin gizli yönlerini ortaya çıkarmak ve bir kişinin düşüncelerinin, hayallerinin ve hayallerinin gerçeklikle ne ölçüde ilişkili olduğunu incelemektir. Öğrenci alışılmadık durumlarla karşı karşıya kalır, bu durumlar onda farklı duygular yaratır, iç dünyasında farklı süreçlerin oluşmasına neden olur. Kahramanın iç dünyasında korku, endişe, panik, şaşkınlık ve nefret duyguları sıklıkla birbirini izler. O neler olduğunu anlayamıyor. Eserde yazar, kahramanın iç dünyasını ve psikolojik deneyimlerini detaylı bir şekilde okuyucuya anlatır.

Anar'ın psikolojizminin önemli bir özelliği de kahramanın rüyalarını anlatmasıdır. Bu, yazarın kahramanın iç dünyasının derinliklerine nüfuz etmesi için bir araçtır. Yazar, rüyaların insanın zihni ve iç dünyası üzerindeki etkisini ustaca göstermiştir: “Korkunç bir rüyadan çığlık atarak, titreyerek ve çıkarak uyandı ama korkusu yenilmedi, aksine arttı, çünkü gerçekte karanlık odasında telefonun çaldığını duydu, ne yaptığını tam olarak anlamadan elini uzattı, telefonu karanlıkta buldu ve desteği kaldırdı. Zil sesi hemen kesildi." (2. s. 574)

Kahramanın psikolojik durumu da aynı şekilde okucuyu etkiler. Alışılmadık, gerçeklikten uzak, hayal gücünde gezindiğini ve gerçeğe yakın olmadığını düşündüğü olayların etkisi öğrenciyi bu durumun nedenlerini araştırmaya sevk eder. Bu anlarda öğrencinin kendisine bu evi kiralayan yaşlı kadına ve oğluna olan nefretini ve öfkesini görüyoruz. Hikayenin sonunda kahraman yorgun ve bitkindir. Olabilecek hiçbir olay ve durum artık onu şaşırtamaz, çünkü düşünmekten, süreçleri birbirine bağlamaktan ve varamayacağı sonuçlar çıkarmaktan yorulmuştur. Eserin sonunda yazar, okuyucuya ve kahramanına olay ve durumlar hakkında bilimsel bir açıklama sunar: Bilincimizin değişmez mantıksal yasalarını ihlal etmeyi kabul edecekmiyiz? Olayların nedenselliğini kırmayı kabul edebilecekmiyiz? Başka bir bilinç sisteminin varlığını kabul edecekmiyiz? Uzak dünyalarla iletişimin ortaya çıkıp çıkmayacağı onlara bağlıdır. Ama tüm olağandışı, anlaşılmaz şeyler için yine mantıklı rasyonel nedenler arayacaksak, alışılmış benzetmeler arayacaksak, zavallı aklımızın kısa arşınıyla bir şeyi ölçeceksek, o zaman kimseyle herhangi bir bağlantı kurmamız mümkün olmayacaktır.

Sonunda yazar, öğrencinin vardığı sonucu bu bilimsel açıklamaya uygun olarak tamamlar: “Öğrencinin yorgun zihninde bir fikir belirdi: kaderin aktığını düşündü, bu yüzden zayıflık göstermedi; Evet, yaşlı kadın, derin bir yarıktan gelen bilgin oğulları - ya aynı tek oğul - iki ya da bir - kim bilir? - her halde, bu garip aile - iki ya da üç, fark etmez - hepsi birlikte öğrencinin bilincini bozamaz ve kafasını dağıtamaz. O deli değildi." (2. s. 603)

Yazar, hikayenin olay örgüsünü ve içeriğini netleştirmek için karmaşık bilimsel ve psikolojik açıklamalar yapsa da bazı noktalar okuyucu için belirsizliğini koruyor. Bununla yazar okuyucuyu düşündürür ve sonuç çıkarmak okuyucuya kalır. Dolayısıyla Anar'ın nesirindeki psikolojizmi Tolstoy'un psikolojizminden ayıran özelliklerden biri de budur. Tolstoy eserinde okuyucunun anlamadığı ve açıklamadığı hiçbir noktaya eserinde yer vermemektedir. Böylece kahramanların kaderi okuyucuyu rahatsız etmiyor. Sonu belli, sonucu bellidir.

Anar, kahramanlarının karakterini ve eylemlerini dikkatle inceler, diyalog ve monologların özelliklerine, dış görünüşün ve iç dünyanın tasvirine her zaman dikkat eder. Yazar, özellikle kahramanın portresinin tasviriyle ilgileniyor ve bu yöntemi iç dünyanın bir görüntüsü olarak ustaca kullanıyor. Anar ve Tolstoy'un çalışmalarındaki psikolojizmin benzer yönlerinden biri, eserlerinde kahramanın konuşmasını, söylediklerini, düşüncelerini nasıl ifade ettiğini, kendileriyle ve başkalarıyla olan ilişkilerini geniş ve net bir şekilde tasvir etmeleridir. Hem karakterlerin konuşmalarında hem de kahramanın monologlarında yazarın konumuna özel bir yer ayırarak iç dünyanın daha net bir resmini ifade ederler. Elbette karakterlerin anlatımını doğrudan ve anlaşılır bir şekilde anlatarak okuyucuya tanıtmak mümkündür. Ancak kahramanı farklı yöntemlerle karakterize etmek, yazarın sanatının bir göstergesidir. Bir psikolog yazar için asıl olan içerik, olay örgüsü ve karakter değil, karakterin iç dünyasının hangi durumlarda

kendini nasıl ifade ettiği, duyguların onun ruhunda ve bilincinde ne gibi değişimlere yol açtığıdır.

Anar'ın eserlerine bakıldığında, yaratıcılığının özünün içinde yaşadığı sosyal çevreye odaklandığı görülmektedir. Eserler günümüze kadar modernliğini korumayı başarmıştır. Çünkü eserlerde gelişen olaylar toplum ve sosyal çevre ile ilgilidir. Yazarın bu tür eserlerinden biri de "Macal" hikayesidir. Anlatının özü ve önemi, günümüzde bile modernliğini korumayı başarmıştır. Yazar öyküye Zen felsefesiyle ilgili ifadelerle başlar. Bu, Anar'ın insanla ilgili her şeye, özüne ve insan kavramına ve özelliklerine ilişkin her şeye olan ilgisinin ve araştırmasının bir göstergesidir ve psikolojiye çok iyi hakim olmuştur: "Zen felsefesine göre insan kendini ve dünyayı anlamaya çalışır ve bu nedenle belirli bir faaliyette bulunur, yani kendini ve dünyayı değiştirir...

Geçmişteki günahları müteakip iyiliklerle yıkama fikri, gelecekteki mutluluk uğruna şimdiki kötülükleri haklı çıkarma fikri, Zen etiğine temelden aykırıdır..." (3. s. 280)

Hikayedeki olaylar yazarın kendisi tarafından anlatılmaktadır. Eserin kahramanı Fuad'dır. Fuad, iş odaklı, yetenekli, genç bir mimardır. Hayattaki başarısının en önemli sebebi ise Rumiya ile olan evliliğidir. Rumiyyenin kocası için babası Şövqü hoca tüm şartları sağlamaktadır. Ona şehrin sovyet sisteminde bir iş bulur, şehrin en güzel yerinde bir apartman dairesi satın alır ve şoförünü Fuadgil'in hizmeti için gönderir. Böylece aydınlık, güzel bir ortamda, her türlü imkana sahip bir şekilde yaşayan Fuad'ın çocukluğu, şimdiki hayatından tamamen farklı geçmiştir. Fuad'ın çocukluğu tek odalı bir apartman dairesinde, ortak bahçesi rutubet kokan küçük bir evde geçti. Yazar, karakterin çocukluk anılarının unutulmaz taraflarını çok etkili ve detaylı bir şekilde anlatıyor. Çocukken bmw arabasıyla gelen sınıf arkadaşının onu şımarttığını ve eve götürmediğini unutmaz. Daha önce partnerinin neden böyle davrandığını anlayamasa da reşit olduğunda bunun sadece kaprislerinden ve özgüven duygusundan kaynaklandığını anladı. Bu nedenle çocuklarını okula arabayla götüren Kasıma arabayı doğrudan okulun önüne park etmemesi talimatını verir. Yazar, kahramanı Fuad'ın iç duygu durumlarını net bir şekilde tasvir ederek okuyucuda yaratmak istediği izlenimleri oluşturmayı başarmıştır. Hikayede anlatılan tüm anlar, kahramanların karakterini ortaya çıkarmaya ve onları karakterize ederek iç dünyalarını açıklamaya yöneliktir. Hikaye boyunca Fuad'ın çocukluk anılarının iç dünyasında bıraktığı derin izleri görüyoruz. Okulda Zeydulla ve arkadaşları tarafından tehdit edilerek babası hakkında aşağılayıcı bir ifade yazmaya zorlanan Fuad'ın hafızasına kazınır. Çocukken bir gün onlardan büyük bir intikam alacağını düşünür. Ancak yazar daha sonra zaman kesiminden bahsediyor. Fuad'ın fikirleri ve düşünceleri de yaşlandıkça değişir ve her şey anlamsızlaşır ve Zeydulla'nın mevcut durumu ondan daha büyük bir intikam alır. Fuad Zeydulla ile tanıştığında, onu tanımasa da sonradan hatırladı. Ama Fuad artık onunla sohbeti bozmak ya da ağzından payını ona vermek için çok geç olduğunu çok iyi anlıyor. Çünkü Zeydulla artık aynı kişi değildir ve belki de yaptıklarından pişman olup Fuada yaklaşmış ve ondan özür dilemek istemiştir. Eserde Fuad'ın anne babasına karşı tavrı, yazarın anlatımı üzerinden okuyucuda yeterince eksiksiz bir fikir oluşturmaktadır. Fuad anne babasını çok sever ve sayar, çocukluğunda büyüdüğü evi, kokusuna ve darlığına rağmen onun için tanıdık ve sevgili bir yerdir. Ancak Fuad'ın akşamları anne ve babasını ziyaret edip, onlarla konuşacak vakti yoktur. Ayda sadece yarım saat onları ziyaret etmeye zaman ayırabiliyor. Ama yazar hikayeyi çok güzel bir sonla bitiriyor. Böylece insan için en önemli şart ve manevi değer olan anne baba sevgisini her şeyin üstüne koyan Fuad, toplantıya katılmayı reddedip babasının evine dönür, Kurban kişinin balığının suyunu deyşdirmeye annesine yardım etmekle hikayeni sonlandırır. T. Salamoğlu söylüyor ki, "Macal" öyküsünün kahramanı Fuad, çevrenin kendisine çizdiği "kesin hayat programını" bir kenara atarak "başarısızlık"tan "macal"a geçmiş ve böylece ruhsal gelişiminin temeli olan öz-farkındalık yoluyla özgürlüğe kavuşmuştur." (4.s. 133) Hikâyenin sonunda Fuad, o manevi tekamül noktasına ulaşır.

Eserde yazar, kahramanı Rumiyyeni detaylı bir şekilde anlatmaktadır: "Uzun bir süre Fuad, Rumiyyenin şakalarına alışamadı, daha doğrusu onun ne zaman ciddi, ne zaman şaka yaptığını duyamadı. Rumiyye suratını buruştururken bile ciddi bir ifade alırdı. Ancak gözlerinin derinliklerinde şeytanlar oynamaya başlardı." (3. s. 283)

Yazar, bu açıklama aracılığıyla karakterin özelliklerini ortaya koymaktadır. Yazarın anlatımı, Rumiyyenin büyüdüğü ortamın onun karakterini nasıl şekillendirdiğini ve ifade ettiğini ayrıntılı olarak anlatır. Fuad'ın anne babasıyla olan ilişkisini ve çocuklarının Fuad'ın babasına ve annesine karşı tavrını gösteren Rumiyye, karakter olarak kibirli bir kadındır. Fuad, kendisinden daha aşağı bir sınıfa tepeden bakılmasından da hoşlanmaz. Ancak o, bu şekilde büyümüş ve yetiştirilmiştir. Yazar, eserde Fuad'ın Rumiyye ile aşk nedeniyle evlendiğini belirtmektedir. Gerçi herkes Fuad'ın Şövgü bey'in kızını geleceğini güvence altına almak için satın aldığını düşünmektedir.

Eserde kahramanların iç dünyası, duygu ve düşünceleri yazarın anlatımında aynı zamanda diyaloglar aracılığıyla da dile getirilmiştir. Yazar, kahramanlarının ruh halini daha iyi, daha net ve mecazi bir şekilde iletmek için genellikle günlük ayrıntıları ve ayrıntılı açıklamaları kullanmıştır.

Tolstoy'un psikolojizminde olduğu gibi kahramanın iç dünyasının rüyalar ve anılar aracılığıyla, yazarın anlatımı ve diyaloglar aracılığıyla ifade edilmesinden, psikolojik belirleme araçlarının anlatıda ifade edilmesinden, yazarların psikolojizmi ifade etme yöntemlerindeki benzer yönlerden bahsetmek olur. Özellikle Tolstoy'un eserindeki psikolojizmin anlatım araçları ile Anar'ın eserlerindeki psikolojizmin anlatım araçlarının (yazar anlatımı, diyaloglar, iç monologlar, rüyalar, anılar vb.) aynı olduğunu belirtmek olur. Ancak Anar'ı Tolstoy'dan ayıran temel özellikler, kahramanların iç dünyaları ile dış dünyaları arasındaki bütünlükdür. Kahramanın dış görünüşü ne kadar güzelse, iç dünyası da dış görünüşünü o kadar tamamlar ve Anar, Tolstoy'un aksine kahramanlarının karakterini geliştirmez. Kahramanlarının karakterleri biçimlendirilmiş, istikrarlı ve değişmez. Bu nedenle bazen yazarın tamamlamadığı öykülerin sonundan okuyucunun sonuçlar çıkarması zor olmuyor.

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THE MYSTERY OF EDWIN DROOD:
A LESS KNOWN WORK BY CHARLES DICKENS

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Abstract

The purpose of this paper is to analyse the novel *The Mystery of Edwin Drood* by Charles Dickens both in the context of the Victorian age, when penny dreadfuls were fashionable, as well as in the context of contemporary readers, who may find this work the most interesting if they are mystery, police novels or film noir fans. The story can be appealing regardless of historical context. We are told about two young people who have fallen in love, Rosa Bud and Edwin Drood. Things begin to go wrong when Edwin Drood suddenly disappears. We do not know if he was murdered, who murdered him, or if Edwin Drood did not make a set up and created the scene to stage his own disappearance. Readers and characters share their doubts by seeing how all evidence can lead us all to suspect Edwin's uncle, John Jasper, since he also wanted to be together with Rosa. Things are getting even more complicated since the ending of the novel is left unclear. This is what leads readers up to these days to still be tempted to speculate what has been going on in the story.

The name penny dreadful refers to a type novel of mystery and crime that was sold cheap and the story was also extremely exciting for the readers. In the 19th century, there was a newspaper called *The Penny Dreadful*, where such serial, sensationalist stories were published.

Regardless of the age, there are some universal elements that can draw readers towards some stories: sensationalism, in this case,together with the thrill of excitement, is one of them. Such a novel could be used to attract students towards Victorian Age literature and to Dickens' works. They may find this novel as closer to their tastes and more relatable than the others.

Keywords: Police novels, psychology, sensationalism, Victorian age, catharsis

1. INTRODUCTION

The works of Charles Dickens were, at the time they were published, mainstream and not every reader could afford to buy them. At the time, penny dreadfuls were fashionable. These were stories that were focused on mystery and gothic plots, often including crimes, but which were also very cheap – one penny, while works such as Dickens' may have been twelve shillings (Cappa, 2014). Charles Dickens is associated by foreign students studying the English language, literature, culture and civilization with the historical times of the Victorian Age.

This age is nowadays popularized through images associated with Gothic and Gothic Lolita fashion subcultures, which draw their inspiration, to some extent, from the dresses and accessories ladies wore at the time. Some of the outfits are adapted to the contemporary times, especially Gothic Lolita fashions, which are a mixture of mysterious, dark and cute. Other outfits seem to be drawn precisely from the respective time period. For these subcultures, background images for photographs shared on social media include deserted, old places, believed to be haunted.

In line with the mood of Gothic subculture, novels and film adaptations of *Dracula* and *Frankenstein*, are often thought of (Martin, 2002). Yet, these two works of fiction deal with fantasy characters and happenings, not with real-life ones. Charles Dickens' novel *The Mystery of Edwin Drood* deals with real-life characters and situations, with incidents that are expected to have a solution which can be found if reason is used, just like in police and detective novels.

According to Martin (2002), we can find a link between heavy metal music and Gothic fiction under the form of the repressed, which could have a liberating effect on the readers and listeners. However, this could all be a question more related to the *catharsis* associated with fictional works. Aristotle referred to the Greek tragedy that was played on stage as an example of catharsis, and it involved a process of purification or cleansing (Powell, 1995): watching or reading a tragedy led to the "purging of the spirit of morbid and base ideas or emotions by witnessing the playing out of such emotions or ideas on stage" (Aristotle, 2001). This can be so since adolescents discover various moods, some of which can be really dark, and, overall, all emotions are lived to their maximum degree, since at that age the evolution of the brain is very fast, and new connections are constantly being established (Dumontheil, 2016). The reason why especially adolescents and young adults are attracted by Gothic fashion, subculture, as well as Gothic stories may be related to the stages their brain development goes through. What is more, Gothic subculture can lead to glammorising stories that have such features, which is why *The Mystery of Edwin Drood* may have more appeal on the young students than other works he wrote. Young students may find this novel more relevant to their interest and more easily relatable to their preoccupations, especially if they belong to, or are familiar with, Gothic subculture, at least as far as their fashion tastes are concerned.

The familiarity with Gothic subculture and heavy metal music may make the Victorian age, at least through some works, more interesting and to provide more familiar grounds, as well as a reality to resonate with for young adults and students, be they of highschool age or doing their university studies. According to Kohlke (2018), we can, indeed, speak of presentism when it comes to the penny dreadfuls, since this type of fiction "invites readers. viewers to infer seeming parallels and continuities between the 19th century and postmodernity." Thus, the fact that this type of fiction is relevant has been acknowledged.

While Charles Dickens is not included in the penny dreadful writers' category, he does show, at least in some of his works, or in some parts of his works, some elements which are compatible with the penny dreadfuls that were, according to Cappa (2014), popular within the time period of the 1830s-1900s). According to Cappa (2014), the penny dreadfulls were also called "bloods" and "shilling shockers," since they included stories whose main elements were murder, melodrama, vulgarity, Gothic settings, as well as characters that were fantastic and frightening, such as vampires, wherewolves, but also human, e.g. pirates, robbers, as well as characters from the past, e.g. gladiators from ancient Rome. Highwaymen were also present as characters in penny dreadfulls, with their revolvers kept ready (Springhall, 1994).

Why is Charles Dickens not included in this category? This is, first of all, since he was a literate and educated author. In contrast, the authors of the penny dreadfuls belonged to the British "semi-literate, working class" (Cappa, 2014). The penny dreadfuls' main purpose was to make the readers feel the excitement, to feel the chills and also the thrills of stories whose purpose was to entertain, and not necessarily to bring up a deep exploration of the topic. The penny dreadfuls, in contrast with works such as those by mainstream authors like Charles Dickens, "depend more upon sensationalism than upon literary or artistic merit for their success" (Springhall, 1990).

Penny dreadfuls refer to "strange, horrid and sensationalist tales" (Haining, 1975). Some penny dreadfuls had their setting in London, "a London of the very rich and the very poor, of

sensational crimes and horrible violence, and of *laissez-faire* capitalism, which privileges questions of profit over questions of morality. Penny dreadfuls were not pure, but vulgar, violent" (Lee & King, 2015). Penny dreadfuls referred to those "stories of monsters, mysteries, and the supernatural," which were, in fact, "as Gothic as they come" (The Gothic Bookworm, 2020).

Some elements in some of Dickens' novels may suggest the mood set up by penny dreadfuls and, thus, be found appealing by a young public of readers nowadays who are familiar with Gothic subculture. For example, in *Bleak House*, we deal with a murder, that of Tulkinghorn, and with an arrest, that of Trooper George, but these are just "red herrings, designed to confuse the issue, but ultimately they make possible the complete unveiling of the pattern of human relations that it is the chief business of the novel to disclose" (Donovan, 1962). Other incidents in this novel which remind of penny dreafuls are the following: "Jo's disappearance from the stable," "the mystery of Krook's papers," as well as "Lady Dedlock's whereabouts after her flight" (Grenander, 1956).

Close to the penny dreadful is Charles Dickens' short story *A Christmas Carol*, which deals with ghosts and fantasy. The old Scrooge finds himself guides, on Christmas night, by three ghosts: of past Christmas, of present Christmas, and of future Christmas. Scrooge feels guilty for behaving badly to his employee, who is a poor man with a big family, and whom he asks to work for him during the holidays. Scrooge is rich but not generous, and after he sees the consequences of his deeds, he decides to improve. Due to the supernatural elements and scary scenes, this short story can be seen to be as thrilling as a penny dreadful.

Additionally, the old lady Miss Havisham in *Great Expectations* and her room, which has remained the same from the day she was left at the altar during her wedding day by her future husband, can be seen as part of such novels. Her house is very old and untaken care of. She plots to take revenge on all men, Pip, a young boy included, by making him be seduced by Estella. Pip, in turn, is turned, secretly, into a gentleman by a convict whom he saved from being caught in his childhood. All these plots behind the young couple could be considered as part of a penny dreadful plot.

The influence of Dickens' character typology and writing style, as well as plot, has influenced the penny dreadfuls (Springhall, 1991). According to Kohlke (2018), the penny dreadful relies on "'Dickensian' and Gothic stereotypes of the period." Additionally, according to Shatto (1990), for some readers, "Dickens looks and feels as cheap as a Victorian penny dreadful."

Even if we may find elements which inspired the penny dreadfuls in Dickens' works, one of his works stands out. This work is *The Mystery of Edwin Drood*, which has actually remained unfinished by its author. We do not know how Dickens would have continued and ended it, which creates an additional mystery.

2. MATERIALS AND METHODS

Human beings seem to be, as a rule, attracted to mysteries, since the mysteries give rise to imagining various scenarios and solutions, in the attempt to solve them. We can add this universal feature of human beings to the fact that young audiences can find such novels attractive through their familiarity with Gothic subculture. At the same time, curiosity is just one of the features of the human beings, which can drive them to exercise their imagination to understand what some episodes in history are about, or what an author wanted to mean through a novel, all the more since it is unfinished. We can also find instances of further exploring certain stories through looking at fan fiction, which develop alternative scenarios with respect to various episodes, as well as with respect to alternative endings. At the same time, sequels are continuation of certain novels, which can be written by the same author or by someone else,

and where readers can find the exploration of what can happen further or what has happened previously to the action of the previously read novel.

The very plot of Dickens' *The Mystery of Edwin Drood* focuses on a mystery to be solved within the fictional world, reminding of a whoddunnit, or detective, police novel. The whoddunnit is defined by the Cambridge dictionary available online (2023) as "a story about a crime and the attempt to discover who committed it." According to the same source, readers need to wait until the end of the novel to find out who the murderer or criminal is.

The Mystery of Edwin Drood by Charles Dickens has been sparkling interest since it is one of the unfinished novels. At the same time, it looks so close to sensationalism and to the penny dreadfuls: it contains many mysterious happenings. There is a young couple, formed by Edwin Drood and Rosa Bud, whose story intertwines with that of John Jasper, who, from the beginning of the story, is involved with opium. He is also Edwin's uncle, and he is also attracted to Rosa. Two other young people, brother and sister, Neville and Helena, appear as confessors to Edwin and Rosa, who have been arranged to marry by their fathers. Neville becomes attracted romantically to Rosa, yet he notices how Edwin easily quarrels with Rosa, which is a usual habit of theirs, and Neville believes Edwin does not realize how lucky he is to marry Rosa in the future. Rosa tells Helena how she is afraid of her music master, John Jasper, as she studies in the Nuns' House. Edwin and Neville get into conflict, a conflict which is handles by Reverend Crisparkle, by inviting the two young man for a dinner in the home of Jasper. Mr Grewgious, the guardian of Rosa, reveals to her that her father left her a rich inheritance, which is not given to her function of marrying Edwin. She can get the inheritance regardless of her choice. A transaction involving a ring given by Rosa's father to her mother, which should be given to Rosa by Edwin as a sign that he wants to marry her, appears, mediated by Mr Grewgious. It is a mutual decision between Edwin and Rosa to decide not to marry. A scene with a crypt follows, as Durdles leads Jasper to the cathedral crypt. Jasper gives Durdles wine, which leaves him uncoscious. A boy named Deputy is believed by Jasper to spy on them and Jasper begins to strangle him, but then stops. After the reconciliation dinner between Edwin and Neville, Edwin disappears. Jasper encourages the rumours that Neville may have murdered him. After half a year goes buy, Jasper confesses his love to Rosa, she refuses him, but he threatens her to ruin Neville. As a result, Rosa leaves to her guardian in London. The novel began with Jasper leaving from an opium den, a place where he could get opium. For the first time after Edwin disappeared, Jasper visits the opium den again, and is followed by the woman running it. She finds out who he is. However, the details following are unknown. Dickens has left no clue as to his further plans with this story. This was his last novel, and it has remained unfinished, giving thus rise to various speculations on the part of his readers (Orford, 2018), thus enhancing the penny dreadful mood. The solution cannot be found since other clues are missing, as well as maybe other structures of the plot. The open ending was not deliberate on Dickens' side, which makes things even more complicated for his readers.

The action occurs in a cathedral town, and we have a mystery (Mitchell, 1966), which can be enough to present us, in sharp contrast, spirituality, or, at least, the expectation of finding peace and spirituality in this place, while mystereious disappearances and threatenings occur. We could call this a contrast, which is very powerfully resented, emotionally, by the readers. We also hear of vices, such as the suggestion, right from the start, of Jasper being an opium addict, or, at least, an opium user. Jasper does work in a church environment, teaching Rosa music lessons, but she confesses that she is afraid of him. He is both a mysterious character, as well as a character inspiring evil intentions, as it seems from young Rosa's reaction towards him. This leads her to instinctively reject him. The behaviour of Jones is created through suggestion, by using various characters' impressions, and, in the meantime, the reader comes to believe that there is something wrong in the intentions of this character.

The story becomes mysterious since the reader does not know which character to trust, and get at least one clear persoective. In the novel *The Mystery of Edwin Drood*, according to Mitchell (1966), "no single character occupies the stage for a majority." However, readers do get right from the beginning an illustration of Jasper's actions, so that we feel that "the narrative begins with Jack Jasper and events collect (or are organized) around his intentions, he may be said to provide a partial or distorted focus. for the novel's multiplicity." We could notice how "The novel begins with a doubling of focus which makes us aware of two realities: an inner and an outer, the fantastic, opiated mind of Jasper envisioning Turkish palaces and dancing girls and the more local reality of the English Cathedral Tower in the world just outside the window." Since Jack is an opium user, we could feel tempted, as readers, to hold back from trusting completely his perspective. We may not be able to make a clear distinction between what is reality and what is fantasy, in a manner similar to his own. Later on, we may feel tempted to believe that fantasies actually hide real, honest wishes: "In the second paragraph of the novel we learn that the external reality (the cathedral rising in the 'background') does not exist: it is less real than the internal fantasy, for the former is questioned, whereas the latter is not." Readers realize that they have been witnesses to opium-generated fantasy vision, and not of actual reality. Yet, we may be tempted to draw some conclusions and impressions about Jasper, as we see how he values having fun and pleasure, while he actually should be an example of moral correctness, since he teaches music in a religious setting. His suggested dark inner reality makes us think and look on him as one of the suspects for the eventual murder of Edwin Drood. Yet, could he have really done it? After all, Edwin and Rosa decided to end their engagement on friendly terms, and, since Jasper was Edwin's uncle, he may have found this out in time to stop. On the other hand, Neville was, just like Jasper, in love with Rosa and would had liked to have her for himself. Readers can start speculating from here that, maybe, Jasper and Neville may have not found out in time about the breaking of the engagement between Edwin and Rosa, which may have led to one of them making Edwin disappear from the picture. The fact that Jasper asks Rosa to marry him can further raise the readers' suspicions, since Jasper may have been jealous on his nephew and made him disappear, by murder or by keeping him locked away somewhere. On the other hand, since Jasper has fantasies generated by his opium use, we may not even trust him completely as a character, since maybe he is not completely responsible for his acts. He may have done something to hurt Edwin while losing control over reality. Anything could be possible.

Using opium leads to more and more questions regarding its effect on affecting and distorting perception of reality. Opium is understood as the real protagonist of Dickens' last novel (Tracy, 2009).

Through his use of opium, Jasper becomes open to the readers by being honest to them about his deepest and darkest desires. He no longer cares about the external appearances, which are there to play nicely in front of society and to show off a perfect image, which nobody can, actually, have. That perfect image set up for society could be seen as the result of hypocrisy. During the Victorian times, it was a taboo subject to be honest about the deepest and most intimate emotions and desires. We can see these desires coming out as blamable and dangerous if not kept under control, as in the novel *Dr Jekyll and Mr Hyde*, which was also a product of the Victorian age, and which still continues to be seen as relevant in our contemporary times, through its continuous adaptation into film versions. The darkest wishes and fantasies could be shown in dreams, naturally occuring during sleep, or through various hallucinations while using drugs. In the case of Jasper, control over not revealing darkest wishes is shown in the story, especially since on of his opium dreams could be interpreted as anticipation of Edwin Drood's murder: the opium dream is about "a journey among great heights and depths with a doomed fellow-traveller" (Tracy, 2009).

According to Freud (1920), the dream represents the fulfillment of a wish. Indeed, in Jasper's dream, we assume that the traveller that is doomed is Edwin Drood. The character of Drood, in the dream, is, however, disguised, showing that Jasper does not actually completely confess to himself how much he hates Edwin, especially since he stands between him and Rosa. We could see here an activation of Jasper's Oedipal complex, which makes him want to have the woman he likes, Rosa, symbolically the mother figure, and kill, symbollically, the father figure, Edwin. The Oedipus complex, or its reactivation for characters in certain situations, has also been illustrated in tragedies such as Shakeapeare's *Hamlet* (Loewald, 1979). Readers may be tempted to draw parallels with the outcome, tragic, of *Hamlet*, and be led to believe that something evil is about to happen. Yet, we cannot know. For the time being, we as readers are simply overcome by the violence of the feelings shown by Jasper towards Edwin and by his determination to get Rosa. The dreams intensify and become clearer, eventually showing off Jasper directly killing Edwin to have Rosa (Tracy, 2006). Such dreams can be considered childish, showing directly the fulfillment of the wish, and are generally specific to young children. They can also be considered traumatic dreams, with everything shown directly, in this case the dream being about the intense wish to get Rosa from Edwin.

What makes us shiver with fear when thinking about the interactions between Rosa and Jasper have been related to mesmerism (Cox, 2000). Indeed, the novel lets readers hear Rosa's confession to her friend Helena that Jasper has used the power of his look on her, making her be in his power, without him even saying a word to her. She feels the power of his gaze and how he is making her his "slave" while she is singing and Jasper is playing, giving her hints about the musical notes (Cox, 2000).

Definitely, such impressions draw the readers further into the mystery, presenting Jasper as a man with will power to pursue his wishes. In this case, he wants to have Rosa for himself. However, readers cannot see this as a plot regarding a man in love with a woman that rejects him. He seems to be very powerful with every new moment of rejection, or every new suggestion of rejection from Rosa.

The way readers of this novel feel has been intended by Dickens: the author was "intent upon creating a novel whose major interest lay solely in suspense and mystery... less upon writing the sort of complex technical mystery story which so many of the ingenious unravellers of Drood's puzzle have invented" (Hark, 1977).

Therefore, the effect on the reader had long been planned by Dickens.

3. RESULTS

The emotional impact of Dickens' last novel is so intense, since it is based on one of the basic traumas of a child, and on its reflection on his personality and destiny as an adult: the Oedipus complex. Jasper goes over the tabooed wish of possessing the mother and killing his father, simbolically, through wishing to get Rosa and make Edwin go away, a desire which is expressed clearer, repeatedly, and more and more intensely as the novel progresses.

The fact that Jasper consumes opium offers an explanation as to why we have access to his dreams and wishes. Opium acts as a disinhibitor, allowing someone to express himself freely, letting go all moral rules they have been taught to take into account in society.

Readers may realize that they are getting aware of the power of anyone's destructive impulses and wishes by reading this novel. They may feel frightened at the very suggestion of what may have become od Edwin Drood, a character that we only know about that he has disappeared. His murder is assumed by witnessing the opium fantasies of Jasper.

The power of suggestion of a universal psychological complex, such as the Oedipus complex, and its associated destructive drives lies at the core of this story. The others can only be exterior details, which simply lead to spark some additional interest here and there.

The reader is caught in a game of wishing to find out who the murdered is, but readers cannot have any certainty, since the novel was left unfinished. This is different from a deliberate open ending, which leads reader to ask more and more questions and try various solutions to feel that they have closed down this mystery.

The similarities regarding the psychological and emotional effect of the novel with the penny dreadfuls may not be left to chance, since we understand that Dickens was deliberately trying to make this novel different from all the rest, by writing for suspense's sake.

4. CONCLUSION, DISCUSSION, AND RECOMMENDATION

Dickens' last novel becomes, through its emotional impact, one of his most attractive ones, due to several reasons. One of them is the reason that mankind has a universal inclination towards enjoying how to explore solutions to mysteries of every kind, including alternate realities. Jasper could be seen as exploring, through opium, granting his wish to have Rosa and make Edwin go away. The fantasy is fulfilled in a violent way, since Edwin gets killed. The repetitive nature of the dream reflects Jasper's unsolved Oedipus complex, due to the trauma of not understanding why he cannot set the father aside and get the mother. While normally he should have identified with the father and understood that those are his parents and that it is impossible to marry one of them due to incest reasons, he keeps wishing to fulfill his wish. He struggles to convince Rosa to accept him, yet she seems, intuitively, scared of him, as if she is sensing his dark wishes and fantasies. Another reason why this novel is attractive is due to the timelessness of whodunnits, crime or police novels, which, it is true, may have deeper impact during adolescence. However, thrillers destined for adults including many of the ingredients of penny dreadfuls are also popular and very much appreciated by the readers. At the same time, the Victorian age, with its Gothic elements, form an atmosphere that is so familiar to young people belong to, being used to, or being interested in Gothic subculture. For these reasons, readers may find this novel very much relatable and relevant to their interests, even if so much time has passed since the time Dickens wrote it, and the world around us, including its mentality, have changed.

Universal elements such as fantasies, dreams, and wish fulfilling following faulty Oedipus complex resolution also help this book sound so contemporary, in an unexpected way.

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ASPECTS OF THE HUMAN NEED TO EXPLORE

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Abstract

The purpose of this paper is to analyse the means through which human beings prove their need to explore unknown territories. This need has been made visible through practices such as discovering new continents and conquering new lands since the beginning of history. Later on, the need was visible in the explorations of ancient sites, and discovery of traces of ancient civilizations. People have, for years on end, made hypotheses about civilization mysteries such as what happened to the Maya civilization, to Atlantis, what the purpose of the huge statues on Easter Island was, how the ancient civilizations lived their daily lives, and so on. The space has been a topic of discovery and exploration as well, from both scientific and fictional points of view. Science fiction literature has, during some times, been very preoccupied with exploring new galaxies, universes, and planets, and finding life there. The future was also explored through fiction. For instance, the film (1968) and book by Pierre Boulle (1963) Planet of the Apes explores the far-away future of the planet Earth, which is ruined, and where we find a civilization that reverses the theory that humans evolved from a common ancestor of monkeys. Therefore, we can also explore scientific theories, and imagine what would happen if the situation was the other way around. Nowadays, virtual reality technologies ensures various simulations of situations, which include exploring fictional worlds, riding a train in a fun park, flying a plane, even doing surgery using virtual reality glasses, training as militaries during a war, and so on. Even our dreams have been the topic of exploration, as we can see from films based on the theory and technique of controlling our dreams, meaning that we can be aware that we are dreaming and then explore our dream world.

Keywords: Ancient sites, psychology, science fiction worlds, values, virtual reality

1. INTRODUCTION

We could say that the way our world looks like today is so due to the urge human beings have always felt to explore. They have explored not only physical, geographical territories and various surroundings, but also scientific inventions appeared as a result of this need. The need of human beings to understand how the world worlds, and various natural phenomena in the world as well, can also be related to their need to explore the cases and to find a scientific explanation, which is how the field of science has appeared. We could say that we are now benefitting from all the contemporary comfort of life due to the developments which have occured through the landmark historical episodes, such as the Industrial Revolution, when people no longer needed to work in rural areas to ensure their existence, and food resources where provided to them, which in turn led to them to change their homes and move from rural to urban areas, and, afterwards, to put it briefly, the technology which led to the possibility of creating smart cities and digitalized systems for use in everyday life, in institutions, with respect to parking, and so on was another significant historical episode. We could better detail the need

to explore as not only just the need to discover what there already is around us, but also as the need to create, and to make innovations, which are definitely visible in the field of technology, and in the way it has improved our everyday lives through the centuries. Inventions such as electricity, the light bulb, having the possibility to have running water in our houses, a heating system, and, gradually, moving on towards entertainment possibilities from radios, television, cinema, to laptops, smartphones and tablets can defininitely prove and sustain this idea. The human beings have the power to intervene on their environment and to change it, as we have seen throughout history from the way they have built cities, from the oldest times.

From ensuring basic living conditions for survival and basic comfort, to ensuring possibilities for even higher comfort and entertainment, as well as possibilities to create art at a high level, this can be seen as the trajectory which drives humanity to continue to pursue their will of survival. From direct confrontation with real life situations, we have reached the level of comfort where we can just simulate various dangerous situations with virtual reality glasses, e.g. how to act during a military conflict, how to deal with doing surgery as a student in Medicine, how to maintain balance when going through a train ride in the fun park, and so on.

2. MATERIALS AND METHODS

The analysis of significant historical episodes in the history of mankind, as well as of cultural products, will be considered in this section. Cultural products are understood as “intangible goods of unincorporated group or community authorship” (Scafidi, 2001). In the case of some inventions, we may, indeed, associate the inventor with a certain culture, according to the culture to which the inventor belongs or which helped improve the respective invention. However, we can also speak about discoveries such as the fire, for which we do not have an associated name. The same goes for the discovery of salt, or for the discovery of its uses in the field of medicine, or even its benefits in preserving food. About the wheel (Hooke, 2000), we only know that it was invented by the Sumerian people, so we can only locate this invention within a certain cultural and geographical space. Later on, through collective effort, the wheel is improved (Bulliet, 2016), with new features being added. Other inventions, such as the printing press, are associated with the name of an inventor, Johannes Guttenberg (Rees, 2016). In other cases, we may simply speak of discoveries which went on further after a landmark was established which set up the way, e.g. the first man walking on the Moon.

The need to explore which is constant throughout the history of mankind can take both literal, physical form, of actual exploration of territories, as well as exploring in a figurative manner, regarding various theories, hypotheses, and possibilities for creating break-through innovations. Imagination in fiction is another way of expressing the need to explore, both hypothetical fictional worlds, such as utopias, dystopias, science fiction worlds, which can include life on other planets, as well as fairy-tale worlds, where magic is something which is part of everyday life, due to the suspension of disbelief, when the readers ignore certain actions, objects, and characters with respect as to how realistic they are. Even if they are not realistic, the reader becomes more open-minded, or simply goes along with the story, breaking free from the constraints and usual laws of the real world. Flying and talking horses, or apples made of gold that grow on trees are accepted in spite of the knowledge of them being pure fiction. The reader becomes willing to team up with the author or story teller in his/ her wish to explore new worlds and new possibilities, as well as other laws of functioning which hold valid in other worlds than our own.

It is the need to explore that drives humanity when they seek out a new invention, and do research and experiments in order to make it work.

One of the first main events in the history of humankind could be the discovery of the fire (Gowlett, 2016), together with the possibility of human beings to control fire and to use it for various purposes, from warming themselves, to cooking food, to creating tools, and to survive by keeping dangerous wild animals away from their places.

Another discovery concerning an element that was already there could be considered the discovery of salt (Adshead, 2016), since it could be used as a preservative for food, as a beneficial element ensring the pH of the soil, as well as an element used in medicine for purposes such as wound disinfection, healing, in various potions to cure respiratory diseases, etc. Human beings try various things in an expression of their need to find new uses of various substances and objects, and which can then lead towards other discoveries, in turn. This attitude has continued in the field of medicine, through finding various vaccines, cures, and treatments for many diseases which were, at first, considered deadly. From this point of view, the need to explore for medicines and cures in the field of medicine has proven to be an essential attitude to ensure survival of mankind.

During the era of the great discoveries, when in fact humankind was discovering the way our Earth looked like, explorers ventured with saling ships on various expeditions to discover new territories and also new ways of life belonging to other cultures. They have always felt the need to explore what lay beyond our own territories and beyong our own cultures, always wondering what they could find there. The entire earth was, then, no longer a mystery. Different cultures, different ways of thinking were also explored, and this attitude continues until today, when we explore other cultures through looking at their cultural products, which include various habits, old and contemporary, visits to their country, learning their language, reading about their traditions and practices, reading fictional works set up in the past, all in the hope to explore more and more about other mentalities. Practices such as motivational techniques, mindfulness, finding happiness and purposes in life, have also been taken over from one culture to another, e.g. Western culture members have been willing to explore new ways of thinking regarding dealing with stress, relaxing, and living the moment, instead of worrying about the future or feeling nostalgic about the past by borrowing ideas and practices from Japanese Zen Buddhism and Indian Buddhism. In this way, Western culture members show willingness to have an open mind to thinking differently than they had been taught by the culture they were brought up in.

We also enjoy fictional stories about characters doing explorations. As an example, Jules Verne's books were very popular among teenachers, since their urge for exploring was satisfied by going through the various adventures described there. These explorations inluded sea trips, balloon trips, underwater trips, and also the exploration of various theories and hypotheses belonging to the field of science, e.g. in *Five Weeks in the Balloon*, the theory of going with or against the sense in which the Earth rotates may lead to arriving in the same spot one day later or earlier.

Exploration of the world, be it external or internal, the latter referring to the psychology of characters and the way they may react in various situations in relationships, at personal, romantic, family or friends level, or just at social level, can show us how it can end in creativity. All literary works are part of creativity, 100%, or a lesser percent, or starting from some real life situations which are then changed to the storyteller's liking. Through novels, the authors can start exploring the courses of some human lives, in various circumstances. The readers can join the writers on the road of exploration. External explorations of the world in works of fiction can consist of the way characters lived in certain historical periods of the past, or the way they could live in certain periods of the future. As an example, in the novel by Pierre Boulle (originally published in 1963), *Planet of the Apes*, and in the first film made after it (1968), we can witness a reversal of the usual theory we have grown accustomed to, namely, that man has

evolved out of a common ancestor we had with the ape. In this version of the theory, we see how the reversal is explored, namely, some space explorers get to travel a lot further in time in the future, when they reach a planet where the humans live in nature, just like apes, or other animals, where humans cannot talk, and cannot understand reality as we have been used to see in humans, and that, instead, apes are the intelligent life form, being doctors, researchers, and carrying out experiments on humans, just like we do on various animals. This is an exploration of a "what if" type of scenario, where we could start wondering and imagining what if everything were the other way around, for instance how would the Earth look like? It is revealed, in the end of the film, that the planet the explorers had landed on, was, actually, Earth, but somewhere in the distant future. As a clue, one of the explorers sees the remains, in ruins, of the well-known Statue of Liberty. The shot gradually shows, almost as if drawing on, the spikes of the crown the Statue of Liberty wears on her head, and the viewer has a moment of anxiety, until it all becomes clear what the explorer sees. The film tries to make viewers live the same moment of suddenly realizing our future, as if after a nuclear attack, on planet Earth. We are constantly being made aware of what could happen if we do not take care of our planet. In the film, the tragic consequences of not taking care of our planet are explored, to the point where we reach the end, and we are made to experience a shock regarding all the carelessness of our actions. We witness a dystopic universe of our own planet, and we only realize in the end which planet that one is. The fictional work of Pierre Boulle does, however, follow the cycle of evolution of any civilization, and in this case it is extended to the humankind's civilization on all the planet, as if the author is referring to a generalization. Pierre Boulle does not focus on one civilization only on Earth, but on the entire planet, in the future. Any civilization could be seen as going through several stages of development, of which the main ones are, roughly, the following: the beginning, which includes the rise of a new civilization, the middle stage, when the civilization reaches the peak, or the golden stage of its evolution, and the final stage, which is the stage of decline. In Pierre Boulle's work, the final stage of the human civilization on Earth is depicted. However, due to the symbol of the USA, the Statue of Liberty, we may say that it is also an exploration of the power the USA has had all over the world. It is, after all, still one of the main powers, to our day. The last scene in the film *Planet of the Apes* reminds of the discovery on ancient sites of former great empires, which simply collapses, while during their peak stage they seemed eternal. We are reminded, through the last scene of the film, which is, visually, so powerful, that our own civilization, and everything we are so used to can be ephemeral just like the great civilizations of the world from the past. The film opens up old speculations on this topic. According to the views of Spengler, all civilizations go through a cycle of development and decline (Farrenkopf, 2000), and all of them follow this gradual pattern.

Therefore, based on this pattern of the evolution, in gradual stages of all civilizations, and then on their end which is their decline, and which can be confirmed by looking at all great ancient civilizations, including ancient Greek, Roman and Egyptian civilizations, we can go on speculating, through scientific theories or simply through imagination, of the future of our present-day cultures, as well as on the future of the planet Earth at global level.

Once the Earth was known as far as territories were all mapped, further explorations continued in order to rediscover the past, through ancient ruins which were dug by archeologists. The ancient civilizations of the past were, thus, discovered, and now our civilization is better understood through its roots in the past. We can draw certain connections regarding why our world looks the way it does today. As an example, our universities have been built in a certain style reminding of ancient times, various architectural remains date back from ancient times, such as the Colloseum in Rome, or almost entire architectural monuments such as the Egyptian pyramids, the domain of law has been shaped by the ancient Greek and Roman world. Entire

ancient cities were reconstructed, to the point where the everyday lives of people were explored in both historical works, as well as in fiction, through films and novels.

Mysteries such as the purpose of Stonehenge, the famous rock formation in England, which was believed to be an astronomical observatory, but at the same time a place for holding various ritualistic ceremonies by the druids, at the change of seasons, the giant sculpted rocks on Easter Island, their purpose, together with the speculations regarding what happened to the people there, and why they had left the place, just like in other examples such as those involving the Maya civilization.

Other explorations followed after the Earth had every territory on maps and on the Earth globe marked down included the outer space and the exploration of the underwater world.

The exploration of the underwater world has led not only to discover various natural phenomena such as currents, but even evidence of ancient civilizations' remains which have been covered by waters, since the surface of the Earth is in constant change. Through such explorations we have found out about the mysterious city of Atlantis which, to this day, still sparkles the interest of various hypotheses and debates about what has happened back then. Additionally, various species of fish and vegetation, as well as mountains and hills just like in the world at the surface have been discovered. Other mysteries that spark the imagination and open the door for explorations, in this case by scientists and researchers, as well as by professional divers, are the ones related to exploring old shipwrecks, and then to start forming hypotheses and finding evidence as to why the shipwreck occured.

With respect to space exploration, the major point was the year 1969, when Neil Armstrong was the first man ever in the world to have set foot on the Moon. Afterwards, explorations have continued in the hope to find forms of life on other planets and even giving rise to the hope of exploring other galaxies and universes. All these hopes have been explored through science fiction and fantasy books and films throughout the years. Space has been further explored until the hypothesis of "Commercial space travel" (Lin, 2006) was created, which was based on the model of the colonies we have all read about throughout history.

Currently, webcams offer access to photographs of space. Webcams are also placed in various areas of interest in cities all over the world, and these can satisfy the need to explore virtually. The virtual environment has also been exploited to the purpose of the human need to explore, and webcams are just one example. Further on, we can visit virtually certain museums, and we can also use virtual reality glasses and various software, including games, to simulate various real-life situations which are tempting to explore, but dangerous to our lives. For example, we can simulate a fun ride in a fun park, which we otherwise may not have the courage to take in real life. We can also try flying a plane in the setting of a computer game, just because we are curious, but have zero knowledge about how to do it. Besides, it would take time and money to learn, and then we may not even want to profess as pilots, or we may not have the psychological and physical fitness to do so. Training for future professionals on a military battling field can be simulated through virtual reality, which offers the opportunity for them to learn and be prepared for real-life situations without getting hurt during the exercise. Medical students can practice surgery to train for actual, real-life situations, without causing any risks to patients. Besides, by doing it themselves, even if only virtually, the chances for them to learn faster and more efficiently, and to memorize the steps in various types of surgery are higher than simply watching someone with experience doing it.

Learning driving rules, traffic signs and how to control a car can also be done, temporarily, safely for absolute beginners. Players can resort to imagination by moving the car through a city's streets, or they may even use a simulator equipped with car break, clutch and acceleration

pedals, with hand break, and even with steering wheel. In this way, the beginner can have the opportunity to practice more than just when together with the instructor, especially since the amount of time spent during classes is limited. Some students may need more coordination exercises than others, and this practice can be ensured by the driving car simulator.

The need to explore of manking is expressed through the attraction of people of all ages to gaming. There, more and more innovative and higher quality games allow for their imagination to be sparked and to explore various possibilities regarding acting in a certain environment. While the gaming setting can be limited to a standard set of actions and by fixed rules, the players can still learn how to act as if they were in various situations, such as fighting the enemy while driving a space ship, running from someone and hiding, or even fighting with someone, using various points and powers they have gained throughout the game.

The way mechanisms work, such as the mechanism of flying has also been explored, with the result being the planes which are now a usual means of transport, similar to trains and cars. Mankind has always been fascinated by the possibility of flying, and watching how birds do it and understanding the process helped develop the invention of the first flying machines. Afterwards, the need for exploration was expressed into further improving the first flying machines. The same could be said about all vehicles with an engine, which led from the change of travelling by a coach pulled by horses, with faster and more comfortable means such as cars and trains. The means of transport are a clear expression of the human need to explore into developping further and making more efficient previous innovations.

Humankind did not settle with their first achievements, but continued for more and more discoveries and inventions, to the point at which they managed to exercise their own creativity and imagination, and bring out to reality, as concrete objects, various inventions and tools they have begun imagining under the form of projects. They began knowing exactly the mechanism that the respective tools and objects needed, and worked hard to fulfill this purpose.

Nowadays, we have reached a very high degree of development, to the point where we are beginning to consider the possibilities offered by artificial intelligence through even higher improvement in the future.

We can consider as landmarks several moments in the history of mankind with certain inventions, function of their role in further developments due to the human drive to explore. Among these inventions, according to the selection done by Holbert (2023), we can find the printing press, which led to the spread of literacy throughout all social classes, and towards the possibility of social equality. Equality and human rights are, nowadays, a significant value, which people struggle for. The electric light definitely led to various possibilities, such as working when outside it is dark, and doing creative and intellectual work as well, not only physical labour. The automobile involved ensuring, right from the start, higher possibilities of personal mobility, since the owner did no longer depend on means of public transport to get where he/she wanted, and no longer had to rely on the standard, fixed route of public transport means. The telephone ensured communication on the spot over larger areas. This communication was also fasther than through letters. Radio and television helped people have access to what was going on in the world, from cultural, news, and artistic points of view. Vaccination and anaesthesia pushed forward the field of medicine. Vaccination ensured higher survival rates in the case of some diseases, as well as better life quality, as the person would not remain, in some cases, crippled from diseases or with various health issues which would require treatment for all the rest of their lives. Anaesthesia could ensure an easier and more comfortable process during surgery, but also deeper surgery without discomfort.

Humans are described as “creators of [...] their environment” (Baciu, 2013), and their innovations and discoveries do serve as tools towards creating a pleasant environment, above one that ensures for them their basic needs of survival. Creating their homes, villages, cities, and the way they function, reaching the highest level of today’s smart city, with all its digital facilities for institutions, work, education, and entertainment is a very good illustration of this idea.

3. RESULTS

Throughout our need to explore, we have moved on from the first discoveries, observations on how things work, as well as innovations towards using these to further improve our possibilities of exploration of the surrounding world. Through creating digital technology and developping it, we now have access to webcams placed in various spaces and to rockets which can be controlled to photograph surfaces of planets and the way these planets look like from outer space, without sending people to travel there. We have also used all our discoveries and inventions not only just to ensure, and then to improve our living conditions, but also to reach highest levels of civilization, by ensuring greater possibilities of creativity, sharing of intellectual work through the Internet and access to databases to communicate with other researchers, as well as for purposes of entertainment. All the improved inventions become tools for us to use in a creative way, to further develop our understanding of the world, as in the case of webcams which can be used to observe wildlife and understand what they are doing without bothering them with human presence in their own environment.

The need to explore is also part of our today’s project management culture, where we are asked to have ideas on which to found the creation of a new project. With every new project planning, we explore the possibilities that the project can open for us. We can also explore a topic of interest in detail in our graduation, dissertation, PhD and other scientific papers. We can explore our own personality and our own wishes or skills through psychological scenarios where we can discuss how we would react with a therapist, or choose certain reactions based on a multiple choice text.

Improving our lives and creating further possibilities of entertainment are the result of the need to explore.

4. CONCLUSION, DISCUSSION, AND RECOMMENDATION

Whether people nowadays explore a scenario, hypothesis, culture or territory themselves, it is clear from their behaviour that they are always attracted by exploring. They do not need to do scientific explorations and create a device themselves. They can satisfy their need to explore through using what is already available. For instance, the curiositiy about gadgets is about the need to explore. We can see this from the way they "play" with them and look for further possibilities to use them. We can see how users of smartphones enjoy doing creative selfies. We can see how the touristic industry offers people places to visit and activities based on their need to explore.

When we are in a new place, we tend to wish to visit it and explore it a bit. This could have to do with our need to know our environment and to ensure we are safe, but this need for familiarity and safety coexists with the need to explore. As children, we are curious about the world from our early years of life and the need to explore is visible in the way we want to try doing various things which can even be dangerous. We are constantly curious and our imagination is also used to explore. Our games are also a proof of our need to explore. Games can create various scenarios which can help us explore our behaviour in various circumstances. As children, we satisfy our need through adventure stories, and, later, starting from our teenage

years, through science fiction works. As young adults we are drawn to explore various domains where we could work, by trying out several faculties to see what we like.

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The idea of the multiverse, which is used in science fiction and fantasy books and films as a means for characters to explore alternative scenarios of their lives, bases on choices, exploit the human need to explore. This is why it is successful. Even advertising has used the idea of the multiverse. The need to explore was relied upon for future students looking to sign up for their studies at the Technical University of Civil Engineering Bucharest in the advertising campaign. Students were invited to explore various possibilities and career paths by choosing one faculty or another. They were also invited to explore this within the University Admission Fair this year for high school graduates. The field of Engineering itself is associated with the need to explore various possibilities, and to create various technological tools to help create innovative building designs, as well as constructions of dams, and plants meant to purify water. Other fields of study and activity are also linked with the need to explore, e.g. History, Geography, and some intertwine with creativity, such as Medicine, where feel like we have the opportunity we can make our own discoveries to help people with various illnesses, Philology, where we feel we can write fiction, Music, where the creative component is obvious, etc. Even when we teach, we read, we are taught and we speak about creative means of teaching, so that we can get the students to be motivated and to be interactively involved in the activities related to each class. We seek to explore new possibilities to relate to students and to teach them, as well as new possibilities to improve our work in various domains of activity, and then to use our knowledge in a practical and innovative way.

Throughout our lives, whether we are active explorers or simply using what other created before us for our practical use in our field of activity (e.g. teaching, engineering, medicine, which all rely on digital technology and various devices can be used), or for our entertainment (benefitting from tourism opportunities, virtual visits to cities and museums), we tend to have as an obvious trait the need to explore. Almost everything we do can be related to some extent to the need to explore. We continue living, due to our need to explore, or to our curiosity related to what awaits us next. We are attracted to the possibility of having the future predicted, precisely of the need to explore where our lives can go.

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THE EDUCATIONAL ISSUES IN NIZAMI CREATIVITY
NİZAMİ YARADICILIĞINDA TƏHSİL MƏSƏLƏLƏRİ

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Özet

Nizami Gəncəvi Azərbaycan ədəbiyyatının elə dahi simalarındandır ki , onun yaradıcılığı öz poetik enerjisi ilə müasir bədii düşüncənin inkişafında müstəsna rol oynamışdır . Nizami yaradıcılığının poetik sirləri müasir ədəbi düşüncənin - ədəbiyyatşünaslığın inkişafında mühüm əhəmiyyət kəsb etmişdir.

Nizami yaşadığı dövrdə üstünlük təşkil edən dini elmlərlə yanaşı , dünyəvi elmlərin tədris edilməsinin tərəfdarı olmuşdur. XII əsrdə dahi şair təhsilin dünyəviliyi kimi mütərəqqi pedaqoji ideyanı irəli sürmüşdür. Nizaminin bu mütərəqqi fikirləri müasir elmi-baxışlarla səsləşmişdir. Dahi Nizami dünyəvi biliklər deyərkən riyaziyyat, həndəsə, astronomiya, kosmologiya, təbabət və s. nəzərdə tutmuşdur. O , yaradıcılığında sadaladığımız elmlərin əhəmiyyətini, insanın dünyagörüşünün formalaşmasındakı rolunu xüsusi vurğulamışdır. “Xəmsə”də qadın təhsili, oğlanlarla qızların birgə təhsil alması, dinindən, irqindən, cinsindən asılı olmayaraq hər kəsin təhsil hüququnun bərabərliyi və s. pedaqoji ideyalar da öz əksini tapmışdır. Şairə görə cəmiyyətin düzgün inkişafı üçün savadlı , təhsilli insanların olması mühüm faktordur. Düzgün , ədalətli , sivil cəmiyyətin yaranmasında təhsil böyük rol oynayır. Ensiklopedik zəka sahibi olan Nizami təhsilin məzmununa həm humanitar (poetika, məntiq, müxtəlif dillər), həm təbiət (astronomiya, biologiya, kimya, coğrafiya), həm də dəqiq (riyaziyyat, həndəsə və s.) elmləri daxil etmiş, həmin elmlər üzrə dərin və hərtərəfli biliklərə yiyələnməyi təhsilin başlıca vəzifəsi hesab etmişdir.

Ensiklopedik biliyə sahib Nizami dini elmlərə də dünyəvi elmlər qədər dəyər vermişdir. Şairin “Xəmsə” yaradıcılığının fəlsəfi aspektdə təhlili bir daha sübut etmişdir ki, dahi Nizami dünyanın Allah tərəfindən yaradıldığını qəbul etmişdir. Lakin obyektiv gerçəkliklə bağlı məsələlərə − təbiət, cəmiyyət və təfəkkür hadisələrinə dini baxışlar müstəvisində deyil , elmi nöqteyi nəzərdən yanaşmışdır.

Anahtar kelimeler : Nizami , təhsil , elm , təbiət , bilik

Abstract

Nizami Ganjavi is one of the great figures of Azerbaijani literature, whose creativity has played an exceptional role in the development of modern artistic thought with its poetic energy. Poetic secrets of Nizami's creativity have become important in the development of modern literary thought - literary studies.

Nizami supported the teaching of secular sciences along with the religious sciences that prevailed during his lifetime. Even in the twelfth century, the genius poet put forward the progressive pedagogical idea of the secularity of education. These progressive ideas of Nizami

resonated with modern scientific views. Dahi Nizami refers to worldly knowledge as mathematics, geometry, astronomy, cosmology, medicine, etc. intended. He specially emphasized the importance of the sciences we have listed in his work, their role in the formation of a person's worldview. Women's education, co-education of boys and girls, equal right to education for everyone, regardless of religion, race, gender, etc. in "Khamsa". pedagogical ideas are also reflected. According to the poet, the presence of literate and educated people is an important factor for the proper development of society. Education plays a big role in creating a correct, fair and civilized society. Possessing an encyclopedic intellect, Nizami included humanitarian (poetics, logic, various languages), natural (astronomy, biology, chemistry, geography) and exact (mathematics, geometry, etc.) He considered the acquisition of comprehensive knowledge to be the main task of education.
Nizami valued religious sciences as much as secular sciences. The analysis of the poet's work "Khamsa" in the philosophical aspect proved once again that the genius Nizami accepted that the world was created by God. However, the issues related to objective reality - nature, society, and mental phenomena - were approached from a scientific point of view, not at the level of religious views.
Key words: Nizami , education, science, nature, knowledge

GİRİŞ

Hər hansı bir xalqın , cəmiyyətin mədəniyyətinin inkişafı , tərəqqisi üçün elmin , təhsilin rolu əvəzolunmazdır. Bəşər tarixinə nəzər salsaq , təhsil hər zaman mədəniyyətlərin cahillikdən qurtuluşunda, inkişafında , xalqları zülmət dünyadan işıqlı dünyaya aparan yolda bir çıraq rolunu oynamışdır. Xalqımız əsrlər boyu müstəmləkəçilərin əsarət zəncirlərini qırmaq üçün təkcə qəhrəmanlıq nümunələri göstərməmiş , bununla yanaşı vətənimizin elmli , təhsilli ziyalıları xalqı cahillikdən , gerilikdən qurtarmaq üçün ağır mənəvi yük daşımış və bu missiyanı uğurla yerinə yetirmişlər. İnsanın şəxsiyyət kimi formalaşmasında elmin və əməyin rolu danılmazdır. Bu səbəbdən də XIX əsrdən üzü bəri maarifpərvər ziyalılarımız rus çarizminin müstəmləkəçi siyasətinin qadağalarına baxmayaraq , təhsilin inkişafı yolunda əlindən gələni əsirgəməmişlər. XIX əsrdə xalqının tərəqqisi , maariflənməsi yolunda böyük xidmətləri olan Seyid Əzim Şirvani təhsili xəzinə , əməyi onun açarı hesab etmişdir. Təhsilli gəncliyi olan xalqın qurduğu dövlətin təməli də möhkəm və uzunömürlü olacaqdır. Ümummilli lider Heydər Əliyevin dediyi kimi, "Təhsil millətin gələcəyidir". Ulu Öndər Heydər Əliyevin müstəqil dövlətimizin inkişafı naminə yürütdüyü qabaqcıl siyasətin bir istiqamətini də təhsilin inkişafına göstərdiyi mühüm diqqəti tutmuşdur . Heydər Əliyev elmin , təhsilin , savadlı gəncliyimizin inkişafı naminə, dünyanın ən qabaqcıl, inkişafetmiş ölkələrinin elmi- metod və texnologiyalarının təhsil sahəsində tətbiqinə xüsusi önəm vermişdir. Təhsil siyasətinin uğurlu aparılması sayəsində ölkəmizin elmi-texniki tərəqqisi yüksək inkişaf nöqtəsinə çatmışdır. Bu siyasəti bu gün də Ulu Öndər Heydər Əliyevin davamçısı cənab Prezidentimiz İlham Əliyev layiqincə davam etdirir.

YÖNTEM

Təhsil haqqında Azərbaycan Respublikasının qanununun 19-cu maddəsində qeyd edilmişdir : " 19.1. Ümumi təhsil təhsilalanlara elmlərin ümumi əsaslarının öyrədilməsini, zəruri bilik, bacarıq və vərdişlərin aşılanmasını, onların həyata və əmək fəaliyyətinə hazırlanmasını təmin edir. Ümumi təhsil təhsilalanların fiziki və intellektual inkişafına, zəruri biliklərə yiyələnməsinə, onlarda sağlam həyat tərzinə və sivil dəyərlərə əsaslanan vətəndaş təfəkküründün formalaşmasına, milli və dünyəvi dəyərlərə hörmət hissinin aşılanmasına, ailə, cəmiyyət, dövlət və ətraf mühit qarşısında hüquq və vəzifələrinin müəyyən edilməsinə imkan yaradır." Təhsilə müasir yanaşmanın əsasında təhsilalanların elmlərin ümumi əsaslarını öyrənməsi, zəruri bilik, bacarıq və vərdişlərə yiyələnməsi, həyata və əmək fəaliyyətinə hazırlığının təmin edilməsi

dayanır. Maraqlı nüanslardan biri budur ki , biz müasir elmi yanaşmanın elementlərini hələ XII əsrdə dahi Nizaminin yaradıcılığında görə bilirik. Nizami Gəncəvi yaradıcılığında təhsilə verilən dəyər mühüm yer tutmuşdur . Dahi Nizami təfəkküründə görə təbiət, cəmiyyət hadisələri haqqında dərin biliklər yüksək təhsilin əsasını təşkil edir. Sənətkarın müəllif konsepsiyasının təşkil edən kamil insan anlayışının əsasında elm , təhsil dayanır. Şair insanı heyvandan fərqləndirən başlıca əlamət kimi ağıl və kamalı dəyərləndirmişdir. Şairə görə ağlın çırağı isə elmdir, bilikdir. İnsan elmlə ucalıb kamilləşə bilər.

Nizami yaşadığı dövrdə üstünlük təşkil edən dini elmlərlə yanaşı , dünyəvi elmlərin tədris edilməsinin tərəfdarı olmuşdur. XII əsrdə dahi şair təhsilin dünyəviliyi kimi mütərəqqi pedaqoji ideyanı irəli sürmüşdür. Nizaminin bu mütərəqqi fikirləri müasir elmi-baxışlarla səsləşmişdir. Dahi Nizami dünyəvi biliklər deyərkən riyaziyyat, həndəsə, astronomiya, kosmologiya, təbabət və s. nəzərdə tutmuşdur. O , yaradıcılığında sadaladığımız elmlərin əhəmiyyətini, insanın dünyagörüşünün formalaşmasındakı rolunu xüsusi vurğulamışdır. Məsələn, "Yeddi gözəl" poemasının qəhrəmanı Bəhramın dünyəvi biliklərə yiyələnməsi səhnəsində şairin xüsusi diqqət və rəğbətini görürük.

Bəhram öyrənmişdi ərəb, fars, yunan

Dilini məktəbdə öz ustadından.

Münzirdə var idi başqa əlamət,

Ulduzlar elmində kəskin məharət.

On iki bürc ilə o, yeddi ülkər

Qabağında açıq sandığa bənzər.

Həndəsə xəttinə əməl edərdi,

Minlərlə Məcisti o həll edərdi [4 , s. 65].

BULGULAR

Nümunədən göründüyü kimi , Nizami təhsilin məzmununa dünyəvi elmləri (astronomiya, riyaziyyat, həndəsə, ərəb, yunan, fars dilləri və s.) daxil etməklə onların insanın mənəvi inkişafında, kamilləşməsindəki rolunu xüsusi diqqətə çəkmək istəmişdir. Şairin "İsgəndərnamə" poemasında da , dünyəvi elmlərə verdiyi əhəmiyyəti görürük. Nümunədən görünür ki, İsgəndər qazandığı biliklər səviyyəsində yaşıdlarından seçilir :

Hər əqlə sığışan hünər, bilikdən

Bir məna çıxarır mənanı bilən.

Ulduzlar bəzəyən kimi göyləri

Bəzərdi pak olan yeni gövhəri.

Çatdırdı onu hər gizlin biliyə,

Hansı bir gənc almış belə tərbiyə? [5, s. 66]

"İsgəndərnamə" poemasının "Qibtli Mariyənin hekayəsi və onun hiyləgərliyi" səhnəsində Nizami elmi hər cür maddi- fiziki varlıqdan üstün tutmuşdur. Şair burada da dünyəvi biliklərin əhəmiyyətinə və üstünlüyünə önəm vermişdir. Nizami Qibtli Məriyə ilə bağlı yaratdığı səhnədə göstərmək istəmişdir ki , bu dünyada yüksək bilik , elm hər cür silahdan üstündür və silah gücünə həllini tapa bilməyən məsələlələr elm yolu ilə həll oluna bilər. Poemada dünyəvi elmlərə, xüsusilə, kimya elminə böyük önəm verilir. Doğma yurdu işğal olunmuş Mariyə İsgəndərin yanına gəlib ondan hərbi kömək almaq istəyir. Lakin İsgəndərin ağıllı vəzirinin

Ərəstunun məsləhəti ilə Mariyə qızıl istehsal etməyin yolunu öyrənir. Mariyə bundan sonra fikrini dəyişərək düşmənə hərbi yolla deyil, elmi yolla qalib gəlmək qərarına gəlir. Bununla da o , öz doğma yurdunu işğalçılardan azad etməyə nail olur. Şair bu poemada da elmi , savadı hər şeydən üstün tutaraq insanları cahillikdən uzaq olmağa səsləyir. Eyni zamanda Nizami dövründə birmənalı qarşılanmayan dünyəvi elmlərin təbliği də xüsusi önəm kəsb edir.

SONUÇ , TARTIŞMA VE ÖNERİLER

Şairin bütün "Xəmsə" yaradıcılığını sistemli şəkildə izlədikdə dünyəvi elmlərin , təhsilin təbliğini görə bilərik. Başqa məsnəvisində oğlu Məhəmmədin simasında bütün gənclərə "Bilik kəsb etməklə dünyanı qazan", deyən şair yalnız bilik vasitəsilə cəmiyyətdə lazımı mövqe qazanmağın mümkünlüyünü demək istəmişdir. Şair təhsilin məzmunundan bəhs edərkən həm təbiət, həm də cəmiyyət (humanitar) elmlərinə aid bilikləri nəzərdə tutmuşdur. Nizami Gəncəvinin müəllif konsepsiyasına görə, insan hansı elmi öyrənirsə onun bütün sirlərini, incəliklərini mükəmməl şəkildə mənimsəməlidir :

Bir elm öyrənmək istədikdə sən,

Çalış ki, hər şeyi kamil biləsən [6, s.65].

Nizami "Leyli və Məcnun" poemasının "Oğlum Məhəmmədə nəsihət" adlı hissəsində gəncləri elmə yiyələnməyə çağırır, yalnız elmi biliklər sayəsində insan uca mərama yüksələ bilər.Nizami bu əsərdə oğlunun timsalında bütün gənclərə nəsihət edərək yazmışdır:

Qəflətdə oynama ,qeyrət vaxtıdır,

İndi hünər vatı,şöhrət vaxtıdır.

Ucalmaq istəsən, bir kamala çat,

Kamala ehtiram göstərər həyat.

"Xəmsə"də qadın təhsili, oğlanlarla qızların birgə təhsil alması, dinindən, irqindən, cinsindən asılı olmayaraq hər kəsin təhsil hüququnun bərabərliyi və s. pedaqoji ideyalar önəm kəsb etmişdir . Nizamiyə görə təhsildə cinsi fərqin olması düzgün deyil. Təhsil kişilərə lazım olduğu qədər qadınlara da vacibdir. Şairə görə cəmiyyətin düzgün inkişafı üçün savadlı , təhsilli insanların olması mühüm faktordur. Düzgün , ədalətli , sivil cəmiyyətin yaranmasında təhsil böyük rol oynayır. "Xosrov və Şirin" poemasındakı Şirin də, "Leyli və Məcnun" poemasındakı Leyli də, "Yeddi gözəl" poemasındakı Slavyan gözəli də, "İsgəndərnamə" poemasındakı Qibtli Mariyə də - savadlı qadın obrazlarıdır.

Hər uşaqda qorxu və ümid vardı,

Dərsinə, elminə can yandırardı.

Xırda oğlanlarla qızlar yanaşı,

Hamısı olmuşdu sıra yoldaşı...

Orada bakirə bir inci vardı,

Sırada Qeys ilə bir oturardı. [6 , s. 78]

"Leyli və Məcnun" poemasından gətirdiyimiz bu hissə oğlanlarla qızların birlikdə təhsil almalarının bariz nümunəsidir. Şairin yaradıcılığına nəzər saldıqda onun insanlar arasında irqi, dini ayrı-seçkilik salmadığını görürük. O , bərabərlik konsepsiyasına üstünlük vermiş, bu konsepsiyanı təhsildə də gözləmişdir. Bunu aşağıdakı şeir nümunəsindən də görmək mümkündür:

Hərəsi bir yerdən, bir qəbilədən,

Bu ədəb evində öyrənirdi fənn.

Yuxarıdakı təhlillərdən belə qənaətə gələ bilərik ki , ensiklopedik zəka sahibi olan Nizami təhsilin məzmununa həm humanitar (poetika, məntiq, müxtəlif dillər), həm təbiət (astronomiya, biologiya, kimya, coğrafiya), həm də dəqiq (riyaziyyat, həndəsə və s.) elmləri daxil etmiş, həmin elmlər üzrə dərin və hərtərəfli biliklərə yiyələnməyi təhsilin başlıca vəzifəsi hesab etmişdir.

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AN EXAMINATION OF COMMON CHALLENGES ENCOUNTERED IN INSTITUTES OF HIGHER LEARNING IN PAKISTAN

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Abstract

The purpose of this study is based on exploratory research to identify Common Challenges Encountered in Institutes of Higher Learning. The exploratory research approach is used to achieve the objectives of the study in less time and with inexpensive means. For the last few years, Pakistan is facing a lot of emerging challenges in the education sector such as curriculum, few training institutions, corruption in education, teachers' behavior, and less research work. Emerging challenges in the education sector are fewer training institutions and the trend toward research work which is essential to follow for the growth and strength of any economy. The purpose of our research is to identify the emerging challenges in the educational sector in Pakistan which the educational sector is suffering for the last few years. The researcher used triangulation to carry out the reliability and validity of the data for results. So, to conduct this triangulation the researcher used questionnaires for the students, questionnaires for the teachers, and interviews with the management. In this regard primary data was collected from the focused group of students using a sample of 100 questionnaires for each university filled by the students of the selected five universities. The findings highlight the positive relationship of quality education with curriculum, few training institutions, corruption in education, teachers' behavior, and less research work. These challenges caused restrictions in accomplishing competent teaching and learning with respect to quality education. According to the current situation in Pakistan, the same challenges are being faced.

Keywords: Curriculum, Corruption, Teachers' Behavior, Research Work.

ASSESSING INFORMATION TECHNOLOGY'S IMPACT ON HIGHER EDUCATION QUALITY IN PAKISTAN: A COMPREHENSIVE STUDY

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Abstract

The world is undergoing continuous changes in all aspects of life. Smart Cities offer a solution to various challenges, such as socio-economic development and improving quality of life. Just as information technology has transformed urban development by changing the way production, consumption, and distribution are connected, it is also revolutionizing the field of education. The introduction of technology has improved communication between instructors and students, providing them with new opportunities. Recognizing the popularity of Facebook among students, researchers suggest its potential for educational purposes. A research study was conducted in Pakistan to examine students' attitudes towards using Facebook for educational purposes within educational institutions. 350 questionnaires were distributed to graduate and undergraduate students, with 290 completed responses received. The questionnaire was designed based on three variables: Student's opinion, Academic Support, and Student-Faculty Relationship. The results indicate that students are willing to utilize Facebook and other social media platforms for educational purposes, in addition to their use for social interaction. Strengthening the connection between students and faculty can contribute to enhanced collaboration and interaction, benefiting people's connectivity, urban ecosystem development, and the advancement of Smart Cities.

Keywords: Facebook; Higher Education Commission; Smart Cities; Social Media.

BLENDED LEARNING ADOPTION IN PAKISTANI UNIVERSITIES: CHALLENGES AND RECOMMENDATIONS

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Abstract

The aim of this study was to examine the standpoints of BS 4 years program (BSCS) students in Pakistani universities regarding the issues and challenges they face. The study utilized a descriptive survey method with a quantitative approach to quantify and measure students' perceptions and issues related to blended learning in education. The study collected data from 219 students out of 482 enrolled in the BS 4 years program (BSCS) at three public universities in Pakistan in the 2022 academic year. A questionnaire with a three-point Likert scale was used to gather data, which was then analyzed using frequencies, percentages, and diagrams. The findings showed that most students had a positive view of blended learning, but they also encountered various issues, such as lack of time, insufficient skills and support for proper use, lack of training, and unavailability of Learning Management Software (LMS) for technological learning tools. The study suggests the need for the development of institutional policies for the effective use of blended learning in universities and the implementation of training and skill development programs for teachers to integrate technology in their teaching.

Keywords: Blended Learning, Challenges, Standpoints, Teacher Education.

NATO'S DOUBLE-TRACK DECISION AND THE PEACE MOVEMENT IN WEST GERMANY

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Abstract

No to Nuclear Armament was a voice of protest in the fall of 1983 by the people of West Germany against NATO's double-track decision to nuclearize Europe. The incident was in 1979 when NATO decided to deploy Pershing 2 and cruise missiles in West Germany and the rest of Europe (Euro missile) under its double track decision to protect Western Europe from the Soviet Allies Warsaw Group. It was a decision when the mutual agreement between NATO and Warsaw was broken based on the limitation of medium and long-range nuclear missiles. Soviet-led Warsaw allies were increasing and deploying their nuclear-capable ballistic missile to create a threat perception in the West led by the United States of America. There were mass blockades, human chains, and protest rallies against the decision of NATO, such as Fall Action Week 1983 in Bonn, a substantial human chain about 108 km from Ulm to Stuttgart to show peace as the central theme in West Germany against NATO's decision, as well as West German Bundestag, who approved the deployment decision. The Euro missile controversy was one of the main themes in the 1980s in political debate. The peace movement was a collaborative phenomenon because of its confused nature. It was socially described as a nuclear crisis in Europe and the World. The paper aims to determine the social and political consequences of the peace movement against nuclear armament and the Government of West German's policies over the Euro missile issue. The paper aims to understand deterrent policies between Warsaw and NATO through its historical perspective. The methodology is through books and academic journals. The feature question is, was that peace movement successful in denuclearization beyond government actions and decisions?

Keywords: West Germany, NATO, Western Europe, European Union, United States, Soviet Union, Warsaw Pact, Peaceful Conflict Resolution, Helsinki Accords, Armament, Disarmament, Eastern Europe, ICBM, I.B.M., SS-20 Ballistic Missile of U.S.S.R., Threat Perception in Western Europe, and the Soviet Socialist Republic, Doble-Track Decision, Socialism versus Capitalism, World War, Regional to Continental Conflicts, Ego-Centric, Strategic Forces, Expansionism, Neo-colonialism, Commercialization, Western Rule, Global South, Rich versus Poor, Global North versus Global South, Neo-Imperialism, Political Regime of West Germany, Chancellor Schmidt of Germany, U.S. President Ronald Reagon, People of Western Germany, Helmut kohl, Chancellor of West Germany, Pershing II Missile system on German Territory, German Historian Manfred Gortemaker, The Soviet Doctrine of Glasnost & Perestroika, Mikhail Gorbachev of the President of the Soviet Union, START-1, Tupolev Tu-22M, East Germany, Reconciliation of Pact, German Counterpart, Gryphon BGM-109G, Mutual Assured Destruction (MAD).

Introduction

By the [2]mid-1970s, the tension between NATO (North Atlantic Treaty Organization) and Warsaw Pact alliance started to relieve after three decades of mistrust and hostility (Bosen,2019). More than 35 countries, including the United States and the Soviet Union, started a peace process to reduce the ideological tension, especially between the United States and the former Soviet Union. Therefore, Helsinki Accords was signed on July 21, 1975 (Bosen,1979). Hope began throughout this agreement. But real tension was going on through the arms race between two blocs, the Soviets and the NATO led by the United States. The Soviet Union replaced its intermediate ballistic missiles with long-range intercontinental ballistic missiles in 1977 in Eastern Europe. Missiles like SS-20 surface-to-surface missiles were set up against the Western bloc even after the agreement for peace in the region. [3]The SS-20 missile was recognized as one of the most dangerous inter-mediate range missiles in Europe, with three independently controlled nuclear warheads (Bosen,2019), which were estimated to be 11 times more destructive than the power of the atomic bomb dropped on Hiroshima in 1945. The initiative of the Soviet Union after the peace agreement tensed the Western bloc led by the U.S., and tension arose again between the West and the Eastern bloc. [4]According to German Chancellor Helmut Schmidt (Bosen,2019), the missile deployment by the Soviets changed the strategic balance between Western Europe and the East, and it favoured the U.S.S.R. he was telling that [5]"They will become an instrument to coerce Germany; these rockets are chiefly aimed at Germany." German Chancellor asked NATO to deploy missiles against the Soviet Union on German soil as a reply. The Chancellor of Germany was influencing Germans that the Soviet missile had been deployed against Germany. Therefore, Cold War started newly in the context of German ideology described by the German policymakers. [6]On December 1979, NATO signed off on the Double-Track decision that envisioned the hopes of talking with the Soviet Union again in the context of SS-20 removal for European security. It has also been promised the United States to deploy U.S. intermediate-range ballistic missiles in Europe against Soviet missiles to protect Western Europe. [7]On December 24, 1979, the Soviet Union invaded Afghanistan. The tension between NATO and Warsaw Pact again increased, and a New Cold War scenario began (Bosen,2019).

[2] NATO foiled Soviets with Cold War Double-Track. Paragraph 1st.

[3] NATO foiled Soviets with Cold War Double-Track. Paragraph 3rd.

[4] NATO foiled Soviets with Cold War Double-Track. Paragraph 4th.

[5] NATO foiled Soviets with Cold War Double-Track. Paragraph 4th.

[6] NATO foiled Soviets with Cold War Double-Track. New Cold War. Paragraph 1st.

[7] NATO foiled Soviets with Cold War Double-Track. New Cold War. Paragraph 1st.

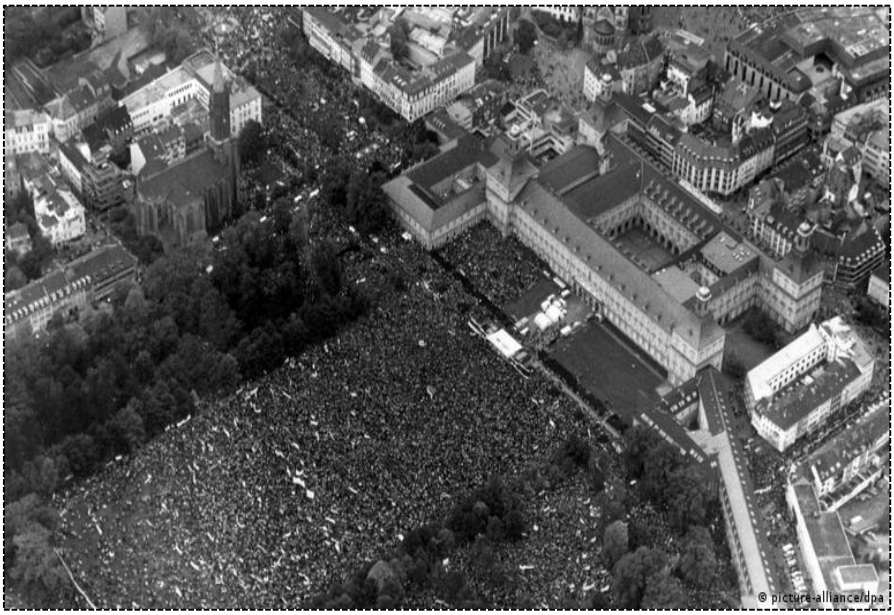


Figure 1: Bonn, Germany. People were protesting in 1981 against the German decision to deploy U.S. missiles against the Warsaw Pact and conflict with the Soviet Union and to use German soil as war ground.

NATO foiled Soviets with Cold War Double-Track – D.W. – 12/12/2019

Literature Review

Cold War between the Soviet Union and the United States was an ideological conflict for establishing capitalism against socialism, or socialism against capitalism in the world, and increasing membership against each other. It was a regular pressurize policy by the United States and the Soviet Union against each other in the context of their eco-centric beliefs and thought. Therefore, no peace agreement worked even though they signed off on the peace process. It was a conflict based on mistrust, hate, and ideological differences. It was an establishment of supremacy against each other for global hegemony. The Cold War ideology still works worldwide according to the current political scenario. The war in Ukraine exemplifies the ideological conduct between the U.S.A. and the contemporary Russian Federation. The Soviet Union collapsed, and the Soviet Union led no Warsaw group after its collapse, but NATO is still working as the most influenceable bloc in the world. Russian Federation asked NATO to break the bloc as there is no more Warsaw Pact nor the existence of Soviet Russia. But NATO ignored Russia's proposal and continuously ranked strategic groups as the single most powerful bloc in the world for the continuation of their ideological establishment and its global preservation. Most countries have been influenced by and accepted the ideologies of the Western bloc, such as acceptance of capitalism, democracy, neo-liberalism, expansionism etc. Therefore, Russia is currently trying to regain its position as the Soviet bloc again, and the war in Ukraine is one of the steps of the Russian Federation as its reply to the West. Ideologies, therefore, are still alive.

Methodology

The paper has been assumed through subordinate sources of data. Subordinate sources of data include academic articles, websites etc. The description of sources has taken the method of writing the essay, reading, gathering in-depth insights on topics, exploring ideas, summarizing, interpreting, and mainly expressing in words (documentary analysis through qualitative approach). This article has described the ideological conflict between the former Soviet

Republic and its allies (Warsaw Pact) and Western Europe led by the United States (NATO). It has been described in the context of colonialism, imperialism, neo-colonialism, and neo-imperialism. It has also represented a connection between the past and the present global scenarios. Cold War is no more, but the system of the New Cold War starts between the current Russian Federation and NATO led by the United States. An overall picture has been described throughout this article of what happened in the past for establishing ideological concepts in the world under a power game policy and how it is connected in the present global scenario. The article also described German centric crisis throughout the Double-Track Decision in 1979 and how it was become German-centric due to socio-lingual procedures between Western and Eastern Germany and its governments. The ideological conflict in both Germany was another factor for the entire system due to the influence and control of the United States in capitalist Western Germany and the Soviet Union in socialist Eastern Germany. Therefore, it is an amicable socio-political relationship between Germany and its relations with both superpowers in the Cold War era.

Discussion

In West Germany (Bosen,2019), thousands of people protested on the streets against the arms race and the policies of the German government, which favour deploying U.S. missiles against the Soviet Union and thus creating a war environment in Germany. The people of Germany were unwilling to make Germany the war front country between the United States and the Soviet Union. It was the thinking of the German people that if Germany allowed the United States to deploy missiles against the Soviet Union, they would not protect Germany and the reducing arms race between two powerful groups. It will finally turn into a war in Europe. [8]According to German historian Manfred Gortemaker, "They could not only stop the arms race between East and West but possibly also the outbreak of war." The peace movement turned into a political force. U.S. President Ronald Reagan was interested in a new arms race and its continuation with the Soviet Union as a part of his think tank and foreign policy doctrine. In Germany, the power of Chancellor Schmidt was declining due to his social and economic policies and his support for America's arms race through using Germany against the Soviet Union, which was officially recognized as a Double-Track (Bosen,2019). German Chancellor Schmidt was replaced by Helmut Kohl of the Christian Democrats (CDU). On November 22, 1983, the Bundestag agreed to station the U.S.'s intermediate-range ballistic missile Pershing II and cruise missiles on German territory. Helmut Kohl was following the doctrine of the previous German Chancellor, Schmidt. Kohl stated that until the Soviet Union removed its intermediate nuclear missiles SS-20, Germany would forward to deploy the U.S. missile system to protect Western and Central Europe from the Soviet Union. An estimated 5,00000 (five hundred thousand people) protested on the street against the decision to missile deployment in Germany. Still, the government was stuck on its decision to deploy U.S. missiles on German territory against the Warsaw Pact led by the Soviet Union. [9]In 1985, Mikhail Gorbachev (Bosen,2019) was elected as the leader of the Soviet Union. He introduced his doctrine to the principles of Glasnost, which was transparency and Perestroika, which was restructuring. Gorbachev concentrated on reforming the Soviet Union due to its tremendous army and arms expenses. He was interested in talking about disarmament with NATO. The ideology of capitalism was flourishing globally, while socialism was declining due to bankruptcy. Talks

[8] NATO foiled Soviets with Cold War Double-Track. New Cold War. Paragraph 2nd.

[9] NATO foiled Soviets with Cold War Double-Track. Soviet Union bankrupted. Paragraph 1st.

began in 1985[10]. [11]By 1987 (Bosen,2019), both the Soviet Union and NATO agreed to destroy all missiles that were capable of targets between 500-5,500 kilometres away. In 1991, the Soviet Union and the United States signed a treaty called START-1 (Bouchen,2019). This agreement helped both powers reduce long-range nuclear missiles. [12]According to German Foreign Minister Hans -Dietrich, "The outcome of NATO's Double-Track Decision — as we had always promised — was not that it would reduce the number of missiles but scrap them entirely" (Bosen,1979). The Minister remarked that disarmament was a process of NATO always, and the [13]'Double Track' was a highly effective measure of disarmament. [14]The NATO Double-Track Decision of 1979 (Wentker,2022) was a conflictful era between Eastern Germany and Western Germany due to their opposite existence throughout opposite allies. Capitalist Western German amalgamation with NATO and socialist Eastern German with Warsaw Pact conflicted. Leaders of both Germany were deciding according to their allies. West Germany was deciding policies according to the United States throughout a democratic forum, while the leadership of East Germany was deciding according to the Soviet Union. This conflictual decision was impacting Germany and their people. Even though Germany was divided into capitalism (West Germany) and socialism (Eastern Germany), they were still together, especially in the context of people-to-people, their concern, their humanistic relationship, and their thinking. They were residing in both East and West Germany. The most substantial problem was for Bonn and East Berlin to reconcile Washington DC and Moscow and maintain relations between German counterparts. As it has been said earlier, the people of Germany were amalgamated from both sides of Germany, even their government, due to social and lingual similarities in both East and West Germany (Wentker,2022). NATO Double-Track Decision was part of NATO's strategic mission to maintain the Soviet Union in the European continent because of the Soviet deployment of SS-20 and Tupolev Tu-22M in Eastern Germany. Therefore, Western Germany decided to deploy U.S. Pershing-II I.B.M. missiles on their soil to protect Western Germany and Western and Central Europe. It was therefore turned into a German specific for Soviet antagonism. The decision taken by the government of Germany was not supported by the people of both East and West Germany due to the concentration of Germany on the crisis. The conflict in the name of the Double-Track Decision finally seemed like a German specific due to many concerns by the German policymakers towards the former Soviet Socialist Republic. Many countries in Western Europe, like the United Kingdom, France, and Italy, and other smaller nations under the NATO pact led by the United States. Germany was a divided country controlled by the United States in West Germany and the Soviet Union in Eastern Germany. The Decision of the Double Track was due to the Soviet expansion of military forces and its missile deployment to threaten Western Europe. Many agreements and talks had been conducted by both the U.S. and Soviet leaders. Still, due to the antagonistic attitude and no compromising mood of the U.S. and



[10] NATO foiled Soviets with Cold War Double-Track. Soviet Union bankrupted. Paragraph 2nd.

[11] NATO foiled Soviets with Cold War Double-Track. Soviet Union bankrupted. Paragraph 2nd.

[12] NATO foiled Soviets with Cold War Double-Track. Soviet Union bankrupted. Paragraph 2nd.

[13] NATO foiled Soviets with Cold War Double-Track. Soviet Union bankrupted. Paragraph 2nd.

[14] NATO's Double-Track Decision and East-West German Relations. Paragraph 1st.

Soviet leaders, no results came out throughout those talks and agreements. It was then turned into a dodgy relationship between the two blocs. The world was concerned about the continuous war threat that could turn into a nuclear war worldwide instead of Europe-centric. [15]NATO (North Atlantic Treaty Organization) intended to deploy an estimated 572 equally mobile American middle-range ballistic missiles, called Pershing II and Gryphon BGM-109G, ground-launched cruise missiles. This deployment for protecting Western and Central Europe by the United States and its armaments was a part of the launching of [16]Mutual Assured Destruction.

Conclusion

The feature question is, was that peace movement successful in denuclearization beyond government actions and decisions? In the early 1980s, the protest by the people of Germany on both sides against the deployment of the West's Pershing II missiles was a sign of revolution against the U.S.-led NATO policy (Mercus,2022). The people of Germany did not believe that the Soviet missiles were damaging to West Germany. Therefore, the Chancellor of Germany of that time was severely criticized due to his social, security and foreign policies toward the United States and NATO's Double-Track Decision. The Double-Track Decision was a policy the NATO for negotiation with the U.S.S.R to set up a peace process in Western and Central Europe, especially in the context of West Germany. Even though it was said that Central Europe was threatened by the Soviet missile, it was also a concern that the Soviet Socialist Republic under Warsaw Pact led many Central European countries like Hungary, East Germany, and Czechoslovakia. Therefore, who was the target in Central Europe? It was then West Germany that was under NATO Pact. It was not a concern whether Western Germany was a centre for the Soviet missile threat; it was an ideological conflict, maintaining order by U.S.-led NATO throughout West Germany and its Chancellor. Whether the peace process through the NATO Double-Track Decision was a successful strategic policy or not has also been a question and concern throughout the world and in the context of contemporary European scenarios. The people's protest did not concern the Chancellor of West Germany, resulting in more complicated relations and the deployment of missiles on West German soil. It was, after all, a change due to Gorbachev's policy of Glasnost and Perestroika in the Soviet Union, through which he agreed to reduce tension as a part of his reformation policy in the Soviet Union. Leaders can not be similar characters, and neither can they follow their previous leader. Russian President Vladimir Putin is an example of a contemporary Russian Head of State who launched the war in Ukraine by thinking behind the threat of NATO in Eastern Europe. It is, therefore, a connection with earlier crises. History thus can not be ignored throughout its evolution process.

[15] NATO Double-Track Decision. Paragraph 3rd.

[16] NATO Double-Track Decision. Paragraph 3rd.

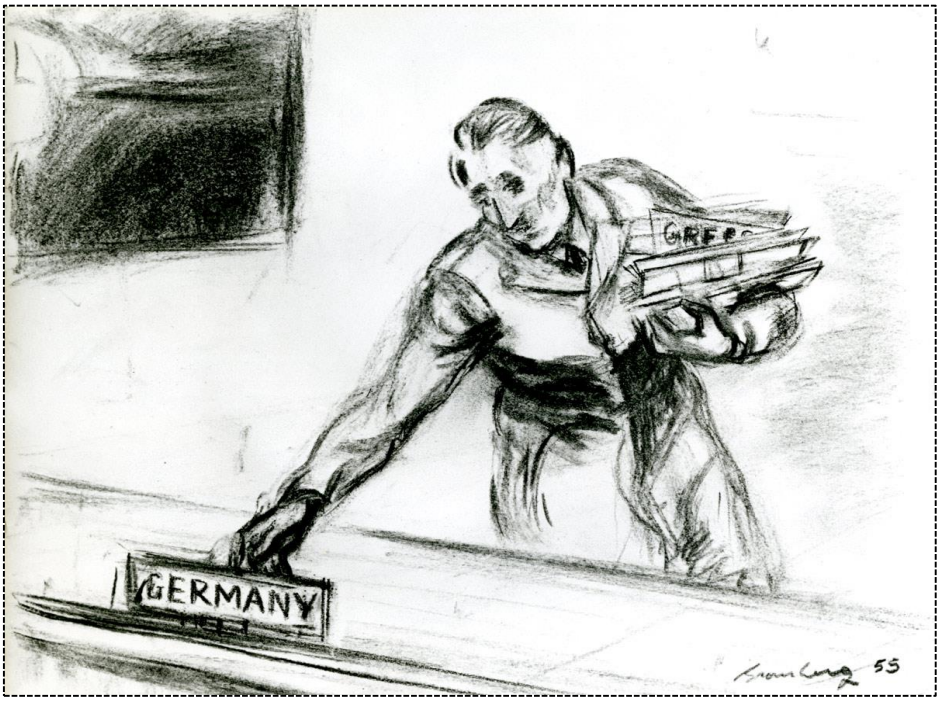


Figure 2: German ideology by the Chancellor of Germany and NATO as one of the members of the Western strategic allies led by the United States of America

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THE RELATIONSHIPS BETWEEN PROFESSIONAL BURNOUT AND SELF-EFFICACY IN THE PROFESSIONAL PERSONNEL OF THE SPECIAL EDUCATION AND REHABILITATION CENTER IN DIYARBAKIR

DİYARBAKIR'DAKİ ÖZEL EĞİTİM VE REHABİLİTASYON MERKEZİ MESLEK PERSONELİNDE MESLEKİ TÜKENMİŞLİK VE ÖZYETERLİK ARASINDAKİ İLİŞKİLER

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Özet

Bu araştırmanın amacı; özel eğitim ve rehabilitasyon merkezlerinde özel gereksinimli bireylerle çalışan meslek personelinin mesleki tükenmişlik düzeyi ile öz yeterlik algısı arasındaki ilişkinin incelenmesidir. Araştırma ilişkisel tarama modeli baz alınarak uygulanmıştır. Araştırma evrenini Diyarbakır'da özel eğitim ve rehabilitasyon merkezinde çalışan bireyler oluşturmaktadır. Araştırma örneklemini ise Diyarbakır'daki çeşitli özel eğitim ve rehabilitasyon merkezlerinde çalışan 310 eğitim personeli oluşturmaktadır.

Araştırmadan elde edilen bulgulara göre mesleki tükenmişlik ile öz-yeterlilik inancı arasında anlamlı bir ilişki bulunmaktadır. Mesleki tükenmişliğin azalması ile öz-yeterlilik puanında azalma olduğu saptanmıştır. Medeni durum değişkeni ile ele alınan ölçekler incelendiğinde gruplar arasında anlamlı ölçüde farklılık olmadığı, bireylerin medeni duruma göre farklılık göstermediği görülmüştür. Meslek çalışanlarının, mesleki tükenmişlik ve öz-yeterlilik inançlarının farklı demografik değişkenlere göre etkilenip etkilenmediği incelendiğinde; mesleki tükenmişlik ve öz-yeterlilik inancının yaş ve medeni duruma göre farklılık göstermediği görülmüştür. Cinsiyet değişkenine göre Duyarsızlaşma alt boyutunda ortalamanın kadınlarda düşük olduğu, Sınıf Yönetimi, Öğretim Stratejileri ve Öz Yeterlilik alt boyutlarında ise kadınların erkeklerden daha yüksek ortalamaya sahip olduğu saptanmıştır. Gelir Düzeyi değişkenine göre Duygusal tükenme, Kişisel başarı, toplam tükenme, öğretim stratejisi, sınıf yönetimi, öğrenci katılımı alt boyutları ile mesleki tükenmişlik ve öz-yeterlilik inançları arasında anlamlı bir korelasyon olmadığı görülürken, Duyarsızlaşma ve Öz yeterlilik alt boyutları ile anlamlı bir ilişki olduğu görülmüştür. Meslek grubu değişkenine göre kişisel başarı, öğrenci katılımı, öğretmen stratejileri, sınıf yönetimi alt ölçek puanlarının ve öz yeterlilik puanının öğretmenlerde diğer meslek gruplarına nazaran yüksek olduğu saptanmıştır.

Anahtar kelimeler: Tükenmişlik, Öz Yeterlik, Özel Eğitim ve Rehabilitasyon Merkezi

Abstract

The purpose of this research; The aim of this study is to examine the relationship between professional burnout level and self-efficacy perception of vocational personnel working with individuals with special needs in special education and rehabilitation centers. The research was applied based on the relational screening model. The population of the research consists of individuals working in a special education and rehabilitation center in Diyarbakır. The research sample consists of 310 education personnel working in various special education and rehabilitation centers in Diyarbakır.

According to the findings obtained from the research, it was determined that there was a significant relationship between professional burnout and self-efficacy belief, and that there was a decrease in the self-efficacy score with the decrease in professional burnout. When the scales considered with the marital status variable were examined, it was seen that there was no significant difference between the groups and that the individuals did not differ according to their marital status. When examining whether professional burnout and self-efficacy beliefs of professional employees are affected by different demographic variables; professional burnout and self-efficacy beliefs did not differ according to age and marital status. According to the gender variable, it was determined that the Depersonalization subscale score was low in women, and the Classroom Management, Instructional Strategies and Self-Efficacy subscale scores were higher in women. According to the Income Level variable, there was no significant relationship between Emotional Exhaustion, Personal Success, Total Exhaustion, Teaching Strategy, Classroom Management, Student Participation sub-dimensions, and professional burnout and self-efficacy beliefs, while there was a significant relationship with Depersonalization and Self-efficacy sub-dimensions. . According to the occupational group variable, personal achievement, student participation, teacher strategies, classroom management sub-scale scores and self-efficacy scores were found to be high in teachers.

Key words: Burnout, Self-Efficacy, Special Education and Rehabilitation Center

NEXT GENERATION WEB-BASED VOTING SYSTEM

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ABSTRACT

NGWBVS is a general purpose voting system and it is not restricted for Elections but anyone can use it for the purpose of voting. The idea behind making this project is to make an electronic system in order to eliminate old manual voting system which requires ballot boxes and a lot of paper pencil work. Since electronic machines work on data in seconds, so time consumption is avoided. Such systems are being used in many European countries but there is no awareness here in Pakistan because 65% to 70% population is uneducated here. Our System NGWBVS also requires educated voters. If a voter is under matriculation, his one vote equals to one vote. And if he has done matriculation, then his one vote equals to 5 votes. In a similar way, if voter has a Bachelor Degree then voters one vote equals to 15 votes. And finally, if voter is a Doctor then one vote equals to 20 votes. This is because a doctor and middle pass voter can never be equal in sense of education and ultimately their decision power also varies. Indirectly, the current study also aroused the people to be educated since there is no other way in this fast and modern age of technology. The researchers simply made a dynamic site which had two levels, Super Admin and voter. The admin logins and starts elections by giving two things: area code and password. Then the voter logins and registers himself by giving his first name, last name, mother name and valid NIC number. The researchers have created a registered database of 20-30 voters which is virtually a **NADRA** Database. Registered voters data is matched and they are given access to the voting page. Now he clicks the vote button to cast the vote to his relevant party candidate. Total number of votes is never displayed until voting session is ended. If the admin feels that there is something wrong happening in his voting area, he can close the voting process by pressing a logout button. Finally at the end of voting session, admin closes Elections and that's all. The researchers' conclusion with suggestions and recommendations was also summed up at the end of the study.

Key words: Next Generation, Web-Based Voting System, NADRA, Displayed, Voter.

INTRODUCTION

Electronic voting is now a reality—and so are the many errors and vulnerabilities in commercial electronic voting systems. Voting systems are hard to make trustworthy because they have strong, conflicting security requirements:

• Integrity of election results must be assured so that all voters are convinced that votes are counted correctly. Any attempt to corrupt the integrity of an election must be detected and correctly attributed.

• Confidentiality of votes must be assured to protect voters' privacy, to prevent selling of votes, and to defend voters from coercion [1].

The system provides an online tool for the clients to vote. In this system there will be two main pages to be able to access: Admin page and Voting Page. From the admin page, the administrator starts the voting. From the Voting page clients will be able to open their election pages and vote in the favor of their desired candidates. According to the login credentials, the system will determine if the user is Administrator or the Voter and open the pages gives access accordingly.

As the world watched the electoral drama unfold in Pakistan, people started wondering, "Wouldn't all our problems be solved if they just used Online Internet Voting?" People all over the world soon started taking a hard look at their voting equipment and procedures, and trying to figure out how to improve them.

There is a strong inclination towards moving to Remote Internet Voting at least among the politicians in order to enhance the following:

- Voter convenience
- Increase voter confidence
- Voter's turnout

However, as will be seen later in this independent study, there are serious technological and social aspects that make Remote Internet Voting infeasible in the visible future.

The state of Pakistan emerged from the partition of the Indian sub-continent in 1947. Originally created to meet the demands of Indian Muslims for their own homeland, it split in two in 1971 when the predominantly Bengali speaking eastern part of the country seceded with help from India, to become Bangladesh. With a population of 142 million, it is the seventh largest country in the world. Since independence in 1947, alternating periods of civilian and military rule and human rights abuses have undermined political and economic stability in Pakistan. During the last few decades corruption, inefficiency, inability and confrontations between internal institutions have tarnished civilian politics and there has been a series of military coups followed by the corrupted leaders.

The project is purely for the educated citizens since only educated people can decide the better future for the country. Every voter now be able to know that on what bases he going to vote the candidate, and think that either he is able for that vote or not?

Electoral System

In early 2002, the military government suggested revised electoral systems to both the Parliament and the Provincial Assemblies. After consultations with civil society organizations, political parties and other stakeholders General Musharraf finally announced the changes to the electoral system on 21 August 2002 as the Legal Framework Order, 2002 was introduced. It was also announced that elections to the National and Provincial Assemblies would take place on 10 October 2002 while elections to the Senate were re-scheduled for 12 November 2002.

The more salient changes were:

Number of seats in the National Assembly increased

Number of seats in the Senate increased

Number of seats in the Provincial Assemblies increased

Set aside seats for women were introduced in both houses of the Parliament and the

Provincial Assemblies

Separate electorate for the minority seats was abolished and a joint electorate

Voting age was reduced from 21 years of age to 18.

The electoral system of Pakistan reflects the federal system laid out in the 1973 Constitution. As a result, the provinces have a significant impact as how the Senate is composed, which is the norm in most federations.

National Assembly

The National Assembly has three categories of seats:

- General seats
- Women seats
- Non-Muslim seats

It should be stressed that only the general seats are directly elected via the First-Past-The-Post system, i.e., by simple majority in single member districts. The women seats, on the other hand, are indirectly elected using a proportional system based on the number of general seats won by each political party from the province concerned in the National Assembly. The non-Muslim seats, on the other hand, are indirectly elected via the same proportional electoral system as used for the women seats, except that the entire country constitutes the constituency. Both women and non-Muslims are picked from the respective closed party list. As a result, independent candidates could only run for the general seats and not for any of the reserved seats in the National Assembly.

A further novelty in this year's election is the five per cent threshold introduced to prevent smaller parties access to the reserved seats for women and non-Muslims. If a party doesn't receive at least five per cent of the general seats in the National Assembly, it will not be allotted any of these reserved seats to the National Assembly.

The number of seats in the National Assembly (NA) increased significantly. In 1997 elections, 217 members of the NA were elected (directly and indirectly) while this time around the figure had risen to 342 (see Figure (1)). One of the main reasons for this increase was the introduction of dedicated seats for women (60), but also the general seats increased by sixty-five new seats. Also, after the increase in the number of seats in the National Assembly [2], Punjab will still be the key province since it holds more than fifty per cent of the seats.

Category of Seats	1997 Elections	2002 Elections	2008 Elections
General Seats	207	272	272
Women Seats	0	60	60
Non-Muslims Seats	10	10	10
Total No. of Seats	217	342	342

Figure (1.1) National Assembly Composition: 2002 elections compared to 2008

LITERATURE REVIEW

The characteristics of a good voting system will, of course, depend on the purpose for which the system will be used. However, there are enough similarities between most polls that it is possible to develop a set of general characteristics that are likely to be desirable in most situations. Indeed, if you think about the various elections in which you have participated, you will probably realize that these polls have several common elements.

Prior to an election, organizers determine who is eligible to vote. This may involve a formal registration period or an announcement that anyone who is a member of a certain group as of a certain time may vote. Once the election begins, administrators may validate the credentials of those attempting to vote. This may involve asking voters for identification from NADRA (In order to see whether voter is Pakistani Citizen or not) and another verification through HEC (which confirms the voter's qualification or education). Generally, this procedure also involves keeping track of who has already voted so that eligible voters may vote only once. After validating each voter, the administrators collect the voted ballots. Finally, the voted ballots are tallied to determine the election result. Thus, a typical election involves registration, validation, collection, and tallying. Because the registration task often takes place prior to the actual election and may employ techniques currently used for traditional elections, this article will focus on the other three tasks.

To have confidence in the election results, people must believe that the election tasks are performed properly. However, there are numerous opportunities for corruption during the performance of each of these tasks. For example, election authorities may cheat by knowingly allowing ineligible voters to register, allowing registered voters to cast more than one vote, or systematically miscounting or destroying ballots. In addition, ineligible voters may register (often under the name of someone who is deceased) or eligible voters may register under multiple names. Registered voters (eligible and otherwise) may also be impersonated at the polls, and ballot boxes, ballots, and vote counting machines may be compromised.

Traditionally, election fraud has been prevented through the use of physical security measures, audit trails, and observers representing of all parties involved. But the prevention of election fraud is made more difficult by the frequent requirement that votes remain private. Observers may not observe a ballot until after it has been placed in a ballot box, and audit trails must not provide the ability to link a ballot back to the voter who cast it. Even so, these security measures generally work well enough that the possibility of widespread fraud is small and people have confidence that election results are accurate.

When designing a web-based polling system, it is essential to consider ways in which the polling tasks can be performed electronically without sacrificing voter privacy or introducing opportunities for fraud. In order to determine whether a system performs these tasks well, it is useful to develop a set of criteria for evaluating system performance. The following is one set of desirable characteristics for electronic polling systems which incorporates the characteristics of most systems described in the electronic voting literature:

Accuracy: A system is accurate if

- It is not possible for a vote to be altered
- It is not possible for a validated vote to be eliminated from the final tally
- It is not possible for an invalid vote to be counted in the final tally.

In the most accurate systems, the final vote tally must be perfect, either because no inaccuracies can be introduced or because all inaccuracies introduced can be detected and corrected. Partially accurate systems can detect but not necessarily correct inaccuracies.

Democracy:

A system is democratic if

- It permits only eligible voters to vote.
- It ensures that each eligible voter can vote only once.

Verifiability:

A system is verifiable if anyone can independently verify that all votes have been counted correctly.

Convenience:

A system is convenient if it allows voters to cast their votes quickly, in one session, and with minimal equipment or special skills.

Flexibility:

A system is flexible if it allows a variety of ballot question formats, including open ended questions. Flexibility is important for write-in candidates and some survey questions. Some cryptographic voting protocols are inflexible because they only allow for single-bit (yes/no) votes.

Mobility:

A system is mobile if there are no restrictions (other than logistical ones) on the location from which a voter can cast a vote.

One of the reasons people are interested in electronic voting systems is that such systems are mobile. Voter participation might increase if people could easily cast votes from computers in their homes, offices, schools, and libraries. Of course, for governmental elections it would be essential to retain centralized polling places for people who would not otherwise have access to computers.

The mobility property itself is a major contributor to some of the problems associated with designing a secure and private electronic voting system. By allowing voters to cast their votes from virtually anywhere, we dramatically expand the universe of ineligible people who may attempt to vote. We also limit our abilities to prevent voters from proving how they voted, as there are no longer private voting booths that can prevent vote buyers from observing vote sellers as they cast their votes.

Existing Problems of Election System

[3] The present election system is based on manual procedures. The process is quite primitive and has certain flaws in it. These include:

Corruption

a. Duplicate voting

One person is allowed to vote only once. However, it has been happening that one person votes for more than one time, hence helping the candidate wins (unfairly).

b. Unsatisfactory Counting Procedures

The counting is manual and has been complained a lot of times as being unfair and biased.

Resources

a. Money

Lot of money is wasted on printing and developing of the ballot papers. Furthermore, this is not a one-time expense, since the candidates won't be same every election, and electronic system is implemented once for all.

b. Human

A great deal of human resource is required to conduct the elections. This is because several individuals are required to perform each of the tasks (including identification of the voter and allotment of the slips). Where Electronic Web Based System requires less human labor.

c. Time

Today is modern and Fast-Growing World and there is a lot of importance of time for everyone, so in this busy age of technology everyone should entertained early. The old voting process is very slow. The voter has to go to various desks for different procedures. This makes the process time inefficient. For this reason, all the voters usually don't get the chance to vote in the time period (9:00 am to 5:00 pm).

Maintenance

a. Maintenance of Records

Maintenance of records is difficult. The voter lists are manual and may contain certain errors. The data contained sometimes is redundant and inconsistent. And on the other hand, Millions and Billions Giga Bytes data can be saved and maintained without any error and redundancy.

b. Manual Procedure Prone to Errors

The manual procedures sometimes result in errors like data inconsistency. Moreover, the manual counting is not much reliable either. So, electronic system is less prone to errors.

c. Slow Results

Manual counting requires slow results since counting is to be done manually. It takes a greater amount of time to get the results. Hence, the results generation process is very slow. On the other hand, electronic processes and result evaluation happens in nano seconds.

Coercivity

Coercivity is an act of casting vote by force by compelling someone at gun points. Corrupt people attack the polling booths. To stop such kind of actions electronic voting is better solution.

KEY DIAGRAMS

The proposed Network Based-Election System is corruption free i.e., one person can only vote once during election. In the proposed system the voting process will be very fast and the voters does not have to go to various personals for different procedures. In the computerized Election System, a less, human resource is required to conduct the election process. The counting process will be fair and unbiased with the help of computers. Hence the proposed system will be cost optimal.

A considerable number of votes get wasted due to wrong stamping. Our system would provide computerized process so that no vote is wasted.

Manual counting is prone to errors and is unsatisfactory. In our automated system, errors like counting mistakes could be eliminated. A lot of resources are needed which include financial resources, human resources and time. Our system would not require large financial resources each time the system is used. The system will only need to be updated.

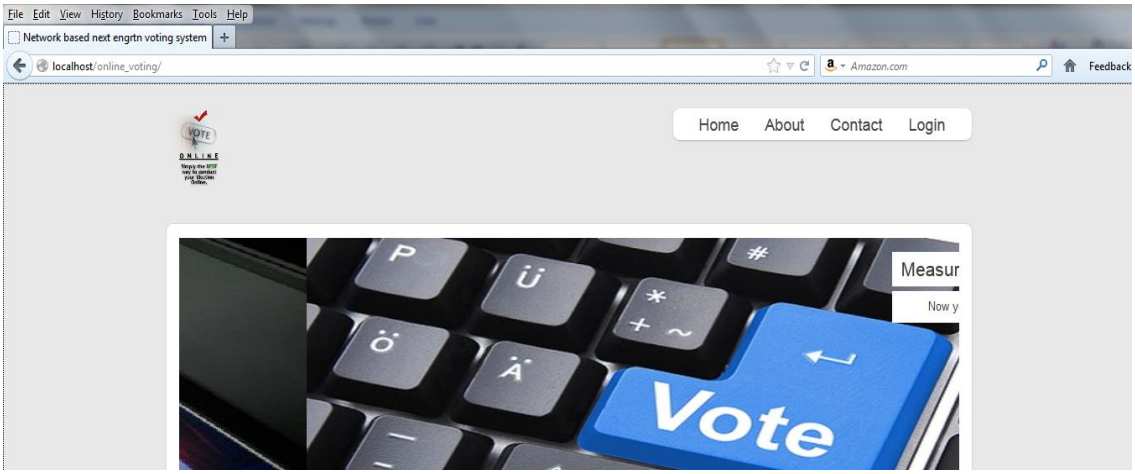
Maintenance of records is difficult and may result in inconsistencies and redundancy. In computerized database systems, maintenance would be easy since it would only require updating and the database system will take care of inconsistencies or redundancies that may arise. The result generation process is very slow. Our computerized system will generate the result immediately and everything is done coercively.

Data Flow Key Diagrams

The key diagram consists of two main parts:

- The Admin Panel
- The User Panel

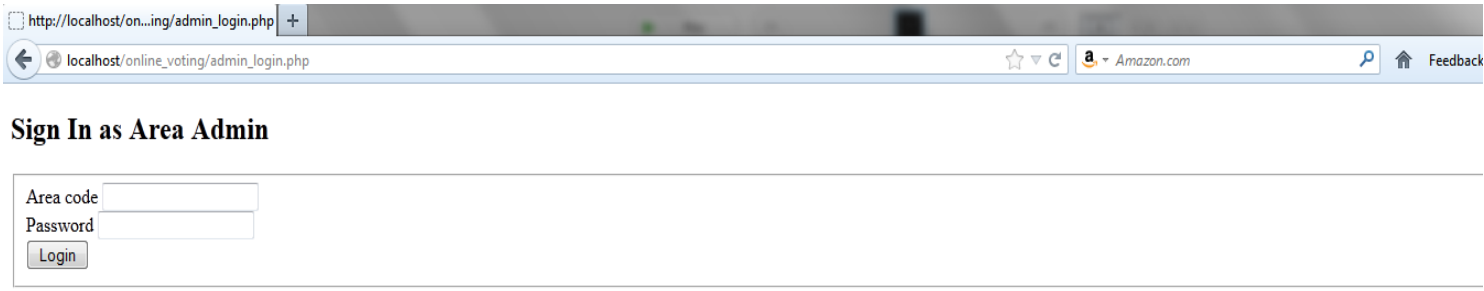
First of all, the admin who is actually the ELECTION COMMISION starts the voting scenario from a web page.



Sign In Admin

The admin login giving the following two things:

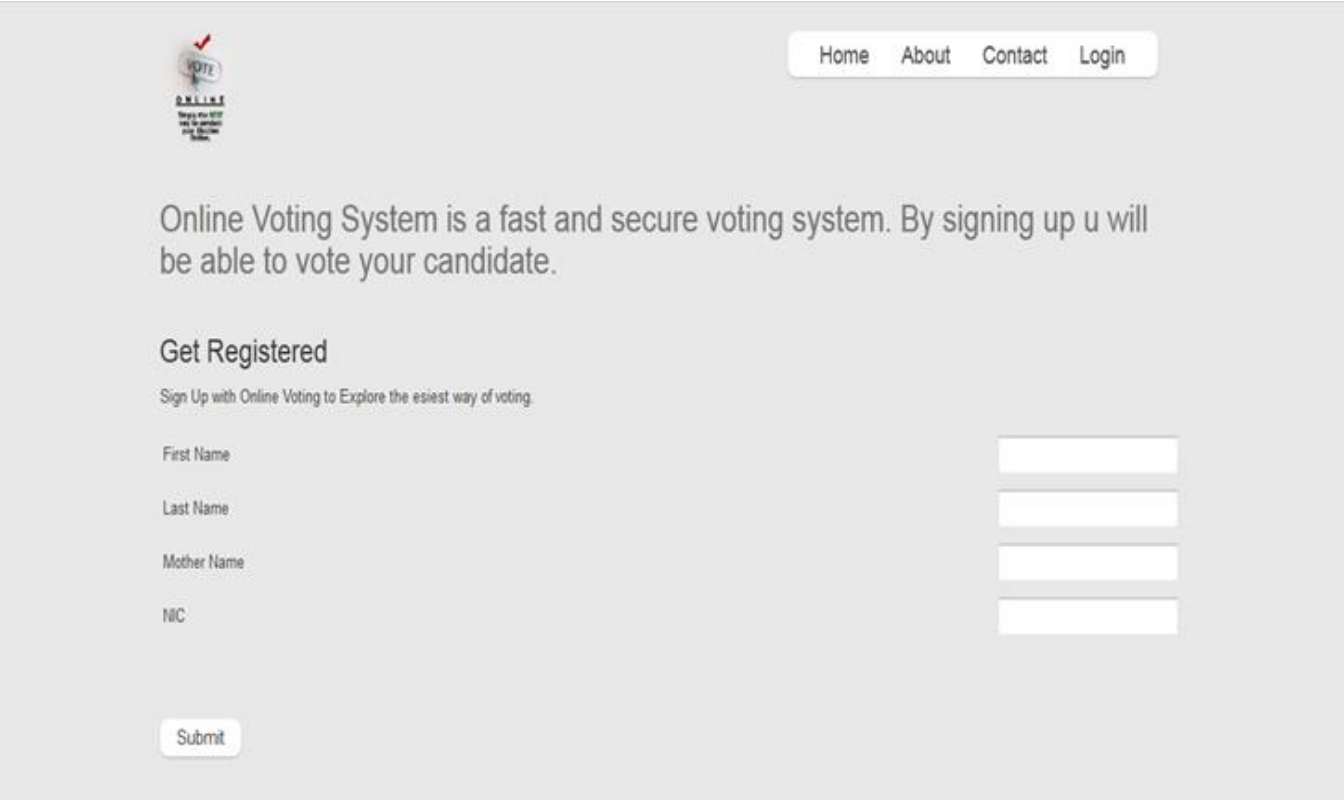
- Area Code
- Password



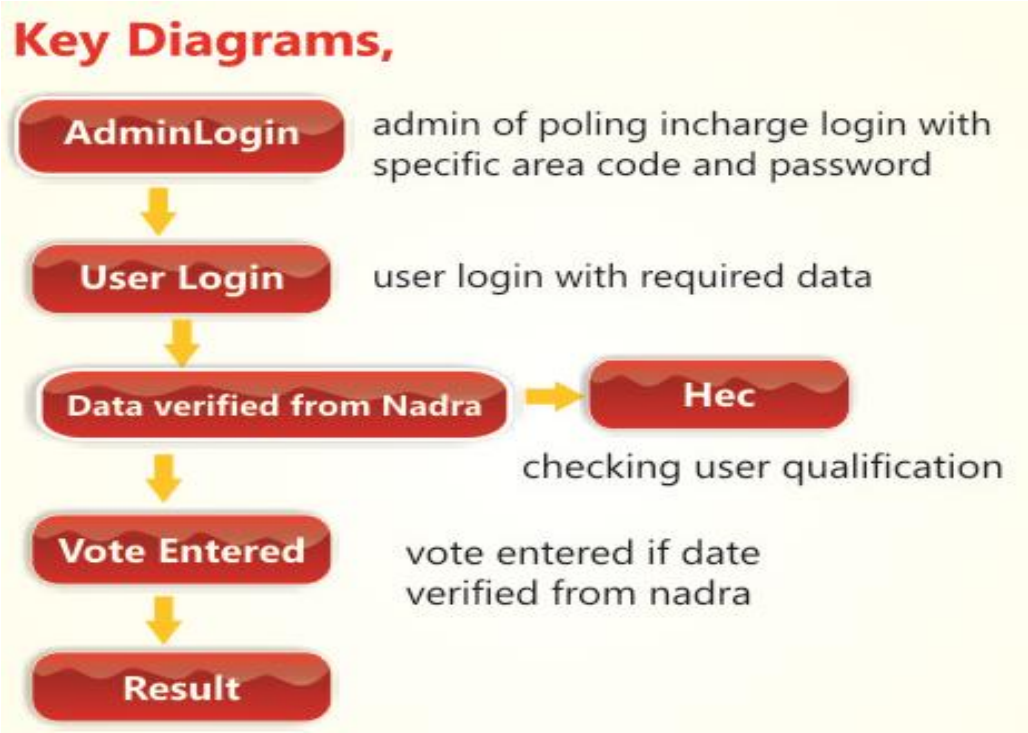
Registration of Users

This retrieves to the main page where a voter can login giving following information:

- First Name and Last Name
- Mother Name
- National Identity Card



Central Key Diagram



Software And Hardware Requirements

Hardware Requirements

High performance server computer

Client: Pentium 4, with minimum Ram of 512MB

500 MB of available hard-disk space minimum

1024 x 768, 16-bit High Color minimum

USB Port (for USB peripherals)

High resolution camera

Software Requirements

The main software resources to be utilized for the project include the following.

PHP

MY SQL

Dreamweaver CS.5

Wamp Server

Windows Operating System (Compatibility upto Window 7)

System Logics

Functional Requirements

- ✓ Maintain the category of election (National or Provincial)
- ✓ Enter the records of the candidates.
- ✓ Enter the records of the voters
- ✓ Maintain the Halqa.
- ✓ Interoperate with other organizational systems (NADRA's database).
- ✓ Interoperate with other Higher Education (HEC).
- ✓ Provide voter validation to ensure that the voter has already not voted.
- ✓ Provide help facility to the voter.
- ✓ Vote casting.
- ✓ Submission of vote by the voter.
- ✓ Vote counting at the back end only visible to the ELECTION COMMISION.
- ✓ Update results (increment the count of the candidate to which the user has voted).
- ✓ Increment is according to the voter's qualification
- ✓ Zero Chances of Coercivity
- ✓ Security.

Non-Functional Requirements

The category for which the elections are held should only be displayed

- ✓ The voter should only be allowed to vote in his own Halqa.
- ✓ The voters must have a valid NIC and qualification
- ✓ Voter validation should be performed by checking whether the voter has already voted or not.
- ✓ The voter should be allowed to vote for only one candidate from one of the both categories.
- ✓ The results of the elections should not be displayed until the end.
- ✓ No one should be allowed to access the database of results
- ✓ Only ELECTION COMMISSION can see the vote.

Interface

Interface design is very important from many respects. If User Interface of any system is strong and eye catching then it's better for the importance of system. In a web-based system, the text and color scheme are very important part for an idea of the whole system.

CONCLUSION

There is no any perfect system in the world which is totally error free and purely one hundred percent accurate from every respect. If one feature is added in a system, there is a chance that another feature cannot give absolute functionality. So, there is trade off in every scenario.

Although the system NGWBVS is an electronic voting system yet it enables people to vote from anywhere without any geographical proximity. But it is less prone towards hackers' attacks. But Systems with perfect accuracy are made while making lot of experiences with them. At Bachelors level, students can just follow their idea but can never make a perfect system but user experience can improve the functionality. A lot of future enhancement can be made in NGWBVS.

Since NGWBVS is general purpose system so it can used for any kind of voting. For C.R ship elections in a class can be done using this system. Some changing in a code would make it perfect for C.R Ship elections. In a similar way, some other elections can also be treated using this system.

And finally, there are some security issues with our system also. We will try our best in order make it more secure and reliable for the future use, so that we could meet the needs of a perfect voting system. With this hope, we all members are ready to test our project in different circumstances while getting user experience from every experiment.

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ONLINE CAR RECOMMENDATION SYSTEM: ENHANCING USER DECISION-MAKING IN THE AUTOMOBILE MARKET

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Abstract

The automobile market offers a wide range of options, making the process of choosing the right car overwhelming for consumers. To address this challenge, online car recommendation systems have emerged as valuable tools to assist users in making informed decisions. This current study presents a novel online car recommendation system designed to enhance user decision-making in the automobile market. The system leverages a combination of user preferences, car features and historical data to generate personalized car recommendations. It also explores the effectiveness of the recommendation system by evaluating its performance metrics and conducting a user study to gather feedback on user satisfaction and usefulness ratings. The results of the study demonstrated the system's ability to accurately suggest relevant car options, improving the decision-making process for users. Additionally, the user study reveals positive feedback indicating the system's practical value in assisting consumers in selecting suitable cars. The findings of the study contribute to the advancement of online car recommendation systems and offer insights into their application in the automobile market. Further enhancements and future research directions were also discussed. The researchers' conclusion with suggestions and recommendations was also summed up at the end of the study.

Keywords: Online Car Recommendation System, Automobile Market, Decision-Making, Personalization, Evaluating, Enhancing, Satisfaction, Challenge, User Experience, Comparative Analysis, Pricing Information, Dealership Integration.

1. Introduction

In recent years, the digital landscape has revolutionized the way we shop for cars, and online car recommendation systems have emerged as a powerful tool to assist consumers in finding their ideal vehicle. In the current car market, where there are thousands of different cars with different features and styles, the buyer is at a disadvantage when it comes to get the perfect car based on his preferences. Moreover, the process of buying a car is a complicated issue; customers spend entire days, weeks, even months searching for a car in local dealerships, newspaper announcements, online. Usually the sellers, who are expert in optimizing their profits, are telling any lie in the book to sell the most expensive and unattractive cars to customers. As a result, the buyer ends up purchasing a car he does not want with money he does not have. The customer does not only lose money but also his valuable time and the opportunity to buy a better car for a better price elsewhere.

The second problem that exists in the current car market, is that there is not an optimal way to sell a car for a fair value. Usually the seller needs to go again to the same dealership that they bought the car from. As a result the seller has a clear disadvantage and ends up being taken advantage of by the system that sold him a car in the first place. Moreover, as technology changes, humans tend to change as well to adjust to those technology advances, unfortunately it is very hard for people to keep up with all the different cars that exist and come out in the market, consequently it is extremely hard to establish beneficial transaction between buyers and sellers.

Current System

Buyers who want to search for a car and get proper and diverse information about different cars, models, styles, horse power, engines, and many other feature usually get that information in a form of an advice or recommendation from the dealer himself, whose only purpose is to sell the car for the highest price, without considering the buyer preference. Therefore they go to car dealerships or to car shows, for the purpose of getting information, even if it's not fair information. Many buyers usually get information about cars from their friends who themselves received their knowledge from other people, as a result this infinite loop creates a large population of buyers who do not know how and what car to buy for a fair value. Moreover, when selling a car, the owner usually goes to PakWheels , CarMax or other dealerships and end up selling their vehicles for less than its worth. The other way people usually sell a car is by listing it in Craigslist or OLX, but unfortunately Craigslist does not enforce any legality over the cars they sell; not surprisingly, this website is very famous for being a hotspot for scammers who cheat and steal money from buyers and sellers alike. All in all, there are many website and non-web related tools that provide a marketplace for sellers and buyers, however, they all fail to provide the relevant information needed for an optimal vehicle transaction.

Purpose of New System

Recommendation systems are taking more importance in online businesses, where the ability to propose a new item or product that a user will like can increase sales substantially. In this project, we propose to implement a web page where users can view certain types of items, for example cars, and give their feedback about them, either explicitly (thumbs up / down, likes, ratings...) or implicitly (clicking on item, spending time reading its description, sharing it..) Then, the system will run algorithms to come up with similar items to show to the user, and optionally collect

feedback about the quality of the recommendation. Algorithms can range from simple similarity measures, to more complex Web-Scrapping Technique. Different topics of web-crawling were applied, such as retrieving information, cleaning it for processing and storing it, evaluating algorithms for recommendation.

In other words, the system will study the user input throughout time, and recommend cars based on Web-Scrapping technique. This way the user can look into prospective cars that meet his or her expectations.

2. Literature Review

Prior research has highlighted the significance of recommendation systems in various domains, including e-commerce and entertainment. While some car-related recommendation systems exist, they often lack personalization and fail to provide a holistic decision-making framework for users in the automobile market. This research aims to bridge this gap by developing a comprehensive Online Car Recommendation System that considers user preferences, vehicle specifications, pricing, and dealership integration. Research has highlighted the significance of personalized recommendations in reducing decision fatigue and buyer's remorse.

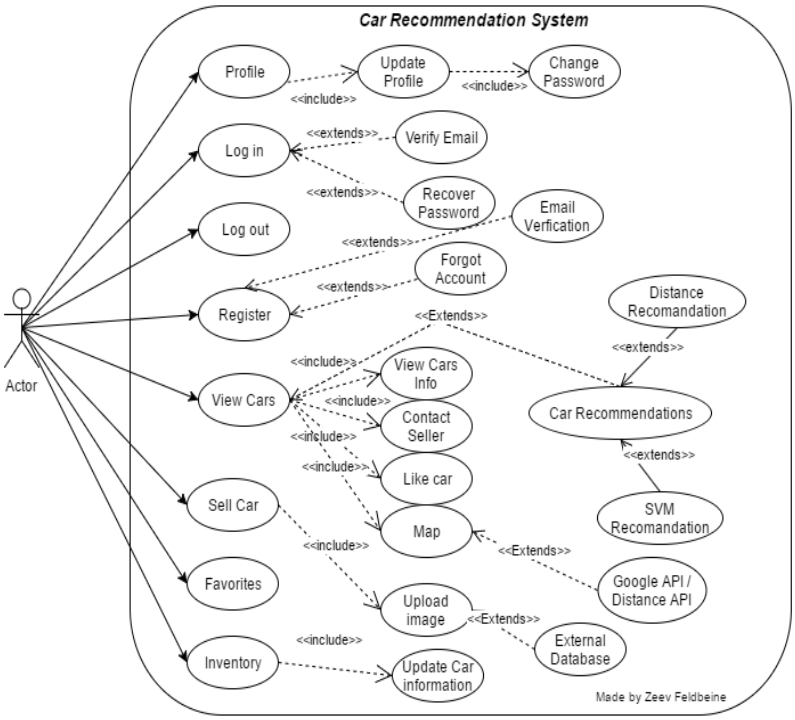
3. System Architecture

The proposed OCRS comprises several interconnected components:

- User Profiling and Data Collection
- Recommendation Engine
- Comparison and Analysis Interface
- Pricing and Financing Information Integration

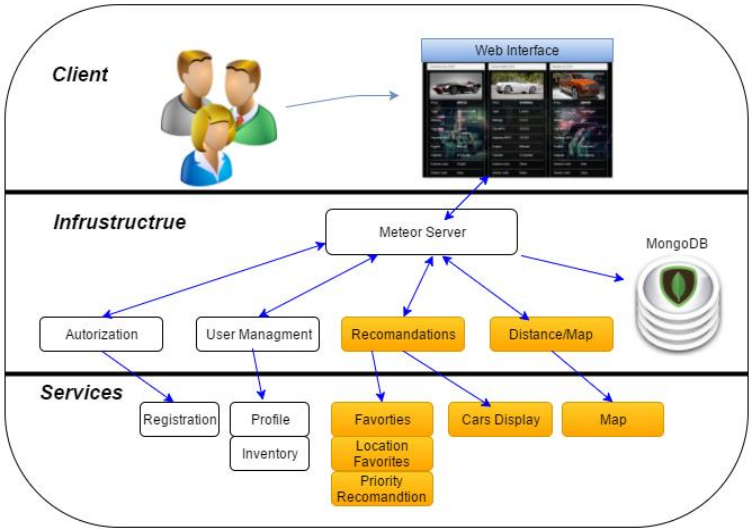
Dealer Interaction and Integration

UML Diagrams



- This diagram describes the Activity of the User or Actor for creating profile, login, logout, Register, view cars, sell cars, favorites and inventory.

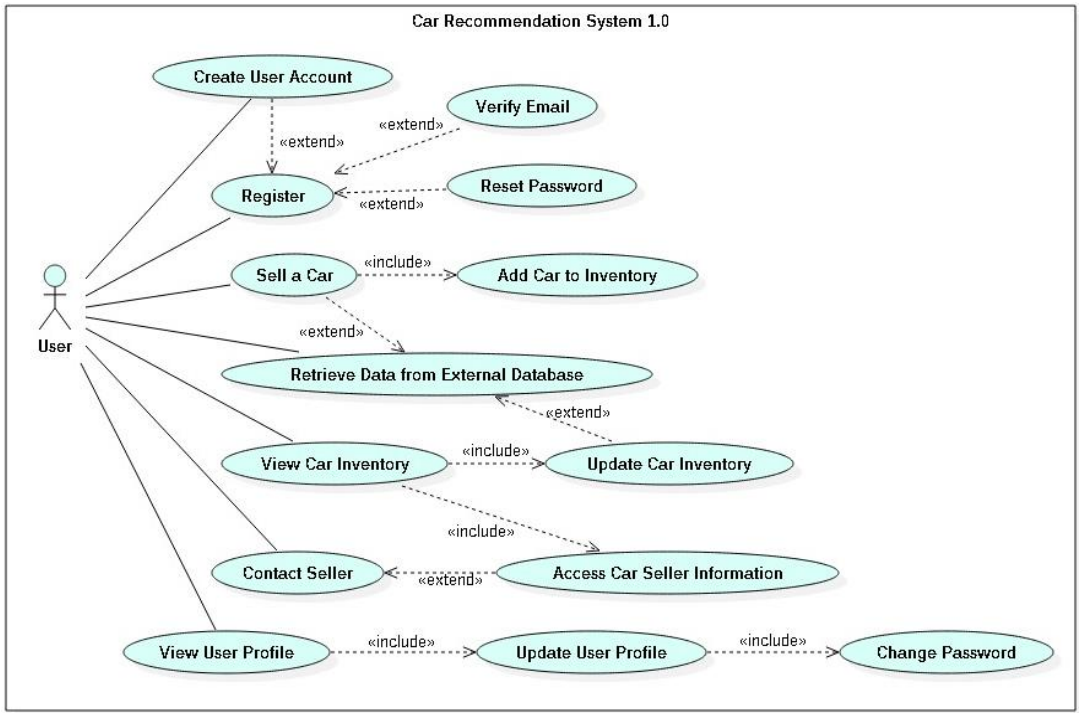
System Design



- This diagram shows user/client activity to the web interface,and he can interact with infrastructure including authorization,user management , recommendations, and map.while the services available for user is to registration,profile personalization, favorites, car display etc.

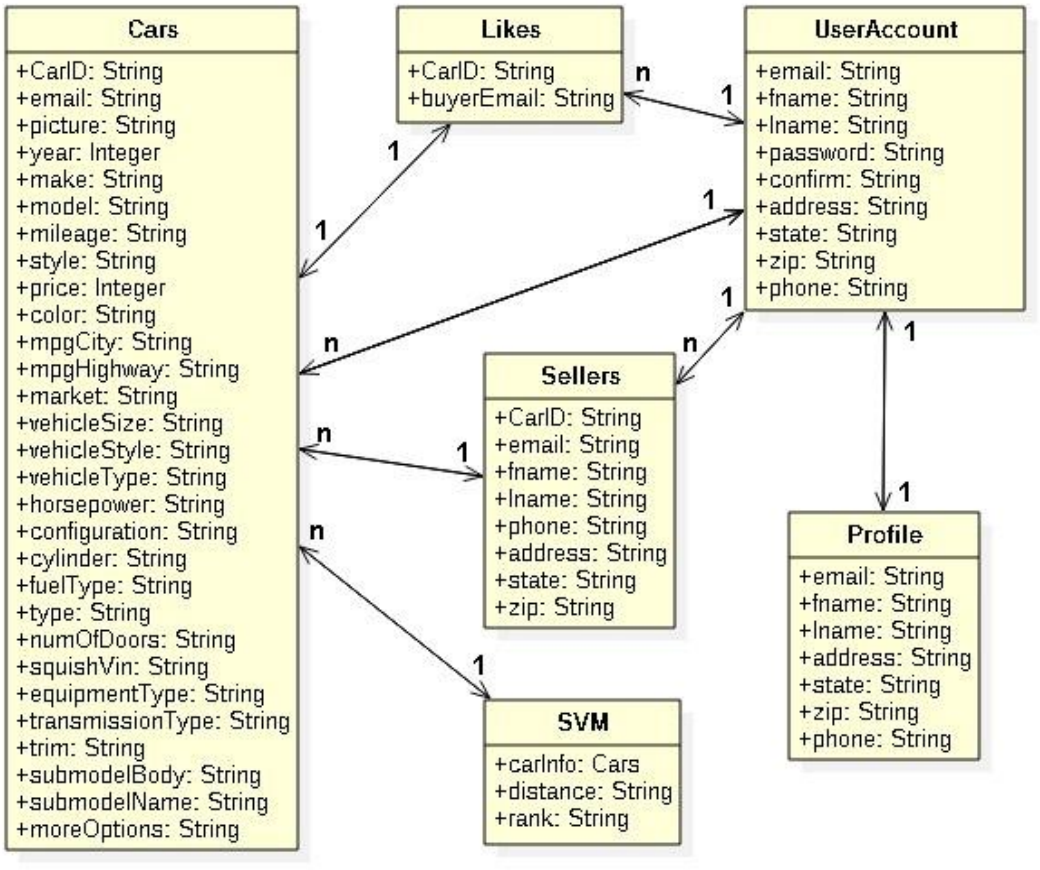
Object Design

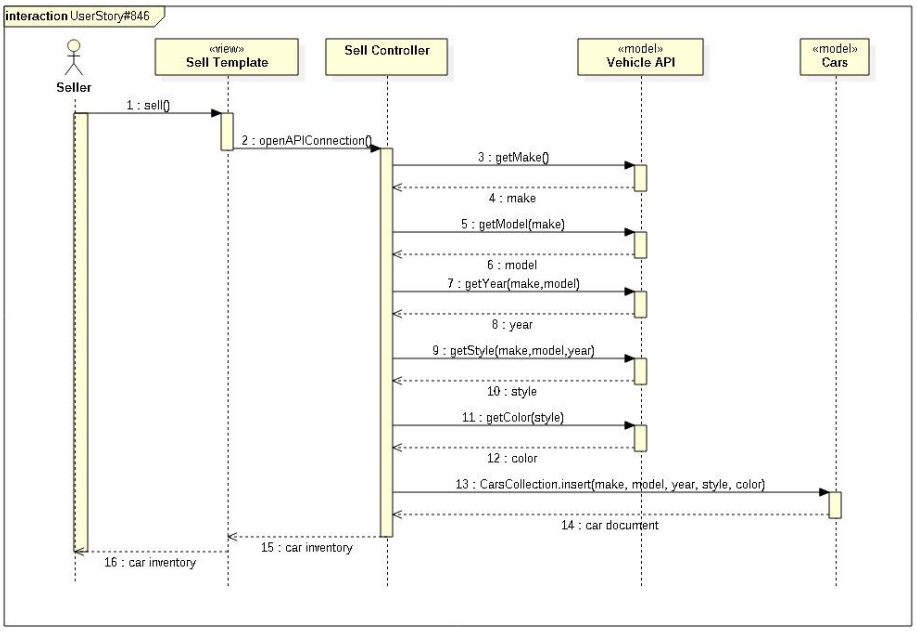
This diagram shows classess of user account,update profile,register,contact seller,update cars and sell options for the user etc.



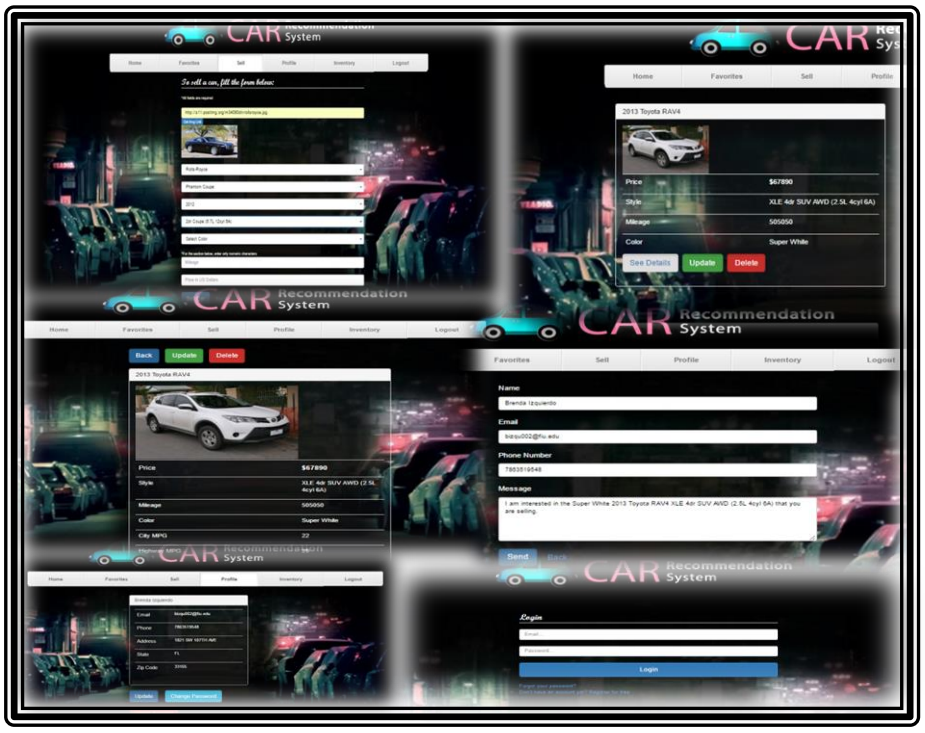
Implementation

- This figure shows Class diagram with entity-relations among Cars, Likes, seller,User account, Profile etc with return values.





7



- This is a sequence diagram which shows a seller sells and after the value passed from one stage to another it gives return result.Like from stage 1 if the value pass it goes to next stage sell template,next to sell controller where the function get() is passed to vehicle Api upto 11 stage with multiple get fuctions and finally passed to cars at stage 13 with return results.

Screenshots

These screenshots shows the interactive website page where a user can get his desired car via Register,login and input details for his desired car and he will get his required vehicle in a Jiffy.All the information of car is displayed and a buyer/seller platform is available for

- everyone.The user will not only see the available cars on this website but also see the cars

data retrieved from multiple websites to this single platfom.This platform will provide a range of cars through web-scrapping technique,which shows multiple options if the cars are available on other websites will be displayed on this single website with all available details.

4. Methodology

The OCRS employs Web-Scrapping Technique, such as collaborative filtering, content-based filtering, and matrix factorization, to analyze user data and vehicle specifications. The system utilizes a hybrid approach to generate accurate and personalized recommendations based on both user preferences and objective vehicle attributes.

Evaluation Methodology: To assess the effectiveness of the OCRS, an evaluation methodology is established. Quantitative and qualitative metrics are defined, including user satisfaction surveys, decision-making accuracy, time saved, and user engagement metrics.

The development of an OCRS involves several key components:

4.1 Data Collection and Preprocessing

Data from diverse sources, including manufacturers, dealerships, and automotive websites, are collected and preprocessed. This data includes specifications, features, pricing, safety ratings, and user reviews.

4.2 User Profiling: Users create profiles by providing their preferences, budget, lifestyle, and priorities. This data forms the foundation for generating personalized recommendations.

4.3 Recommendation Engine: Sophisticated WEB-SCRAPPING Technique by using PYTHON-DJANGO, such as collaborative filtering and content-based filtering, are employed to analyze user preferences and historical data. These algorithms generate recommendations that align with user profiles.

4.4 User Interaction Interface: The system provides a user-friendly interface where users can view recommendations, compare cars, adjust preferences, and explore detailed specifications.

4.5 Integration with Dealerships: Direct integration with dealerships facilitates users in initiating contact for test drives, negotiations, and purchases.

5. Data Collection:

The system gathers data from various sources, including car manufacturers, dealerships, automotive websites, and user reviews. This data includes details about car specifications, features, prices, safety ratings, fuel efficiency, and more. It also delves into data processing techniques to ensure accuracy and relevance.

6.Benefits and Implications:

The implementation of OCRS offers several benefits:

- **Time Saving:** Users save time by receiving tailored recommendations, reducing the need for extensive research.
- Informed Decision-Making: Data-driven recommendations enhance users' ability to make informed decisions aligned with their preferences.
- **Reduced Buyer's Remorse:** Personalized recommendations minimize the likelihood of dissatisfaction post-purchase.
- **Empowered Negotiations:** Users armed with comprehensive information can negotiate better deals with dealerships.

7.Challenges

Several challenges must be addressed in implementing OCRS:

- **Data Accuracy:** Ensuring the accuracy and currency of data from various sources.
- **Privacy Concerns:** Safeguarding user profiles and interactions to maintain data privacy.
- **Algorithmic Bias:** Mitigating biases that might emerge from historical data, ensuring fair and diverse recommendations.

8. Future Directions

The evolution of OCRS is poised to introduce further advancements:

- **Integration of Emerging Technologies:** Incorporating AI-driven image recognition to analyze car images and further refine recommendations.
- **Augmented Reality Showrooms:** Integrating OCRS with augmented reality to allow users to virtually explore recommended cars.

9.Results and Discussion

This section presents the results of experiments and evaluations conducted to assess the performance and user satisfaction of the OCRS. Metrics such as recommendation accuracy, user engagement, and decision-making efficiency are analyzed. The findings are discussed in the context of the research objectives and compared with existing approaches.

10.Conclusion

The Online Car Recommendation System represents a paradigm shift in the way users approach the car-buying process. By leveraging data-driven technologies, OCRS empowers users to make well-informed decisions and navigate the complex automobile market with confidence. Addressing challenges and continuously evolving the system will be essential to maximize its potential and transform the car-buying experience.The research paper concludes by summarizing the key contributions and insights gained from the development and evaluation of the Online Car Recommendation System. It emphasizes the significance of the OCRS in enhancing user decision-making in the automobile market and discusses its potential impact on the industry and consumers.

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A TREND TECHNIQUE IN THE CONTEXT OF ART TEXTILES: TUFTING

SANATSAL TEKSTİLLER BAĞLAMINDA TREND BİR TEKNİK: TAFTİNG

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Özet

Hem sanat hem de tekstil, doğadan ilhamlanarak ilk çağ dönemlerine kadar tarihlendirilirken, tekstilin sanat bağlamında bir disiplin olarak varlığı 20.yüzyıl ile birlikte kabul görmüştür. Başlangıçta tekstil, korunma ve örtünme ile giyinme dürtüsünü karşılarken, sanat eşya yapımı, bu eşyaların ve mağara duvarlarının estetik bezemesini sağlamıştır. 20. yüzyılla birlikte gelişen teknoloji, teknik ve malzeme çeşitliliği sayesinde tekstil, sanatın içinde kendine plastik bir dil edinerek sanatsal bir anlatım aracına dönüşmüştür.

Tafting, bir çerçeve üzerinde gerilmiş kumaş yüzeyine iplikleri özel bir tabanca yardımıyla hav şeklinde dokuyan bir düzenektir. Dokuma sonrası özel bir polimer tabaka ile sabitlenen yüzey, tercihe göre bukleli veya halı görüntüsünde boyutlu bir görünüme sahip olmaktadır. Bu yüzey, kullanılan ipliğin türü, rengi ve yapısına göre tasarıma bağlı olarak düz ya da boyutlu yapılarda kolaylıkla ifade biçimine dönüşen bir estetik bir yapıyla sunulmaktadır.

Bu araştırma ile sanatsal tekstillerde bir trend haline gelen tafting tekniğinin kullanımı ve üretimleri incelenmiştir.

Anahtar Kelimeler: Tekstil, sanat, tafting, sanatsal tekstiller

Abstract

While both art and textile were inspired by nature and dated back to the first ages, the existence of textile as a discipline in the context of art was accepted with the 20th century. In the beginning, textiles met the urge to dress with protection and veiling, while art object making provided the aesthetic decoration of these objects and cave walls. Thanks to the diversity of technology, techniques and materials that developed with the 20th century, textile has turned into an artistic expression tool by adopting a plastic language in art.

Tufting is a mechanism that weaves the threads in the form of pile on the fabric surface stretched on a frame with the help of a special gun. The surface, which is fixed with a special polymer layer after weaving, has a dimensional appearance, optionally in the form of curls or carpet. This surface is presented with an aesthetic structure that easily turns into a form of expression in flat or dimensional structures, depending on the design, depending on the type, color and structure of the yarn used. With this research, the use and production of the tufting technique, which has become a trend in artistic textiles, has been examined.

Keywords: Textile, art, tufting, artistic textiles

Giriş

"Tekstil" sözcüğü, "dokuma" manasına gelen Latin kökenli "texere" kelimesinden türetilmiştir. Sanat ise insanların duygu ve düşüncelerini bir anlatı aracılığı ile (resim, müzik, şiir, dans vb.) aktararak izleyicide düşünme ve hoşlanma duygularını oluşturma biçemidir. "Sanat; insanın

duygu, düşünce ve anlayışını, tabiattaki malzemelerden faydalanarak, heyecan ve hayranlık uyandıracak bir biçimde ifade etmesidir" (Şahin, 1999:1).

Tekstil ve sanat kavramları insanın doğa ile kurdukları ilişkiye bağlı olarak tarihsel ve varoluşsal bağlamda bir ortaklığa sahiptir. İnsanlar, doğayı gözlemleyerek doğada bulunan nesneleri taklit etmişler, kap kacak yaparak bunların estetik bir anlatım nesnesi oluşmasını sağlarken sanatı icat etmişlerdir. Vücutlarını dış etkenlerden korumak ve örtünmek için giyimi keşfederek ise tekstili yaratmışlar, ot, yaprak, saz gibi bitkilerden ve avladıkları hayvanların derilerinden dokuma, örme gibi yöntemlerle yüzey oluşturarak giysiye dönüştürmüşlerdir. Her iki kavramda insanın temel ihtiyaçlarına yönelik ortaya çıkarak sahip oldukları ilk eşyalarını ortaya koymalarına sebep olmuştur. Sanat, yaşanan döneme özgü farklı fikir ve yaklaşımlarla ortaya koyulurken, tekstil zanaat kategorisinden ancak 20.yüzyıl ile sıyrılarak sanat ile anılmaya başlamıştır. Özellikle Endüstri devrimi ile her iki kavramda teknoloji, malzeme, üretim yöntemleri açısından bambaşka çizgilerle ayrılırken 1950 ve sonrası oluşan popüler kültür ile bugünkü postmodern döneme gelmişlerdir. Çalışmada son yılların trend tekniği olan taftingin üretim, malzeme çeşitliliği ve sanatsal ifade biçimleri irdelenecektir. Bu çerçevede sanat ve tekstil kavramlarının disiplinlerarası bağlamda oluşturduğu sanatsal tekstillerin tarihsel, kavramsal ve düşünsel oluşumu hakkında bilgi verilecektir.

Sanatsal Tekstiller

Tekstil hammadde ve teknikleri ile üretilen eserler, kaynaklarda farklı yaklaşımlar ile ele alındığından kavram kargaşası yaşanmaktadır. Başak Özkendirci (Özkendirci, 2014) "Tekstil Sanatında Çok Yüzeylilik ve Heykel İlişkisi" başlıklı Sanatta Yeterlilik tezinde tekstilde estetik kavramların tanımlanması ve birbirleriyle ilişkilendirilmesini üç ana gruptan oluşan bir sınıflandırmayla ele almıştır: 1. Tekstil el sanatları 2. Tekstil tasarımı 3. Sanatsal tekstiller, ardından Sanatsal Tekstilleri a) Tekstil Sanatı b) Lif Sanatı c) Serbest Tekstiller olarak bölümlere ayırmıştır.

Tekstil özünde lifler taşır ve bu lifler boyutlu olmalarından dolayı çok çeşitli üretim yöntemleri ile ipliğe, kumaşa, dokusuz yüzeye vb. yapılara dönüşebilir. Bu boyutlu yapı çeşitli tekniklerle plastik bir oluşuma dönüşerek tekstil sanatını meydana getirir. Tekstil malzemeleri yapıları gereği farklı yöntemlerle şekillendirilebilen üç boyutlu maddelerdir. Tekstil malzemelerinin şekil alabilme, aldıkları formu koruyabilme gibi özellikleri plastik sanatlara hizmet edebilen bir araç olmasını sağlamaktadır. Tekstil sanatı, uzun yıllar literatürde var olan resim, heykel vb. sanat dalları gibi varlığını direkt ortaya koyamamıştır. Resimsel bir öğe olarak varlığını ilk olarak Orta çağ döneminde Tapestry (Duvar halısı) ve goblen panolar ile görmekteyiz. Bu halılarda dini anlatıların ve av sahnelerinin olduğu yapılan arkeolojik kazılarla belirlenmiştir. Resim sanatıyla paralel olarak gelişen tapestry sanatı 17. ve 18. yüzyıllara kadar gelişmeye devam etmiş fakat daha sonra Fransız devriminden olumsuz etkilenmeye başlamıştır. Endüstri devrimi sonucunda teknoloji çağının başlaması ve 20. yüzyıl sanatında başlayan değişim tapestryleri geleneksel üretim tekniklerinden ve klasik anlatımlardan uzaklaştırıp; serbest tekstil sanatlarının oluşmasına yer hazırlamıştır (Akyol, 2010:141). 1887 yılında William Morris ve arkadaşları tarafından Arts&Crafts akımı "Sanat zanaat için, zanaat sanat içindir" sloganı ile tekstil sanat eserleri ortaya koymuşlardır. Endüstri devriminin sosyal, ahlaksal ve sanatsal karmaşasına bir karşı çıkış olarak doğan; Sanatlar ve El Sanatları anlamına gelen "Arts and Crafts" hareketi 19. yüzyılın sonuna doğru İngiltere'de ortaya çıkmıştır. Sonrasında Art Nouveau ve Bauhaus akımı ve okulu ile tekstil bağlamlı sanatsal çalışmalar gelişme göstermiştir. Bauhaus sanat okulunda bu ekolde yetişen Anni Albers, Otti Berger, Gunta Stölzl, Walter Grapius gibi sanatçılar sanatsal tekstilleri, tekstil teknikleriyle (dokuma, baskı örme vb.) ortaya koydukları resimsel çalışmalar aracılığıyla oldukça beslemişlerdir. Bauhaus'un ana amacı fonksiyonel tekstiller olsa da, tekstilin olanakları üzerine yaptığı araştırmalar ve 20.

yüzyıl sanatıyla beslenen deneysel tavrı, serbest tekstillerin bağımsız bir plastik sanat dalı olarak gelişimindeki en önemli temeli sağlamıştır.

Tekstilin sanat olarak adlandırılması özellikle modernizm akımıyla ortaya çıkan sanat akımları ile gerçekleşmiştir. Modernizm sanatın düşünsel yönünün ortaya çıkmasıyla birlikte 20. yy ın ilk yarısında yer almıştır. Tekstil, modernizm ile ortaya çıkan kavramsal anlatımlarda sanat nesnesine dönüştüğünü kanıtlamıştır. Bu dönemlerde ortaya çıkan sanat akımları ile sanatsal tekstiller disiplinlerarası, bütünleşik eserler ortaya koymuşlardır. Bu eserler kumaş, iplik, atık tekstil vb. malzemelerle dikiş, örme, boyama, dokuma, nakış, sarma vb. tekniklerin tuval, boya ve diğer hazır nesneler ile buluşması sonucu ortaya çıkmıştır. Bu eserlere ilk örnek Edgar Degas "On Dört Yaşında Küçük Dansçı' adlı çalışmasıdır. Balmumu kullanarak yaptığı dansçı kız heykeline tül etek giydirmiş ve saçına kurdele takarak tekstili sanatta görünür kılmıştır. Pablo Picasso, 1912 yılında yapılan "Hasır İskemleli Naturmort" adlı çalışmasında kullandığı muşamba parçası ve sicim ile tekstil ile iş birliği yapmıştır. 1930'lar sırasında, Sürrealist sanatçılar, sanrısal durumları uyandırmak için düzensiz malzemeleri kullanmıştır. Meret Oppenheim'ın kürk kaplı çay fincanı ve kaşığı, Sürrealist bir ikon haline gelmiştir (Ullrıch, 2007:9). Böylece bir tekstil oluşumu olan kumaş, sanat nesnesi anlatı malzemesi olarak karşımıza çıkmıştır. Oppenheim'ın düşünsel bağlamda kadın ve erkek cinselliğini ele aldığı bu eserine Yılmaz, (2013,200) sıradan bir nesne olan çay fincanı ve kaşığının kürk ile kaplanmasını kadınlardan beklenen hizmeti ifade ettiğini dile getirmiştir. 20. Yüzyılın ortalarında tekstil sanatı sanat ortamlarında konuşulan bir üsluba, tekstil tercih edilen bir malzemeye dönüşmüştür. "Tekstil, 1950'lı yıllarda tekstil sanatçılarının kişisel ifadelerini aktardıkları özgün kavramsal eserler üretmeye başlamaları ve eserlerini çeşitli platformlarda savunmalarıyla el sanatı tanımının önüne geçerek '..malzemenin tüm potansiyelinin farkına vararak ve ticari zorlamaları dışlayarak, kendi yasalarına sahip bir sanat dalı olmaya başlamıştır" (Braddock, O'Mahony, 1997: 158).

1962 yılında Lozan'da Uluslararası Tapestry (Duvar halıları) Bienali yapılmıştır. Burada pekçok tekstil sanatçısı eserlerini sergilemiştir ve tekstil materyallerinin üç boyutluluğunu ve dokularını ortaya koyan sergileme biçimleri sanatsal tekstiller için çok büyük bir adım oldu. Lif sanatı ilk defa bienal ile dile getirilmiş ve sanatsal tekstillerin en önemli parçalarından biri olmuştur. Özellikle Magdalena Abakanowicz, anıtsal ve doğal liflerle yaptığı çalışmalarıyla tüm dünyada ses getirdi. Bu bienalde Magdalena Abakanowicz'in 'Abakanlar' adlı çalışması "O'nun Abakan'larından biri 1962 yılında İsviçre Lozan ilk Uluslararası Duvar Dokumaları (Tapestry) Bienalinde farklı bir hassasiyet yarattı. Asırlık dokuma zanaatının iki boyutlu duvar dokumalarından üç boyutlu heykele dönüşümü alkışlandı" (Reif, 2001:14). Resim 1'de Magdalena Abakanowicz'in Abakanlar sergisinden bir detay görmekteyiz.



Resim 1: "Abakanlar", Magdalena Abakanowicz, 1962, sisal, Uluslararası Tapestry (Duvar halıları) Bienali, Lozan

Bu bienal ile tekstil sanatı Modernizm ile başlayan düşünsel tarafı tekstil lifi ile başarılı bir şekilde temsil etmiştir. Örneğin Abakanowicz çalışmalarında Feminist söylemleri ve kadınsal duyguları çalışmalarında oldukça kullanmıştır. "Abakanowicz'in teknik ve malzeme seçimi, kadınların kültürel mirası olmuş ve onun vajinal formları 1970'lerde modern sanatta kurulan hiyerarşinin radikal bir yansıması olarak diğer birçok kadın sanatçı tarafından referans alınarak kucaklanmıştı"(Inglot, 2005:5).

1970'li yıllara gelindiğinde tekstiller arazi sanatı ile iş birliği yaparak kamusal alanları, doğal yaşam alanlarını metrelerce kumaşlarla kaplayarak tekstilin dev paketleme deneyimlerini yaşattı. Christo ve Jean Claude çifti enstelasyon sanatçısıdır. Resim 2'de eski bir savaş karargahı olan Reichstag'ın kaplanması projesi yer alıyor. Defalarca izinler alınan kaplama projesinde süreç 1971 yılında başlıyor ve uygulama için ancak 1995 yılına kadar beklemek gerekmiştir. Özel izinler, üretimler ve projeleri barındıran bu sanatsal tekstil eseri 1995 yılında tamamlanarak sergilenmiştir.



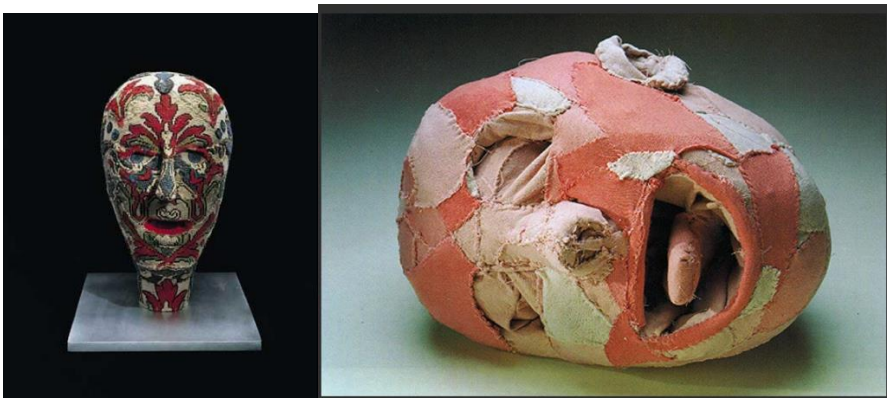
Resim 2: Christo ve Jean-Claude , "Wrapped Reichstag" Polipropilen tekstil, Berlin, 1971-1995

Yine aynı dönemlerde lif sanatı çalışan başka bir sanatçı Sheila Hicks, her türlü elyaf yapımının ana düşünürü olarak kabul edilir. İçgüdüsel olarak zanaatla tanışması çocukken büyükannesinin örgü sevgisi ile başlamıştır. Genç yaşta ipliğe ilgisi başladı ve bir nevi iplik bilinci kazandı. Örgüden dokumaya, sarmadan düğüm atmaya kadar bütün deneyimlere sahip oldu. Resim 3'de 1976 yılında Sheila Hicks'in iplik deneyimleri ile oluşturduğu eserleri görmekteyiz.



Resim 3: Solda, "Big Wheel of Shiva", Keten elyafı ve keten ipliği, 1976, Sağda, "Tapestry Volume, yün, elyaf, sicim, kağıt, 1976

21. yüzyıla gelindiğinde sanatsal tekstiller çok boyutluluk konusunda oldukça yaratıcı çalışmalar sergilemiştir. Louise Bourgeois, 20. yüzyılın seçkin bir Amerikan-Fransız sanatçısıydı; soyut heykelleri, çizimleri ve baskılarıyla tanınıyordu. Sanatçının düşündürücü çalışmaları, çocukluk anılarından ve cinsellik, acı ve korkuya ilişkin psikolojik analizlerden derlenmiştir. Resim 4'de sanatçının yumuşak tekstil heykellerinden örnekler görmekteyiz.



Resim 4: soldaki: " İsimsiz", Louise Bourgeois, 2002 Kumaş ve elyaf, 35,6x30,5x30,5 cm, sağdaki: "Why haveyou run so far away", 1999, 25,4x33x25,4 cm

Modern sanat akımlarından Empresyonizmle başlayan süreç ile arazi sanatı, gösteri sanatı, doğaçlama sanat ile devam edip pop sanat gelen Postmodernizm ile başlayan yeni süreç, minimal sanat fluxus, arte povera ve kavramsal sanat ile her bir aşamada tekstil malzeme ve yöntemleri aracılığı ile iletilmek istenen mesajlar hep plastik bir olguya dönüşüm ile aktarılmıştır. Son zamanlarda tekstilin ilk sanat izlerinin anılmaya başlandığı tapestry sanatına alternatif ama daha basit uygulama alanı olan "tafting" yöntemi gündeme gelmiştir. Bu yöntem ile aynı tapestrylerdeki gibi istenilen boyutlarda resimler çalışılabilir ve daha az emek ile benzer görüntüler elde edilebilir.

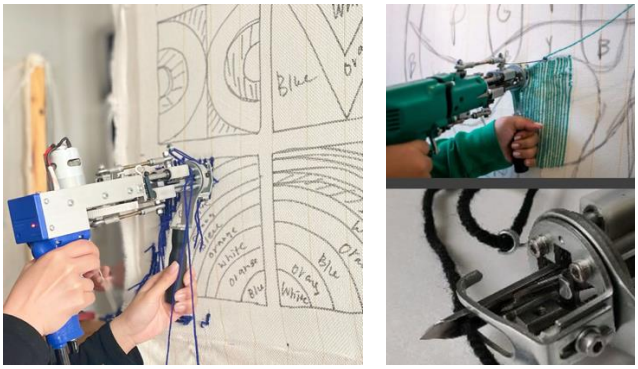
Tafting Nedir? Nasıl uygulanır?

Tafting, bir materyal üzerine kısa veya uzun iplik demetleri yerleştirme işlemidir. Bu iplik demetleri, özel bir düzenekle materyal üzerine delikler açılarak yerleştirilir. Bu delikler materyal üzerinde desenler oluşturabilir veya rastgele yerleştirilebilir. Tafting, endüstride özellikle halı, kilim, mobilya ve otomotiv sektöründe sıklıkla kullanım alanı bulan bir tekniktir. Bu teknik ile yapılan ürünler görüntü itibari ile benzerlk gösteren kirkitli sıkı dokumalara göre daha hafif ve esnek olabilirler. Ayrıca, daha hızlı üretim imkanı sağlarlar. Tafting teknolojisi, gelişen son teknolojilerle birlikte, daha büyük ve kaliteli ürünlerin üretimine olanak tanımaktadır. Bu tekniği uygulamak için gerekli olan malzemeler; kumaş, tezgah, iplik ve tafting tabancasına ihtiyaç vardır (Resim 5).



Resim 5: Tafting yapmak içn gerekli malzemeler: tafting tabancası, iplik, çerçeve ve kumaş

İşlem basamaklarından bahsetmek gerekirse, öncelikle tasarım yapılır. Bu tasarım bir temaya bağlı olabilir, spontane çizimler ile ya da soyut tasarımlarla gerçekleştirilir. Yapılmak istenen kompozisyon belirlenir ve bu kompozisyonu kumaş yüzeyine aktarmak için uygun bir kalem seçilir. Kumaş tezgah üzerine gerilir, kumaşa yapılacak olan tasarım çizilir. Teknik olarak tersten yapılan bir uygulama olması dolayısıyla kafa karışıklığı olmaması için kolaylık olması açısından renklerin isimleri ya da baş harfleri yazılır. Ardından yapılacak olan tasarımın ipliği seçilir, resim 4'te görüldüğü gibi iğneden ve iplik deliğinden geçirilerek doksan derecelik açı ile tabancanın atış kolunun kendine doğru bastırılması ile ilmekler atılır (Resim 6).



Resim 6: Tafting uygulama yöntemi ve tabanca iğne detayı

Tasarımın iplikleri rengine göre ayarlanarak dıştan içe doğru ya da tam tersi şekilde sırası ile ilmekler atılarak tasarım uygulanır. Burada dikkat edilmesi gereken noktalar tabancanın 90 derece ile atış yapması ve bir elimizde atış yapılan ipliğin tabancaya doğrusal düzlemde belirli bir sıkılıkta tutulmasıdır (Resim 7).



Resim 7: Tafting uygulaması

Tasarım tamamlandıktan sonra yapılacak tasarımın kullanım alanına ve tasarıma bağlı olarak aşağıda resim 8'de görüldüğü gibi hav ilmeği atılan yöndeki iplikler yapıştırıcı ile sabitlenir, yoksa atılan ilmekler halıdaki gibi düğümlü olmadığı ve aralarda çözgüler atkılar ile sabitlenmediği için kolayla sökülür.



Resim 8: Sabitleme macunun sürülmesi

Her atış sonrası resim 9'da yer alan sol taraftaki gibi bir görüntü oluşur sağdaki gibi bir görüntü istenirse makas ile traşlama yapılır ve iplik uçlarının oluşturduğu daha boyutlu bir görüntüde elde edilebilir. Bu görüntü kısa, uzun ya da karışık şekilde girinti ve çıkıntı oluşturabilir.



Resim 9: Solda, tafting uygulanmış alan sağda makas ile kesilmiş tafting alanı

İpliklerin traşlanması tezgah üzerinde ya da çıkarıldıktan sonra yapılabilmektedir (Resim 10).



Resim 10: Bitmiş tafting alanlarına püsküllü görünüm için makaslama yapılması

Sanatsal ve Dekoratif Tafting Çalışan Sanatçılar ve Çalışma Örnekleri

Tafting yöntemi başlangıçta endüstriyelde kullanılan ve bu alandaki ihtiyaçları karşılamak üzere üretimler yapılan bir teknik idi. Zamanla tüm dünyada do it yourself (diy) yani Türkçe'ye kendin yap projesi olarak çevrilmiş olan bir etkinlik olarak yayıldı. Teknik, son zamanlarda sanat üretimlerinde sıkça kullanılmaktadır. Özellikle sanatsal tekstiller açısından gitgide yaygınlaşan ve yeni projelere dahil edilen bir teknik olarak hızlıca yayılmaktadır. Gerek sanat gerekse de tasarım alanında gitgide yaygınlaşması uygulama kolaylığı ve özellikle kilim, halı ve tapestrylerle verilmek istenen görüntülere daha az zaman ve emek ile ulaşılmasıdır. Zaman yönetimi açısından avantajlı ve dolayısıyla daha çok üretim imkanı sağlamaktadır.

Hannah Braeken

Sanatçı Hannah Braeken tafting yöntemi ile duvar tapestryleri üretmektedir. Genellikle portre, insan bedeni ve doğadan kaynaklı tasarımlarını tafting yöntem ile çalışmaktadır. Resim 11 ve 12'de çalışmalarından örnekler ve detaylar görülmektedir.



Resim 11: İsimsiz, 55x48 cm, tafting yöntemi ile yapılmış duvar tapestrisi, Hannah Braeken

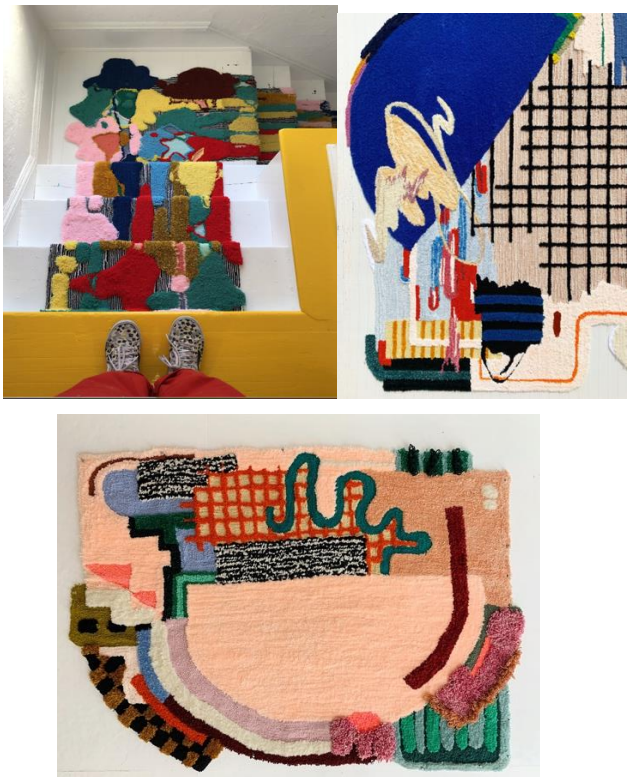


Resim 12: İsimsiz, 120x165cm, 2020, tafting yöntemi ile yapılmış duvar tapestrisi, Hannah Braeken

Caroline Kaufman

Sanatçı Caroline Kaufman'da tafting tekniğini lifler ve resim arasındaki bir evlilik olarak görüyor. Pratt Institute moda tasarımı mezunu olan Kaufman, 2018'de tafting yapmaya başladı ve o zamandan beri Google, WeWork, ve Brooklyn'de bulunan 25 asimetrik parçalı misafir süitlerinin duvarlarını süslediği Ace Hotel'e kadar pekçok şirket için çalışmalarını tamamladı.

Kaufman bu tekniği dekoratif ve sanatsal tekstillerde oldukça yaygın şekilde kullanmaktadır. Genelde renkli ve soyut desenleri tercih etmektedir. Resim 13'de sanatçının çalışmalarına örnekler görmekteyiz.



Resim 13: Carolina Kaufman'ın tafting çalışmaları

Trish Andersen

Trish Andersen'in tafting sürecine ilk ilgisi, kökleriyle yeniden bağlantı kurmanın ve köklerini keşfetmenin bir yolu olarak görmesi ile başladı. Kişisel köklerin özelliklerini gözlemleyerek

ve ortaklıklar kurarak taftinge yakınlık kurdu. Kendi kişisel internet sayfasında tafting ile ilgili şunları yazmıştır: "Tarladan, koyundan ve bir fabrika zemininde geliştirilen lifleri birleştiren Andersen, hem canlı hem sessize, düzgün ve vahşiye, kesik ve ilmekli, yumuşak ve kümülüse, yoğun ve kaba olana her zaman yer olduğunu kanıtlıyor; parçalarının beklenmedik ve çeşitli dokunsal kalitesi, gözlerin duygusal bir şekilde açılmasına izin veriyor. Çalışmaları, zamansal, kültürel, coğrafi veya kişilerarası olsun, sınırların kaçınılmaz olarak kanadığı ve sonuçların genellikle oldukça çarpıcı olduğu gerçeğini dile getiriyor". Trish, Georgia, Savannah'da yaşıyor ve dünya çapında projeler alıyor. Resim 14'de Trish'in tafting ile çalıştığı farklı çalışmalarını görmekteyiz.



Resim 14: Trish Andersen'in tafting çalışmaları

Tim Eads

Tasarımcı ve grafik işleri ile çalışan Tim Eads'in tafting ile ilgili çalışmalarına baktığımızda genellikle katı geometrik düzenleri çalıştığını görmekteyiz. İki boyutlu çalışmaları tafting yapım sürecinde derinlik ve yumuşaklık kazanıyor. Özellikle püsküllü alanlar yaratmakta ve tüylü alanların iç mekanlara atıfta bulunduğunu ifade etmektedir. Eads, Dokuma veya örme gibi diğer tekstil işlemlerine kıyasla, "Tafting benim için resim ve çizimden çok daha fazlası. Tuvalin etrafında zıplayabilir, renklerinizle oynayabilir ve parçanız üzerinde satır satır değil, bir bütün olarak hareket edebilirsiniz." Bu enerji, yüksek havlı dokulu duvar askıları ve karışık boya girdaplarını andıran bir ayna içeren sanatçının 2019 yılında çalışmalarıyla katıldığı

Design Miami enstalasyonlarında belirgindir. Resim 15'de bu enstalasyonlarından örnekler görmekteyiz.



Resim 15: Tim Eads'in tafting çalışmaları

Shishi San

Tekstil sanatçısı olan Shishi San, 2019'dan bu yana tafting tekniğini kullanmaktadır. San, ilhamını folklor ve yerel geleneklerden alıyor, görsel kimliğini benimsiyor ve onu temsil eden bir eser yaratmak için kendi kişisel geçmişinden bir parça entegre ediyor. 2022'den beri yeni üç boyutlu çalışmalarla taftingin heykelsi potansiyelini keşfetmiştir. San, ilk kabarık ve 3D püsküllü vazolarını yaratarak geleneksel tafting modelinden çok boyutsal yapılara geçiyor. Benzersizlikleri, göz kamaştırıcı renkleri ve desenlerindeki incelik, San'ı tafting uygulamalarında yükselen isimlerinden biri haline getirmiştir. Resim 16'da Shishi San'ın çalışmalarına örnekler görmekteyiz.



Resim 16: Shishi San'ın tafting yöntemi ile vazo üretimleri

Sonuç olarak tafting tekniği sanatsal tekstillere her ne kadar bir trend olarak girmiş olsa da pekçok sanatçı tarafından hızlıca benimsenerek ve yaygınlaşarak kullanılmaktadır. Trend kelime anlamı olarak kısa dönemli bir anlama gelsede bu teknik uzun vadede özellikle tapestryler yerine tercih edilecek gibi durmaktadır. Halı, kilim ve tapestry tekniklerine göre aynı görüntüyü hazır bir yüzey üzerine ilmekler yerleştirerek vermek zaman ve emek açısından oldukça avantajlı ve sürdürülebilirdir. Tekniğin çıkışının endüstrideki halı fabrikaları tarafından işlevsel bir amaçla olmasına rağmen günümüzde oldukça estetik ve işlevsel eserler üretilmektedir. Tekniğin üretimi plastik alanlardaki bir resim, heykel üretiminden farksızdır bu özelliği ile sanatsal tekstiller alanında sıkça kullanılması ve yaratıcılığa katkısı yüksek olacağı ön görülmektedir. Son dönem üretimlerinin tek boyutluluktan çıkarak çok boyutluluk alanlarında kullanılması, sanatçılar için üretim çeşitliliği sağlamaktadır. Uygulama tabancasının kullanımının kolay ve eserlerin maliyetlerinin düşük olması kullanıcı açışından

büyük bir avantajdır. Birde uygulama alanı açısından özel bir alan gerektirmemesi önemli bir tercih sebebidir. Bu çalışmanın sonraki çalışmalar için bilgi verici ve ilham kaynağı olacağı umulmaktadır.

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EFFECT OF SALINITY STRESS ON DIFFERENT WHEAT (*TRITICUM AESTIVUM L.*) GENOTYPES AT EARLY SEEDLING STAGE

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Abstract

Globally, more than 20% of soils are salt-affected and the extent of these soils is continuously increasing owing to climate change (Ding et al., 2021; Munns & Tester, 2008). Abiotic stresses are considered to be responsible for a 50% reduction in crop production, imposing a serious threat to global food security (Seleiman et al., 2019; VeatchBlohm, 2007). As a result of the rapid increase in the global population, food production has to be increased by 70% by the end of 2050 (Hassan et al., 2021). Triticum aestivum L (wheat) is a widely grown cereal crop in many regions of the world (Cuong et al., 2020; Wei et al., 2022). This crop provides about 20% of calories and 55% of carbohydrates across the globe. Both growth and yield of wheat are negatively influenced by salinity (Arzani & Ashraf, 2017). In a study of 50 wheat cultivars (Triticum aestivum L.), the salt tolerance of each genotype was assessed during the early stages of seedling growth at four salinity levels: 0 dsm-1 (control, designated as T0), 4 dsm-1 (designated as T1), 8 dsm-1 (designated as T2) and 12 dsm-1 (designated as T3). The genotypes were obtained from the Department of Plant Breeding & Genetics at Islamia University of Bahawalpur-Pakistan. In order to develop the salinity treatment, specific amounts of NaCl were added to distilled water in the laboratory. The seedling stage was chosen for this study because it is the stage in which wheat crops are most sensitive to external biotic and abiotic stress. The results of the study showed that the different salinity treatments had a significant impact on the fresh and dry weight, length, shoot/root ratio, length reduction, weight reduction, and chlorophyll content of the seedlings. This was demonstrated through the use of Least Significance Difference tests and analysis of variance, with a significance level of $P < 0.01$. In particular, the shoot length, fresh and dry weight, and shoot/root ratio of almost all the genotypes were significantly impacted by the applied NaCl salinity, especially at the highest salinity level of 12 dsm-1. The effects of salinity on the various seedling characteristics varied depending on the genotype, with some genotypes being more salt-tolerant than others. Overall, the results showed that salinity had a significant negative impact on the shoot length and fresh and dry weight of the seedlings, across all genotypes. The researchers' conclusion with suggestions and recommendations was also summed up at the end of the study.

Key words: Effects, Impact, Salinity, Salt-tolerant, Genotypes.

1. Introduction

Globally, more than 20% of soils are salt-affected and the extent of these soils is continuously increasing owing to climate change (Ding *et al.*, 2021; Munns & Tester, 2008). Abiotic stresses are considered to be responsible for a 50% reduction in crop production, imposing a serious threat to global food security (Seleiman *et al.*, 2019; VeatchBlohm, 2007). As a result of the rapid increase in the global population, food production has to be increased by 70% by the end of 2050 (Hassan *et al.*, 2021). *Triticum aestivum L* (wheat) is a widely grown cereal crop in many regions of the world (Cuong *et al.*, 2020; Wei *et al.*, 2022). This crop provides about 20% of calories and 55% of carbohydrates across the globe. Both growth and yield of wheat are negatively influenced by salinity (Arzani & Ashraf, 2017). The global wheat production capacity in the year 2020–2021 was 768.9 million metric tonnes (Lark, Schelly, & Gibbs, 2021). Pakistan is the world's sixth largest wheat grower, producing 26 million metric tonnes per year. It contributes to 9.2% of agricultural value-added and 1.8% of gross domestic product (GDP). Wheat crop output reached high up to 8.1% over the previous year's output (Rana, 2020). In Pakistan, wheat being the main staple food cultivated on the largest acreages. Pakistan falls in ten major wheat-producing countries of the world in terms of area under wheat cultivation, total production and yield per hectare. Wheat is the essential diet of population as it constitutes 60% of the daily diet of common man in Pakistan and average per capita consumption is about 125 kg and occupies a central position in agricultural policies of the government. The government announced wheat support price of Rs. 1200 which created interest onthe part of farming community. Wheat contributes 10.1 percent to the value added in agriculture and2.2 percent to GDP. Area under wheat has increased to 8.693 million hectares in 201213, from 8.650million hectares showing an increase of 0.5 percent over last year's area. The production stood at 24.3 million tonnes during 2012-13, against the target of 25.5 million tonnes which is 5.1 percent decrease from target while a 3.2 percent increase over the last year production of 23.5 million tonnes has been witnessed. The yield per hectare in 201213 stood at 2797 (Kg/ha) posted a positive growth of 2.7percent as compared to negative 4.2 percent growth last year. Wheat production in the country has increased from 3.35 to 25 million tonnes (617%) during 1948 to 2011 whereas increase in the area was from 3.9 to 8.9 million hectare during this period (129%). Grain yield (Kg ha) has been increased from 848 (1948) to 2797 (2013) with an increase of 317 percent. Over the past three decades, increased agricultural productivity occurred largely due to the deployment of high-yielding cultivars and increased fertilizer use. With the introduction of semi dwarf wheat cultivars, wheat productivity has been increased in all the major cropping systems representing the diverse and varying agro-ecological conditions. Improved semi-dwarf wheat cultivars available in Pakistan have genetic yield potential of 7-8 t/ ha whereas our national average yields are about 2.8 t/ha. A large number of experiment stations and onfarm demonstrations have repeatedly shown high yield potential of the varieties. National average yield in irrigated and rainfed area is 3.5 and 1.5 t/ha, respectively. The progressive farmers of irrigated area are harvesting 5.5 to 7 tonnes wheat grain per hectare. Based on cropping pattern, disease prevalence and climate, Pakistan has been divided into a ten production zones. However, production zones need to be revisited. In Pakistan, wheat is grown in different cropping systems, such as; cotton wheat, rice wheat, sugarcane wheat, maize wheat, fallow wheat. Of these, Cotton-Wheat and Rice-Wheat systems together account about 60% of the total wheat area whereas rain-fed wheat covers more than 1.50 m ha area. Rotations with

Maize-Sugarcane, Pulses and fallow are also important. Historically, wheat production in Pakistan can be divided into three distinct periods: 1947-65, prior to the release of semi-dwarf wheat; 1966-76, the "Green Revolution" period when High Yielding Varieties (HYVs) with chemical fertilizers were rapidly adopted on about two thirds of total wheat area; and 1977 to date, post green revolution period in which HYVs with disease resistance continued to cover the major wheat area through coordination efforts at national level (Report, 2017). According to estimates, there will be 8.0 billion people on the planet by 2025 and 8.9 billion by 2050. To feed everyone, it is important that global food output doubles by 2025 (Walker, 2016). According to Ashraf and Harris, the potential yield loss due to abiotic stressors is 20%, for salt, and other variables, respectively (Ml Ashraf, Athar, Harris, & Kwon, 2008). Salinity is a particularly harmful stress that inhibits wheat yield and plant growth. Over 800 million hectares of the world's land are impacted by salt, which is over 6% of the planet's total land area (FAO 2008). In semi-arid and dry agricultural ecologies, the effects of rising salinity are particularly pronounced (Manchanda & Garg, 2008). Since most cereals, including wheat (*Triticum aestivum L.*), are categorized as moderately salt-tolerant lycophytes, individual plants have varying levels of tolerance. Because salinity has the greatest detrimental impact on the germination period, it typically reduces nutrient intake and stops wheat plants from reaching their full potential for productivity (H. A. Hussain *et al.,* 2018). In dry and semiarid locations, saline soils are common, particularly where there is intensive irrigation or overfertilization. Salinity is currently one of the main obstacles to agricultural production worldwide (Flowers & Yeo, 1995). Salinity is thought to have an impact on more than 800 million hectares of land worldwide (Shannon, 1997). Nearly 6.30 million hectares of Pakistan land is salty. chlorides, sulphates, bicarbonates, borates, and NaCl the salt that predominates in the soil profile are the primary salts that accumulate in the soil profile (Akman, 2009). The stages of seed germination and early seedling establishment are often the most vulnerable to salt stress (Foolad, 2004). In soil affected by salt, commercial crop germination may be drastically reduced (N. Hussain, Rigoni, & Orij, 2018). Poor seed germination is ultimately due to restricted water intake, which is the outcome of physiological, biochemical, and structural changes inside a developing seed (M Ashraf & Foolad, 2005). Therefore, the likelihood of successfully establishing a crop in saline soil will be greatly increased if the negative effects of salt stress can be reduced during seedling growth stages (Rahman, Gul, & Odhano, 2008). The main strategy used by researchers to produce wheat on salt-affected soils has continued to be breeding to create genotypes that are salt-tolerant. Numerous abiotic stresses have a significant impact on wheat development and grain output. Soil salinity, one of several abiotic stresses, is a significant barrier to wheat production in many regions of the world, resulting in yield losses (EL Sabagh *et al.,* 2020). Salinity hinders the establishment of seedlings, slows plant growth, leads to poor reproductive development, and eventually reduces agricultural output (Dahakal, Adhikari, Manandhar, Bhattarai, & Shrestha, 2021). Globally, the production of food is seriously hindered by rising saline levels, which is a serious problem (Alom, Hasan, Islam, & Wang, 2016). Around 6% of the world's land is affected by salinity; 20% of it is arable land, and 33% is irrigated land, making them particularly vulnerable (Safdar *et al.,* 2019; Yu *et al.,* 2019). Salinity has reduced the amount of irrigated land in Pakistan by roughly 14%, and it is to blame for 64% of production losses (Akram, Athar, & Ashraf, 2007). Salinity stress at the seedling stage is particularly crucial for the screening of many species, according to studies (Ghoulam, Foursy, & Fares, 2002). Several researchers noted a wide range in salinity

stress during germination in wheat cultivars (Kandil, Sharief, & Elokda, 2012). Germination, emergence, and early seedling development are the three primary stages of the wheat crop's establishment, and these three stages are highly susceptible to salt, according to many scientists who conducted seedling tests (Saboora, Kiarostami, Behroozbayati, & Hajihashemi, 2006). Among various field crops, generally, wheat is more sensitive to salinity that hampers the growth and development of plant, leads to low productivity or even complete crop failure under extreme severity of salinity. Plant nutritional conditions, ionic balance, and physiological processes may all be disturbed when plants are exposed to salt via NaCl. Salinity reduces the seed's capacity to absorb water by lowering its osmotic potential. In a later stage, this leads to toxicity and changes in enzyme function. Depending on the plant species, salt stress has varying effects on germination percentage, germination rate, and seedling growth characteristics such shoot length, shoot weight, shoot dry weight, and root/shoot ratio (El-Keblawy & Al-Rawai, 2005). Therefore, in a screening experiment with several wheat cultivars, Boubaker (1996) demonstrated that germination and seedling traits are also relevant criteria for choosing salt tolerance in wheat (Singh, Prakash, & Sastry, 2000). According to Schachtmann and Munns (Schachtman & Munns, 1992), salt tolerance in wheat lines is often characterized by sodium exclusion, whereas salt tolerant lines have much greater shoot sodium levels than sensitive lines. On the relative salt tolerance of different cultivars of agricultural crops in Pakistan, few research have been done (Kayani & Rahman, 1987; Mer, Prajith, H. Pandya, & Pandey, 2000). Numerous researchers have attempted to screen salt-tolerant lines or cultivars on a diverse range of plants during the seedling development stage (M Ashraf, 1999). The development of salt-tolerant cultivars for production in salty circumstances depends on the relationship between several seedling growth characteristics and seed yield and yield component. The knowledge of stress tolerance in plants regarding the physiological basis is important for selection and breeding programs (Chaves, Maroco, & Pereira, 2003). Determination of physiological traits related to stress tolerance could be used as a selection criterion to enhance wheat adaptation to stress conditions. Screening for seeds with a greater tolerance to salt stress aids in the development of salt tolerant cultivars. Increasing levels of salinity (NaCl) significantly reduced the seedling growth parameters in all studied wheat genotypes (Akram *et al.*, 2007; Chaves *et al.*, 2003; Cuong *et al.*, 2020; Kandil *et al.*, 2012; Liu *et al.*, 2020; Saboora *et al.*, 2006). Therefore, the aims of the present study are: i) to assess the impact of salt stress on different cultivars of wheat on seedling stage ii) to screen wheat cultivars for salt stress by assessing germination and seedling properties.

2. Materials and Methods

2.1 Experimental location and plant material:

A total of 50 genotypes with different genetic backgrounds were provided by the Department of Plant Breeding & Genetics, Islamia University of Bahawalpur, Pakistan. The experiment was conducted at the wire house of the Department and the duration of the experiment 25 days. 50 wheat genotypes were sown using a complete randomized design with four treatments (0 dsm^{-1}, 4 dsm^{-1}, 8 dsm^{-1}, 12 dsm^{-1}). Genotypes used in this study are given in (Table 2.1).

2.2 Salinity development:

The salinity levels were (0 dsm^{-1}, 4 dsm^{-1}, 8 dsm^{-1} and 12 dsm^{-1}) Initially deionized water was taken, and sodium chloride (Na Cl) was added in it. 2.56g of NaCl was added in 1

liter of water for 4 dsm^{-1}, 5.12g of NaCl was added in 1 liter of water to make 8 dsm^{-1} salt solution and 7.68g of NaCl was added in 1 liter of water to make 12 dsm^{1} salt solution.

2.3 Measurement of traits

2.3.1 Shoot length (cm):

Measurement of Shoot length (SL) was taken by a ruler in centimeter (cm). Length was measured from the top of the shoot to the point where root starts. The length was recorded for each seedling, along with other relevant information, such as the cultivar and growth conditions.

2.3.2 Shoot fresh weigh (mg):

The harvested seedlings were washed thoroughly with water to remove any

dirt or debris. The washed seedlings were weighed using a balance to determine their fresh weight. For measurement of shoot fresh weight, fresh seedlings were uprooted and shoots were separated. Then Electronic weighing balance was used to measure the weight and expressed in milligram (mg)**.** The fresh shoot weight (SFW) of the seedlings was recorded and noted.

2.3.3 Shoot dry weight (mg):

Seedling shoots were placed in an oven set to a low temperature (typically

around 60ºC-70°C) for several hours until their weight remained constant. This ensured that all moisture content was removed from the shoots. After drying, the seedlings were weighed to determine their dry weight using electronic weighing balance. The shoot dry weight (SDW) was expressed in milligram.

2.3.4 Shoot length reduction

The shoot length reduction (SLR) was calculated using formula, which is

given below (Mackay, Piepho, & Garcia, 2019). The unit of shoot length reduction is expressed as a dimensionless ratio or in percentage.

SLR = (shoot length at control – shoot length at saline condition)/ shoot

length at control.

2.3.5 Shoot weight reduction

The shoot weight reduction (SWR) was calculated using formula, which is

given below (Mackay *et al.*, 2019). The unit of shoot weight reduction is expressed as a dimensionless ratio or in percentage.

SWR = (shoot weight at control – shoot weight at saline condition)/shoot

weight at control.

2.3.6 Root/shoot Ratio:

Root/shoot ratio (R/S) is taken by dividing root weight by shoot weight. The root/shoot ratio is a measure of the relative proportion of root and shoot biomass in a plant. It is calculated as the ratio of root mass to shoot mass, usually expressed as a decimal or as a percentage.

2.3.7 Total Seedling length (cm):

A ruler was used to measure the length of the seedlings (TSL). The shoot

length was measured from the top of the soil to the tip of the shoot using the ruler. The root length was measured from the bottom of the soil to the bottom of the seedling, taking care not to damage the roots during the process. The total seedling length was recorded for each seedling, along with any other relevant information, such as the cultivar and growth conditions.

2.3.8 Total Seedling fresh weight (mg):

The weight of seedling was recorded by weight balance and expressed in

milligram (mg)**.** Wheat seedlings were carefully harvested and removed from the soil. The harvested seedlings were washed thoroughly with water to remove any dirt or debris. The washed seedlings were weighed using a balance to determine their fresh weight. The fresh weight (TFW) of the seedlings was recorded and noted for future reference.

2.3.9 Total Seedling dry weight(mg):

The seedlings were placed in an oven set to a low temperature (typically around 6070°C) for several hours until their weight remained constant. This ensured that all moisture content was removed from the seedlings. After drying, the seedlings were re-weighed to determine their dry weight. The dry weight (TDW) was obtained by subtracting the fresh weight from the dry weight.

2.3.10 Total Seedling weight reduction:

The seedling weight reduction (TWR) according to was calculated using formula, which is given below (Mackay *et al.,* 2019). The unit of weight reduction, expressed as a dimensionless ratio or percentage.

TWR = (Plant weight at control – Plant weight at saline condition)/Plant weight at control.

2.3.11 Total Seedling Length reduction:

The seedling Length reduction (TLR) according to was calculated using the formula which is given below (Mackay *et al.,* 2019). The unit of length reduction, expressed as a dimensionless ratio or percentage.

TLR = (Plant Length at control – Plant Length at saline condition)/Plant Length at control.

2.3.12 Chlorophyll content (mgm^{-2}):

Chlorophyll concentration is normally measured using a Chlorophyll content meter in field. The device was placed on the upper part of the leaves and the reading was taken. The measurement was taken multiple times on different leaves to ensure accuracy and reproducibility. The results were recorded and used to calculate the chlorophyll content of the seedlings.

2.3.13 Root length:

Measurement of Root length (RL) was taken by a ruler in centimeter (cm). The root length was measured from the bottom of the soil to the bottom of the seedling, taking care not to damage the roots during the process.

2.3.14 Root fresh weight:

The harvested seedlings were washed thoroughly with water to remove any dirt or debris. The washed seedlings were weighed using a balance to determine their fresh weight. For measurement of root fresh weight (RFW), fresh seedlings were uprooted and roots were separated. Then Electronic weighing balance was used to measure the weight and expressed in milligram (mg)**.**

2.3.15 Root dry weight:

Seedling roots were placed in an oven set to a low temperature (typically around 60ºC70°C) for several hours until their weight remained constant. This ensured that all moisture content was removed from the roots. After drying, the seedlings were weighed to determine their dry weight using electronic weighing balance. The root dry weight (RDW) was expressed in milligram.

2.3.16 Root length reduction:

The root length reduction (RLR) was calculated using formula, which is given below .

The unit of root length reduction is expressed as a dimensionless ratio or in percentage (Mackay *et al.,* 2019).

RLR = (shoot length at control – shoot length at saline condition)/ shoot length at control.

2.3.17 Root weight reduction:

The root weight reduction (RWR) was calculated using formula, which is given below

. The unit of shoot weight reduction is expressed as a dimensionless ratio or in percentage (Mackay *et al.,* 2019).

RWR = (shoot weight at control – shoot weight at saline condition)/shoot weight at control.

2.4 Statistical Analysis

To investigate the effects of cultivar, salinity treatment, and their

interaction, analysis of variance (ANOVA) was used. Using Pearson correlation analysis, significant differences between treatments were identified at the 0.05 level. IBM (SPSS statistics 27) Software was used to conduct this analysis of variance and Pearson correlation along with least significance differences at all saline level. The data was entered into the software and various statistical tests, such as ANOVA, LSD and correlation were performed to determine the significance of any differences observed between the control and saline treatments. This allowed for an easy interpretation of the results and helped in determining any patterns or trends in the data (Mackay *et al.,* 2019).

2.4.1 Analysis of Variance:

ANOVA (Analysis of Variance) is a statistical method used to analyze the

differences between two or more means, or the average values, of a dependent variable across different categories of an independent variable. It is used to determine whether there are any significant differences in the means of different groups or if the differences observed are due to random chance (Mackay *et al.*, 2019).

2.4.2 Least Significant Difference:

LSD, or Least Significant Difference, is a multiple comparison procedure

used in ANOVA (Analysis of Variance) to compare the means of two or more groups and determine which pairs of means are significantly different from each other. The LSD test is used when a significant overall ANOVA result is found and there is interest in identifying which specific pairs of means are different (Mackay *et al.*, 2019).

2.1.3 Correlation:

Correlation is a statistical measure that describes the strength of the

relationship between two variables. The correlation coefficient is a value between -1 and 1 that indicates the degree of linear association between two variables. If the correlation is positive, it means that as one variable increases, the other variable tends to increase, and if the correlation is negative, it means that as one variable increases, the other variable tends to decrease. A value of 0 indicates that there is no relationship between the variables (Mackay *et al.*, 2019). The most commonly used correlation coefficient is Pearson's correlation coefficient, represented by the formula:

$r = \sum(X - \bar{X})(Y - \bar{Y}) / \sqrt{[\sum(X - \bar{X})^2 \sum(Y - \bar{Y})^2]}$

Table 2.1: Wheat Genotypes

Variety Code	Variety Name	Variety Code	Variety Name
G1	BWP-97	G26	178
G2	PAKISTAN	G27	10-SATY
G3	204083	G28	FSD-08
G4	Fakhar Bakher	G29	214313
G5	Akbar-19	G30	Gold
G6	FSD-08	G31	PI 189745
G7	TD-I	G32	PAK15373
G8	Ghazi	G33	V81188
G9	Subhani	G34	PAK15456
G10	186	G35	SUTLEJ 86

G11	AS-021	G36	IG 41317
G12	204164	G37	C271/WTE//SN64
G13	204171	G38	V.80001
G14	PAKISTAN	G39	INIA66/PJB81//V82274
G15	Akbar	G40	K134(60)/4/TOB/BMAN//BB/3/CAL
G16	Ghazi	G41	V18-1-2
G17	Aas 15-STRN	G42	BB/SA75
G18	Dilkash	G43	TANDOJAM 83
G19	Johar	G44	K134(60)/VEE
G20	LOCAL WHITE	G45	BARANI 91
G21	Silver Blue	G46	W-40
G22	15 STRN NAWAB	G47	W-69
G23	Aruj	G48	PAK15932
G24	Sehar-06	G49	W-78-A
G25	166	G50	PAK15436

3.0 Results and Discussion

3.1 Shoot & Root Length:

The shoot length of wheat is an important character and is also affected by

salinity stress. To compare the mean shoot length between different salinity levels least significance difference test was analyzed. The results indicate that there is a significant difference in mean shoot length between each of the four salinity levels. Comparison of mean difference at 0 dsm^{-1} and 4 dsm^{-1} between the shoot lengths of the genotypes grown under these two salinity levels is 10.03 cm. The significance of the difference is 0.00, indicating that the difference is statistically significant. The smallest difference in shoot length between the different salinity levels is 6.02 cm, between 4 dsm^{-1} and 8 dsm^{-1}. The largest difference in shoot length between the different salinity levels is 28.64 cm, between 0 $dsm^{-1}$and 12 dsm^{-1}. These results indicate that the seedlings showed a significant difference in shoot length as salinity level increased. The largest difference in shoot length indicates that the genotypes were more affected by the highest salinity level of 12 dsm^{-1} compared to the lowest salinity level of 0 dsm^{-1}. The results from the Least Significant Difference (LSD) test for Root Length (cm) of wheat seedlings suggest that there are significant differences in root length of wheat seedlings grown under different

salt levels. The test was performed for salt levels of 0 dsm^{-1}, 4 dsm^{-1}, 8 dsm^{-1} and 12 dsm^{-1}, and the mean differences between the salt levels were calculated and tested for significance. The results show that the maximum difference in root length was found between the salt level of 0 dsm^{-1} and 12 dsm^{-1}, and the minimum difference was between 4 dsm^{-1} and 8 dsm^{-1}. The level of significance is 0.00 meaning highly significant and 0.05 indicating a significant difference. The results suggest that the root length of wheat seedlings is significantly affected by salt stress, with the highest levels of stress resulting in the greatest reduction in root length. Genotypes 204171, Ghazi and TD-I had max shoot and root lengths, whereas 10-SATY, 15 STRN NAWAB and K134(60)/VEE had min shoot and root length at highest level of salinity. The analysis of variance (ANOVA) shows that the total seedling length of 50 wheat genotypes is significantly affected by the 4 levels of salinity. The F-value of 1254.926 further confirms the significant effect of salinity on the total seedling length. The high significance level ($p<0.001$) of the treatment effect indicates that the differences in total seedling length among the 4 levels of salinity is statistically significant. The decrease in shoot length in response to increasing salinity levels is likely due to the inhibitory effects of high salt concentrations on plant growth and development. In plants, high salinity levels can result in osmotic stress, which can affect the uptake and transport of water and nutrients. Additionally, high salt levels can lead to the accumulation of toxic ions in the plant tissue, further hindering growth and development. In conclusion shoot length selection combined with a large root system may result in better adaptability to salt affected land conditions. Ahmed in 2013 investigated the effect of increased salt stress on seedling growth including shoot length and weight and found similar results to the current study (Ahmad, Shahzad, Iqbal, Asif, & Hirani, 2013). Results of analysis of variance and least significance difference test for shoot length are shown in (Table 3.1.2) & (Table 3.1.1).

3.2 Length Reduction:

Reduction in shoot length was increased in all genotypes with the increasing

levels of salinity stress. Shoot length reduction is highest (0.50 cm) when plants are grown under 12 dsm^{-1} salinity compared to those grown under 4 dsm^{-1} salinity. The mean difference is 0.16 cm and 0.34 cm between the 4 dsm^{-1} and dsm^{-1} and 8 dsm^{-1} and 12 dsm^{-1} salinity levels, respectively. The standard error is 0.01 cm and all differences are statistically significant ($p< 0.00$). The root length reduction at 4 ds/m is significantly different from the root length reduction at 8 dsm^{-1} and 12 dsm^{-1}. Similarly, the root length reduction at 8 dsm^{-1} is significantly different from the root length reduction at 12 dsm^{-1}. The mean difference between 4 dsm^{-1} and 8 dsm^{-1} is 0.17 cm and between 4 dsm^{-1} and 12

dsm^{-1} is 0.52 cm. Genotypes Ghazi, 204171 and Johar had min shoot and root length reduction, whereas 10-SATY, 15 STRN NAWAB and K134(60)/VEE had max shoot and root length reduction at highest level of salinity. The results of the ANOVA analysis on total length reduction show that the effect of salinity level on the total length reduction of the wheat genotypes is significant ($p<0.05$). The model has an F-value of 2049.380 and a significance level of 0.00, which indicates that the treatment effect is highly significant. This means that salinity has a significant impact on the total length reduction of the wheat genotypes, and that the genotypes respond differently to salinity levels. The mechanism behind this reduction is that high salinity levels lead to an increase in the concentration of ions such as sodium and chloride in the soil solution, which in turn negatively impacts the uptake and utilization of water and other essential nutrients by the plant roots. This leads

to a reduction in the growth of the shoot and overall plant growth. Additionally, high salinity levels can lead to osmotic stress, which results in water deficit in the plant tissues, causing them to lose turgor pressure, and further reducing shoot length. These physiological changes in the plant tissues can also lead to changes in the gene expression patterns and biochemical processes, further contributing to shoot length reduction (Saddiq *et al.,* 2021). Results of analysis of variance and least significance difference test for shoot length are shown in (Table 3.2.2) & (Table 3.2.1).

3.3 Fresh Weight:

For 0 dsm^{-1}, 4 dsm^{-1}, 8 dsm^{-1} and 12 dsm^{-1}salinity stress levels, data analysis

showed significant differences in fresh shoot weight. The comparison between the salinity levels shows that the shoot fresh weight decreases as the salinity level increases. the mean difference between the 0 dsm^{-1} and 4 dsm^{-1} treatment is 112.43 mg, with a significance of 0.00. The shoot fresh weight obtained values varying from 450 mg to 590 mg in normal conditions with max value 590 mg. The smallest difference in mean shoot fresh weight is between the seedlings grown at 4 dsm^{-1} and 8 dsm^{-1} salt levels, with a difference of -108.21 mg. The largest difference in mean shoot fresh weight is between the seedlings grown at 0 dsm^{-1} and 12 dsm^{-1} salt levels, with a difference of 327.70 mg. There is a significant difference in root fresh weight across the different salt levels, with higher salt levels leading to lower root fresh weight. The maximum difference in mean root fresh weight occurs between 0 ds/m and 12 ds/m (367.12 g), while the minimum difference occurs between 4 ds/m and 8 ds/m (111.83 g). Genotypes 204164, 166 and PAKISTAN had max fresh weight, whereas PAK15932, W-40 and PI 189745 had min fresh weight at highest level of salinity. The ANOVA table shows that the effect of the 4 levels of salinity (0 dsm^{-1}, 4 dsm^{1}, 8 dsm^{-1} and 12 dsm^{-1}) on the total fresh weight of the seedlings is statistically significant (P-value = 0.00). In conclusion, the results show that as the salinity level increases, the shoot fresh weight of the 50 genotypes decreases, indicating that salinity has a negative impact on the growth and development of the seedlings. This is due to the inhibition of growth and metabolic processes. Salinity stress affects the water uptake and availability in the plant, leading to dehydration and ion toxicity. This results in decreased growth and reduced fresh weight of the shoot. The plant responds to salinity stress through various mechanisms, such as exclusion of ions, synthesis of compatible solutes, modulation of osmotic potential, and activation of stress-responsive genes. Ahmed et al 2013 and Faisal et al 2017 investigated the effect of increased salt stress on seedling growth including seedling weight found similar results to the current study. Additionally, salinity stress also impacts the overall photosynthesis and energy metabolism of the plant, leading to decreased growth and reduced fresh weight (S. Hussain *et al.,* 2019). Results of analysis of variance and least significance difference test for shoot fresh weight are shown in (Table 3.3.2) & (Table 3.3.1).

3.4 Dry Weight:

Increasing salt levels result in a decrease in shoot dry weight, with the

largest decrease observed between the 0 dsm^{-1} control group and the 12 dsm^{-1} salt level group. The mean difference between these two groups was -101.59 mg with a highly significant (0.00) significance level. There is a significant difference between the root dry weight of the plants grown in different salt levels (0 dsm^{-1}, 4 dsm^{-1}, 8 dsm^{-1} and 12 dsm^{-1}). Significance values show that the differences are statistically significant (0.00, which

is less than 0.05). The minimum difference is between the salt levels of 4 dsm^{-1} and 8 dsm^{-1} with a mean difference of 33.54 g and the maximum difference is between 0 dsm^{-1} and 12 dsm^{-1} with a mean difference of 110.13 g. Genotypes 204164, 166 and PAKISTAN had max dry weight, whereas PAK15932, W-40 and PI 189745 had min dry weight at highest level of salinity. The ANOVA table describe the total dry weight of the wheat seedlings, it can be concluded that the treatment (salinity levels) has a significant effect ($p<0.05$) on the total dry weight of the seedlings. The F-value (4268.174) indicates the magnitude of the effect and is also highly significant ($p<0.05$). The significant effect of the treatment on the total dry weight suggests that different salinity levels have a noticeable impact on the dry weight of the seedlings. According to (Ullah, Qayyum, Thaheem, Al-Turjman, & Sepasgozar, 2021), research results in wheat cultivars were based on genotypic response to various salinity stress levels in terms of shoot dry weight. The decrease in shoot dry weight with increasing salt levels is likely due to osmotic stress caused by the high concentration of salt in the growth medium. High salt concentrations can lead to an imbalance in the water potential inside and outside the plant cells, causing water to move out of the cells and leading to dehydration. This decrease in water content can result in reduced growth and biomass production, as seen in the decreased shoot dry weight. The mechanisms behind the effect of salt stress on plant growth are complex and involve multiple physiological, biochemical, and molecular processes. These can include changes in the regulation of gene expression, changes in metabolic pathways, and alterations in ion transport and water relations (Ahmadi, Pour-Aboughadareh, Fabriki-Ourang, Mehrabi, & Siddique, 2018). Results of analysis of variance and least significance difference test for shoot dry weight are shown in (Table 3.4.2) & (Table 3.4.1).

3.5 Weight Reduction

Reduction in shoot weight was increased in all genotypes with the increasing levels of salinity stress. Significance difference test show that as the salt level increases, the shoot weight reduction also increases. The mean difference between a salt level of 4 dsm^{-1} and a salt level of 12 dsm^{-1} is 0.48, with a significance value of 0.00. This means that the difference in shoot weight reduction between these two salt levels is highly significant, and the true difference is likely to be between 0.46 and 0.50. The minimum mean difference (I-J) in the Shoot Weight Reduction table is -0.48 (for salt levels 4 dsm^{-1} and 12 dsm^{-1}), while the maximum mean difference is 0.48 (for salt levels 4 dsm^{-1} and dsm^{1}). There is a significant difference in root weight reduction between the different salt levels. The minimum difference is between the salt levels 4 dsm^{-1} and 8 dsm^{-1}, with a mean difference of 0.22. Genotypes 204164, W-40 and K134(60)/VEE had min weight reduction, whereas Ghazi, Johar and 166.0 had max weight reduction at highest level of salinity. The maximum difference is between the salt levels 4 dsm^{-1} and 12 dsm^{-1}, with a mean difference of 0.46. The results of the ANOVA show that the total weight reduction of the wheat seedlings is significantly affected by the salinity levels. The F-value (1892.150) is significant at $p < 0.05$, which means that the variation in weight reduction is not due to chance. The treatment effect (salinity levels) contributes to 11.061 units to the total variation in weight reduction. These results indicate that there are significant differences in seedling weight reduction between these salt levels. High levels of salt in the soil can lead to osmotic stress, which affects the water uptake and distribution in the plant, leading to decreased growth and reduced weight. Additionally, high salt levels can lead to ion toxicity, which can further affect plant growth and weight (Dadshani *et al.*,

2019). Results of analysis of variance and least significance difference test for weight reduction are shown in (Table 3.5.2) & (Table 3.5.1).

3.6 Root/Shoot Ratio:

The Least Significance Difference test was performed to determine if there were significant differences between the means of the Root/Shoot Ratio of weight at each salt level. The mean differences between the salt levels were found to be significant as pvalue 0.00. This means that there were statistically significant differences in the Root/Shoot Ratio of weight between the four salt levels. The lowest mean difference was found between the 0 dsm^{-1} and 4 dsm^{-1} salt levels, with a difference of 0.02. The largest mean difference was found between the 0 dsm^{-1} and 12 dsm^{-1} salt levels, with a difference of

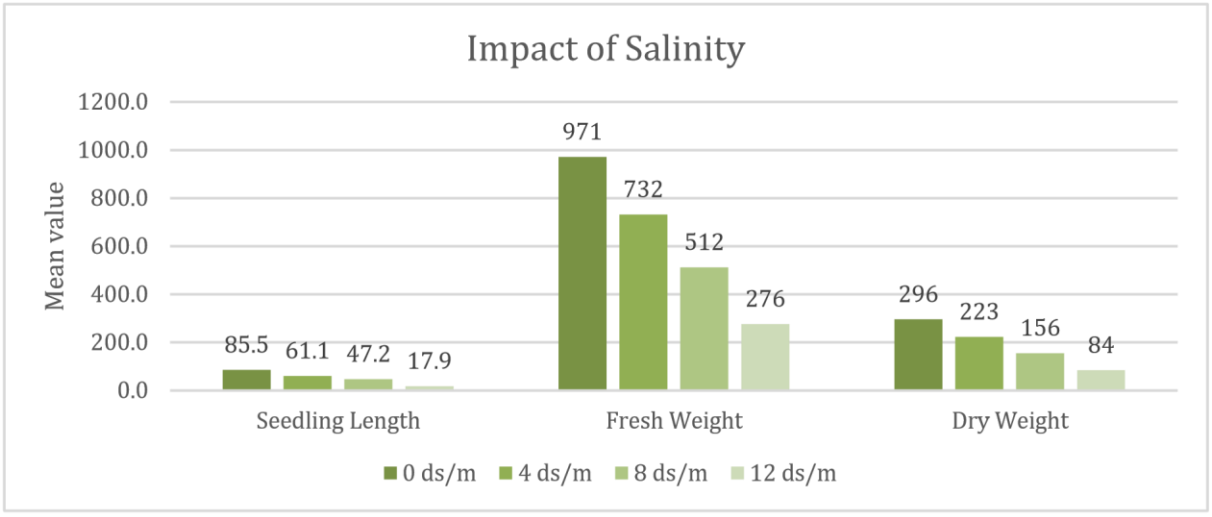
0.15. These results suggest that there was a gradual increase in the Root/Shoot Ratio of weight as the salt levels increased from 0 dsm^{-1} to 12 dsm^{-1}. Overall, the results of the LSD test indicate that there were significant differences in the Root/Shoot Ratio of weight at different salt levels, with the ratio increasing as the salt level increased. Genotypes SUTLEJ 86, 186 and Aas 15-STRN had max root/shoot ratio, whereas PI 189745, Gold and PAK15456 had min root/shoot ratio at highest level of salinity. The increase in root/shoot ratio of weight at different salt levels could be due to various physiological and biochemical mechanisms that are triggered in response to high salt stress. Some possible mechanisms include changes in the transport of water and nutrients, changes in ionic balance, changes in gene expression, and changes in the distribution of biomass between roots and shoots (Ahmadi, Pour-Aboughadareh, Fabriki Ourang, Khalili, & Poczai, 2020). Results of analysis of variance and least significance difference test for root/shoot ratio are shown in (Table 3.6.2) & (Table 3.6.1).

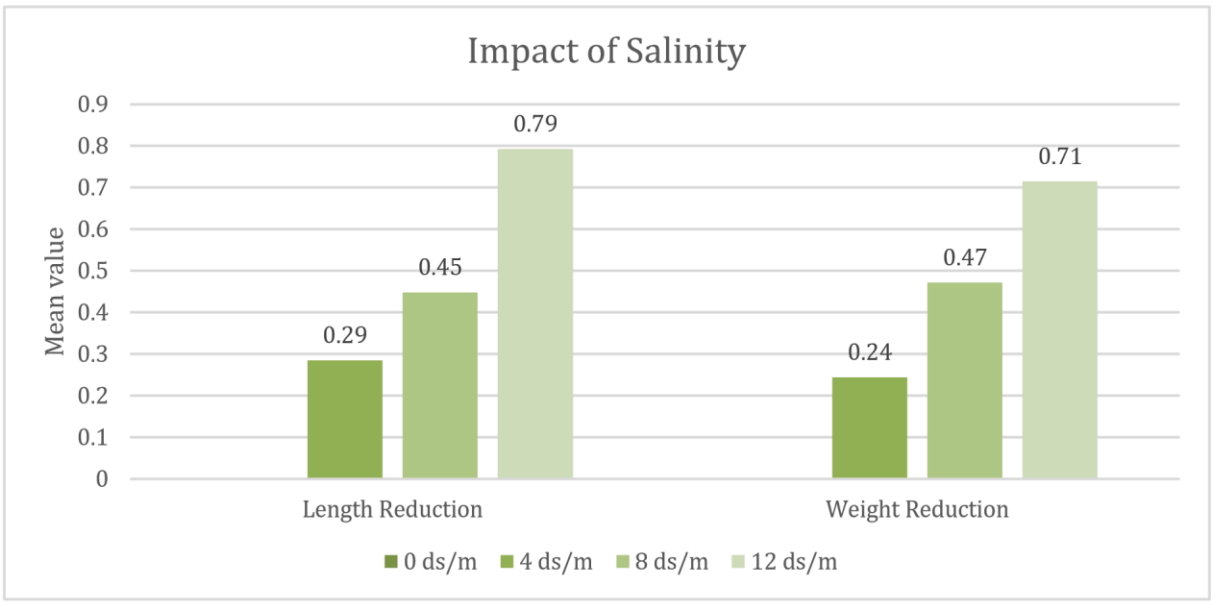
3.7 Chlorophyll Content:

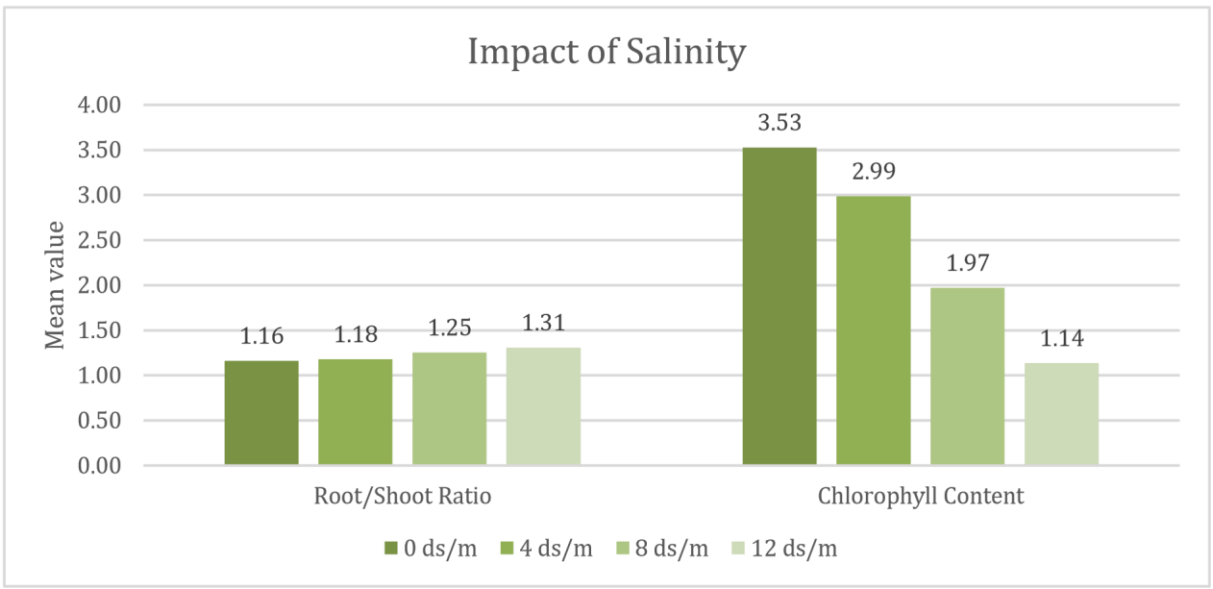
The results show a significant difference (p=0.00) in chlorophyll content

between different salt levels, with the mean difference ranging from -2.39 to 1.56. From the ANOVA table, it can be seen that levels of salinity, has a significant effect on the chlorophyll content of 50 wheat genotypes (p = 0.00). The F-value is larger than the critical value, indicating that the treatment effect is statistically significant and cannot be explained by chance. Genotypes Johar, FSD-08 and 15 STRN NAWAB had max chlorophyll content, whereas SUTLEJ 86, V81188 and Dilkash had min chlorophyll content at highest level of salinity. A higher level of salinity lead to a decrease in chlorophyll content. The high concentration of salt in the soil affects the plant's ability to absorb water and essential nutrients. When the roots of the plant are unable to absorb enough water, the plant undergoes osmotic stress, which results in decreased water potential in the plant. This decreased water potential can lead to a decline in turgor pressure and eventually wilting of the plant. The decreased water availability also limits the ability of the chloroplasts to produce energy through photosynthesis, which results in decreased chlorophyll content. Additionally, high levels of salt can cause ionic imbalances in the plant, leading to decreased chlorophyll synthesis and an increase in degradation of existing chlorophyll (Seleiman *et al.*, 2022). Results of analysis of variance and least significance difference test for shoot length are shown in (Table 3.7.2) & (Table 3.7.

Graphical Representation of Impact of Salinity on Seedlings Traits


Impact of Salinity
Mean value
1200.0
1000.0
800.0
600.0
400.0
200.0
0.0
85.5
61.1
47.2
17.9
971
732
512
276
296
223
156
84
Seedling Length
Fresh Weight
Dry Weight
0 ds/m
4 ds/m
8 ds/m
12 ds/m


Impact of Salinity
Mean value
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0.29
0.45
0.79
0.24
0.47
0.71
Length Reduction
Weight Reduction
0 ds/m
4 ds/m
8 ds/m
12 ds/m


Impact of Salinity
Mean value
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
1.16
1.18
1.25
1.31
3.53
2.99
1.97
1.14
Root/Shoot Ratio
Chlorophyll Content
0 ds/m
4 ds/m
8 ds/m
12 ds/m

(Table 3.1.1) Least Significance Difference Test for Shoot Length

Shoot Length (cm)						
(I) Salt level	(J) Salt level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
0 dsm^{-1}	4 dsm^{-1}	10.03	0.58	0.00	8.89	11.17
	8 dsm^{-1}	16.05	0.58	0.00	14.91	17.18
	12 dsm^{-1}	28.64	0.58	0.00	27.50	29.78
4 dsm^{-1}	0 dsm^{-1}	-10.03	0.58	0.00	-11.17	-8.89
	8 dsm^{-1}	6.02	0.58	0.00	4.88	7.16
	12 dsm^{-1}	18.61	0.58	0.00	17.48	19.75
8 dsm^{-1}	0 dsm^{-1}	-16.05	0.58	0.00	-17.18	-14.91
	4 dsm^{-1}	-6.02	0.58	0.00	-7.16	-4.88
	12 dsm^{-1}	12.60	0.58	0.00	11.46	13.74
12 dsm^{-1}	0 dsm^{-1}	-28.64	0.58	0.00	-29.78	-27.50
	4 dsm^{-1}	-18.61	0.58	0.00	-19.75	-17.48
	8 dsm^{-1}	-12.60	0.58	0.00	-13.74	-11.46

(Table 3.1.2) Least Significance Difference Test for Root Length

Root Length (cm)						
(I) Salt level	(J) Salt level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
0 dsm^{-1}	4 dsm^{-1}	13.15	0.75	0.00	11.68	14.62
	8 dsm^{-1}	21.04	0.75	0.00	19.57	22.52
	12 dsm^{-1}	37.83	0.75	0.00	36.36	39.30

4 dsm^{-1}	0 dsm^{-1}	-13.15	0.75	0.00	-14.62	-11.68
	8 dsm^{-1}	7.89	0.75	0.00	6.42	9.36
	12 dsm^{-1}	24.68	0.75	0.00	23.21	26.15
8 dsm^{-1}	0 dsm^{-1}	-21.04	0.75	0.00	-22.52	-19.57
	4 dsm^{-1}	-7.89	0.75	0.00	-9.36	-6.42
	12 dsm^{-1}	16.79	0.75	0.00	15.31	18.26
12 dsm^{-1}	0 dsm^{-1}	-37.83	0.75	0.00	-39.30	-36.36
	4 dsm^{-1}	-24.68	0.75	0.00	-26.15	-23.21
	8 dsm^{-1}	-16.79	0.75	0.00	-18.26	-15.31

(Table 3.1.3) Analysis of Variance for Total Seedling Length

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	231563.207	3	77187.736	1254.926	.000
Intercept	1108552.319	1	1108552.319	18022.955	.000
Treatment	231563.207	3	77187.736	1254.926	.000
Error	24357.089	396	61.508		
Total	1364472.614	400			
Corrected Total	255920.296	399			

(Table 3.2.1) Least Significance Difference Test for Shoot Length Reduction

Shoot Length Reduction						
(I) Salt level	(J) Salt level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
4 dsm^{-1}	8 dsm^{-1}	-0.16	0.01	0.00	-0.19	-0.14
	12 dsm^{-1}	-0.50	0.01	0.00	-0.53	-0.48

8 dsm^{-1}	4 dsm^{-1}	0.16	0.01	0.00	0.14	0.19
	12 dsm^{-1}	-0.34	0.01	0.00	-0.36	-0.32
12 dsm^{-1}	4 dsm^{-1}	0.50	0.01	0.00	0.48	0.53
	8 dsm^{-1}	0.34	0.01	0.00	0.32	0.36

(Table 3.2.2) Least Significance Difference Test for Root Length Reduction

Root Length Reduction						
(I) Salt level	(J) Salt level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
4 dsm^{-1}	8 dsm^{-1}	-0.17	0.01	0.00	-0.19	-0.14
	12 dsm^{-1}	-0.52	0.01	0.00	-0.54	-0.50
8 dsm^{-1}	4 dsm^{-1}	0.17	0.01	0.00	0.14	0.19
	12 dsm^{-1}	-0.36	0.01	0.00	-0.38	-0.33
12 dsm^{-1}	4 dsm^{-1}	0.52	0.01	0.00	0.50	0.54
	8 dsm^{-1}	0.36	0.01	0.00	0.33	0.38

(Table 3.2.3) Analysis of Variance for Total Seedling Length Reduction

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	13.436	2	6.718	2049.380	.000
Intercept	77.664	1	77.664	23692.411	.000
Treatment	13.436	2	6.718	2049.380	.000
Error	.974	297	.003		
Total	92.073	300			
Corrected Total	14.409	299			

(Table 3.3.1) Least Significance Difference Test for Shoot Fresh Weight

Shoot Fresh Weight (mg)						
(I) Salt level	(J) Salt level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
0 dsm^{-1}	4 dsm^{-1}	112.43	4.12	0.00	104.34	120.52
	8 dsm^{-1}	220.64	4.12	0.00	212.55	228.73
	12 dsm^{-1}	327.70	4.12	0.00	319.61	335.79
4 dsm^{-1}	0 dsm^{-1}	-112.43	4.12	0.00	-120.52	-104.34
	8 dsm^{-1}	108.21	4.12	0.00	100.12	116.30
	12 dsm^{-1}	215.27	4.12	0.00	207.18	223.36
8 dsm^{-1}	0 dsm^{-1}	-220.64	4.12	0.00	-228.73	-212.55
	4 dsm^{-1}	-108.21	4.12	0.00	-116.30	-100.12
	12 dsm^{-1}	107.06	4.12	0.00	98.97	115.15
12 dsm^{-1}	0 dsm^{-1}	-327.70	4.12	0.00	-335.79	-319.61
	4 dsm^{-1}	-215.27	4.12	0.00	-223.36	-207.18
	8 dsm^{-1}	-107.06	4.12	0.00	-115.15	-98.97

(Table 3.3.2) Least Significance Difference Test for Root Fresh weight

Root Fresh Weight (mg)						
(I) Salt level	(J) Salt level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
0 dsm^{-1}	4 dsm^{-1}	127.01	4.97	0.00	117.23	136.79
	8 dsm^{-1}	238.84	4.97	0.00	229.06	248.62
	12 dsm^{-1}	367.12	4.97	0.00	357.34	376.90
4 dsm^{-1}	0 dsm^{-1}	-127.01	4.97	0.00	-136.79	-117.23

	8 dsm^{-1}	111.83	4.97	0.00	102.05	121.61
	12 dsm^{-1}	240.11	4.97	0.00	230.33	249.89
8 dsm^{-1}	0 dsm^{-1}	-238.84	4.97	0.00	-248.62	-229.06
	4 dsm^{-1}	-111.83	4.97	0.00	-121.61	-102.05
	12 dsm^{-1}	128.28	4.97	0.00	118.50	138.06
12 dsm^{-1}	0 dsm^{-1}	-367.12	4.97	0.00	-376.90	-357.34
	4 dsm^{-1}	-240.11	4.97	0.00	-249.89	-230.33
	8 dsm^{-1}	-128.28	4.97	0.00	-138.06	-118.50

(Table 3.3.3) Analysis of Variance for Total Seedling Fresh Weight

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	26560041.950	3	8853347.317	4250.526	.000
Intercept	155144462.490	1	155144462.490	74485.453	.000
Treatment	26560041.950	3	8853347.317	4250.526	.000
Error	824821.560	396	2082.883		
Total	182529326.000	400			
Corrected Total	27384863.510	399			

(Table 3.4.1) Least Significance Difference Test for Shoot Dry Weight

Shoot Dry Weight (mg)						
(I) Salt level	(J) Salt level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
0 dsm^{-1}	4 dsm^{-1}	34.85	1.28	0.00	32.35	37.36
	8 dsm^{-1}	68.40	1.28	0.00	65.89	70.91
	12 dsm^{-1}	101.59	1.28	0.00	99.08	104.09

4 dsm^{-1}	0 dsm^{-1}	-34.85	1.28	0.00	-37.36	-32.35
	8 dsm^{-1}	33.55	1.28	0.00	31.04	36.05
	12 dsm^{-1}	66.73	1.28	0.00	64.23	69.24
8 dsm^{-1}	0 dsm^{-1}	-68.40	1.28	0.00	-70.91	-65.89
	4 dsm^{-1}	-33.55	1.28	0.00	-36.05	-31.04
	12 dsm^{-1}	33.19	1.28	0.00	30.68	35.70
12 dsm^{-1}	0 dsm^{-1}	-101.59	1.28	0.00	-104.09	-99.08
	4 dsm^{-1}	-66.73	1.28	0.00	-69.24	-64.23
	8 dsm^{-1}	-33.19	1.28	0.00	-35.70	-30.68

(Table 3.4.2) Least Significance Difference Test for Root Dry weight

Root Dry Weight (mg)						
(I) Salt level	(J) Salt level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
0 dsm^{-1}	4 dsm^{-1}	38.10	1.49	0.00	35.17	41.04
	8 dsm^{-1}	71.65	1.49	0.00	68.72	74.58
	12 dsm^{-1}	110.13	1.49	0.00	107.20	113.07
4 dsm^{-1}	0 dsm^{-1}	-38.12	1.49	0.00	-41.04	-35.17
	8 dsm^{-1}	33.54	1.49	0.00	30.62	36.48
	12 dsm^{-1}	72.03	1.49	0.00	69.10	74.97
8 dsm^{-1}	0 dsm^{-1}	-71.65	1.49	0.00	-74.58	-68.72
	4 dsm^{-1}	-33.54	1.49	0.00	-36.48	-30.62
	12 dsm^{-1}	38.48	1.49	0.00	35.55	41.42
12 dsm^{-1}	0 dsm^{-1}	-110.13	1.49	0.00	-113.07	-107.20

	4 dsm^{-1}	-72.03	1.49	0.00	-74.97	-69.10
	8 dsm^{-1}	-38.48	1.49	0.00	-41.42	-35.55

(Table 3.4.3) Analysis of Variance for Total Seedling Dry Weight

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	2466453.546	3	822151.182	4268.174	.000
Intercept	14392307.645	1	14392307.645	74717.247	.000
Treatment	2466453.546	3	822151.182	4268.174	.000
Error	76278.959	396	192.624		
Total	16935040.150	400			
Corrected Total	2542732.505	399			

(Table 3.5.1) Least Significance Difference Test for Shoot Weight Reduction

Shoot Weight Reduction						
(I) Salt level	(J) Salt level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
4 dsm^{-1}	8 dsm^{-1}	-0.24	0.01	0.00	-0.26	-0.22
	12 dsm^{-1}	-0.48	0.01	0.00	-0.50	-0.46
8 dsm^{-1}	4 dsm^{-1}	0.24	0.01	0.00	0.22	0.26
	12 dsm^{-1}	-0.24	0.01	0.00	-0.26	-0.22
12 dsm^{-1}	4 dsm^{-1}	0.48	0.01	0.00	0.46	0.50
	8 dsm^{-1}	0.24	0.01	0.00	0.22	0.26

(Table 3.5.2) Least Significance Difference Test for Root weight Reduction

Root Weight Reduction					
(I) Salt	(J) Salt	Mean Difference	Std.	Sig.	95% Confidence Interval

level	level	(I-J)	Error		Lower Bound	Upper Bound
4 dsm^{-1}	8 dsm^{-1}	-0.22	0.01	0.00	-0.24	-0.19
	12 dsm^{-1}	-0.46	0.01	0.00	-0.49	-0.44
8 dsm^{-1}	4 dsm^{-1}	0.22	0.01	0.00	0.19	0.24
	12 dsm^{-1}	-0.25	0.01	0.00	-0.27	-0.23
12 dsm^{-1}	4 dsm^{-1}	0.46	0.01	0.00	0.44	0.49
	8 dsm^{-1}	0.25	0.01	0.00	0.23	0.27

(Table 3.5.3) Analysis of Variance for Total Seedling Weight Reduction

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	11.061	2	5.530	1892.150	.000
Intercept	68.258	1	68.258	23354.126	.000
Treatment	11.061	2	5.530	1892.150	.000
Error	.868	297	.003		
Total	80.187	300			
Corrected Total	11.929	299			

(Table 3.6.1) Least Significance Difference Test for Root/Shoot Ratio

Root/Shoot Ratio						
(I) Salt level	(J) Salt level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
0 dsm^{-1}	4 dsm^{-1}	-0.02	0.03	0.00	-0.08	0.05
	8 dsm^{-1}	-0.09	0.03	0.00	-0.16	-0.02
	12 dsm^{-1}	-0.15	0.03	0.00	-0.21	-0.08
4 dsm^{-1}	0 dsm^{-1}	0.02	0.03	0.00	-0.05	0.08

	8 dsm^{-1}	-0.07	0.03	0.00	-0.14	-0.01
	12 dsm^{-1}	-0.13	0.03	0.00	-0.19	-0.06
8 dsm^{-1}	0 dsm^{-1}	0.09	0.03	0.00	0.02	0.16
	4 dsm^{-1}	0.07	0.03	0.00	0.01	0.14
	12 dsm^{-1}	-0.06	0.03	0.00	-0.12	0.01
12 dsm^{-1}	0 dsm^{-1}	0.15	0.03	0.00	0.08	0.21
	4 dsm^{-1}	0.13	0.03	0.00	0.06	0.19
	8 dsm^{-1}	0.06	0.03	0.00	-0.01	0.12

(Table 3.6.2) Analysis of Variance for Root/Shoot Ratio

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	1.372	3	0.457	8.329	.000
Intercept	599.936	1	599.936	10925.138	.000
Treatment	1.372	3	0.457	8.329	.000
Error	21.746	396	0.055		
Total	623.054	400			
Corrected Total	23.118	399			

(Table 3.7.1) Least Significance Difference Test for Chlorophyll Content

Chlorophyll Content (mgm^{-2})						
(I) Salt level	(J) Salt level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
0 dsm^{-1}	4 dsm^{-1}	0.54	0.04	0.00	0.46	0.62
	8 dsm^{-1}	1.56	0.04	0.00	1.48	1.63
	12 dsm^{-1}	2.39	0.04	0.00	2.31	2.47

4 dsm^{-1}	0 dsm^{-1}	-0.54	0.04	0.00	-0.62	-0.46
	8 dsm^{-1}	1.02	0.04	0.00	0.94	1.09
	12 dsm^{-1}	1.85	0.04	0.00	1.77	1.93
8 dsm^{-1}	0 dsm^{-1}	-1.56	0.04	0.00	-1.63	-1.48
	4 dsm^{-1}	-1.02	0.04	0.00	-1.09	-0.94
	12 dsm^{-1}	0.83	0.04	0.00	0.76	0.91
12 dsm^{-1}	0 dsm^{-1}	-2.39	0.04	0.00	-2.47	-2.31
	4 dsm^{-1}	-1.85	0.04	0.00	-1.93	-1.77
	8 dsm^{-1}	-0.83	0.04	0.00	-0.91	-0.76

(Table 3.7.2) Analysis of Variance for Chlorophyll Content

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	339.533	3	113.178	1495.526	.000
Intercept	2311.927	1	2311.927	30549.736	.000
Treatment	339.533	3	113.178	1495.526	.000
Error	29.968	396	.076		
Total	2681.428	400			
Corrected Total	369.501	399			

3.7 Correlation among wheat seedling traits:

The degree of relationship between two variables is described by correlation coefficient (Mackay *et al.*, 2019). Correlation coefficients describe the level of association between two variables. It is useful in plant breeding since it can provide a predicted link that can be applied in practice, as well as data on relationship between different desired qualities. It is very important in plant breeding since it can reveal analytical relationship that can be employed in practice as well as provide proofs of relationship between a variety of desirable features. It gives plant builders a fundamental understanding of the link between a variety of yield contributing elements, which helps them in selection with desirable characteristics. Information about the association of seedling features under normal and salinity conditions may add in the formulation of indirect selection strategies in current study. At 0 dsm^{-1} salinity level, root length and shoot length have a positive correlation coefficient of 0.56, which indicates that they are

positively related; as one increases, the other is likely to increase as well. Root length and root fresh weight have a very weak positive correlation coefficient of 0.06, which means that there is a small positive relationship between them. Root dry weight and root fresh weight have a strong positive correlation coefficient of 1, which indicates that they are highly positively related. Root/shoot ratio has a moderate positive correlation with root fresh weight and root dry weight (0.83), which suggests that as the ratio of root to shoot increases, the root fresh and dry weight also increases. Shoot length and shoot fresh weight have a weak positive correlation coefficient of 0.17, indicating that there is a small positive relationship between them. Shoot length and shoot dry weight have a similar weak positive correlation as shoot length and shoot fresh weight. Total seedling length has a strong positive correlation with both shoot fresh weight and shoot dry weight (0.82 and 0.10, respectively), which means that as the total seedling length increases, so do the fresh and dry weight of the shoot. At 4 dsm^{-1} saline level, there is a negative correlation between seedling length and seedling length reduction. This means that as seedling length decreases, seedling length reduction increases. There is a positive correlation between seedling length and seedling fresh weight. This means that as seedling length increases, seedling fresh weight also increases. There is a positive correlation between seedling length and seedling dry weight. This means that as seedling length increases, seedling dry weight also increases. There is a negative correlation between seedling length and seedling weight reduction. This means that as seedling length decreases, seedling weight reduction increases. There is a positive correlation between seedling fresh weight and seedling dry weight. This means that as seedling fresh weight increases, seedling dry weight also increases. There is a negative correlation between seedling weight reduction and seedling dry weight. This means that as seedling weight reduction increases, seedling dry weight decreases. There is a positive correlation between root/shoot ratio and seedling length. This means that as root/shoot ratio increases, seedling length also increases. There is a positive correlation between root/shoot ratio and seedling fresh weight. This means that as root/shoot ratio increases, seedling fresh weight also increases. There is a positive correlation between root/shoot ratio and seedling dry weight. This means that as root/shoot ratio increases, seedling dry weight also increases. All seedling weight and length traits have a positive correlation with chlorophyll content except with reduction traits. At 8 dsm^{-1} and 12 dsm^{-1} salinity levels, correlation b/w all traits were same like at 4 dsm^{-1}. Root length and Shoot length are positively correlated (0.48). Root length and seedling length are positively correlated (0.90). Root length reduction and total seedling length reduction are negatively correlated. Root fresh weight and total seedling dry weight) are positively correlated (0.61). Root/shoot ratio and total seedling weight reduction are negatively correlated (-0.47). Chlorophyll content and total seedling dry weight are negatively correlated (-0.03). Similar results were demonstrated by El-Henday and he stated that, the significant reduction in seedling growth by salinity may be due to toxic effects of NaCl and unbalanced nutrient uptake by the seedlings. These deleterious effects of salinity may result in a significant decrease in photosynthesis rate and increases in respiration rate of seedlings that lead to a shortage of assimilate to the developing organs and may down growth or stop it entirely (El-Hendawy *et al.*, 2005). Plant growth and indices such as shoot & root length, shoot & root fresh weight, shoot & root dry weight, root/shoot ratio, shoot & root length reduction and fresh shoot & root weight reduction, are considered important indices for selecting salinity tolerant wheat genotypes (Foito, Byrne, Shepherd, Stewart, & Barth, 2009). Studies revealed that seedling growth parameters showed a much higher sensitivity to salt stress than those for seed

germination. Height and dry weight of seedling decreased significantly with increasing salinity concentrations. However, the low salinity concentration reduced these parameters to a lesser degree than moderate and high salinity concentrations. Furthermore, salinity affected shoot growth more than that of roots. Results of the studies have shown that height and weight of shoot & root and the shoot/root ratio demonstrated the greatest variation in the salt tolerance among genotypes. This indicates that measurements derived from the shoots were generally more effective as screening criteria than those from the roots, which may be due to the osmotic adjustment occurring in roots more rapidly, but losing turgor more shoot length than roots (EL HENDAWY, Hu, Sakagami, & Schmidhalter, 2011). This study may help advance techniques for assortment of required varieties with preferred traits. The findings of (Khan, Malik, & Muhammad, 2013) in term of correlation coefficients showed that Shoot length had a highly positive and significant relationship with shoot fresh and shoot dry weight during saline conditions.

(Table 4.8.1) Correlation Among Traits at 0 dsm^{-1} Salinity

Correlation of Traits at 0 dsm^{-1}	RL	RFW	RDW	R/S	SL	SFW	SDW	TSL	TFW	TDW	CC
RL	1	0.06	0.06	0.04	0.56	0.04	0.04	0.94	0.08	0.08	-0.22
RFW	0.06	1	1.00	0.83	-0.05	-0.08	-0.08	0.02	0.84	0.83	-0.02
RDW	0.06	1.00	1	0.83	-0.05	-0.08	-0.08	0.02	0.84	0.83	-0.02
R/S	0.04	0.83	0.83	1	-0.12	-0.62	-0.62	-0.03	0.40	0.39	0.04
SL	0.56	-0.05	-0.05	-0.12	1	0.17	0.17	0.82	0.04	0.05	-0.06
SFW	0.04	-0.08	-0.08	-0.62	0.17	1	1.00	0.10	0.47	0.49	-0.09
SDW	0.04	-0.08	-0.08	-0.62	0.17	1.00	1	0.10	0.47	0.49	-0.09
TSL	0.94	0.02	0.02	-0.03	0.82	0.10	0.10	1	0.07	0.08	-0.18
TFW	0.08	0.84	0.84	0.40	0.04	0.47	0.47	0.07	1	1.00	-0.06

TDW	0.08	0.83	0.83	0.39	0.05	0.49	0.49	0.08	1.00	1	-0.06
CC	-0.22	-0.02	-0.02	0.04	-0.06	-0.09	-0.09	-0.18	-0.06	-0.06	1

(Table 4.8.2) Correlation Among Traits at 4 dsm^{-1} Salinity

Correlation of traits at 4 dsm^{-1}											
TSL	SWR	SDW	SFW	SLR	SL	R/S	RWR	RDW	RFW	RLR	RL	
0.93	0.08	-0.07	-0.07	-0.15	0.59	0.03	0.12	-0.03	-0.03	-0.38	1	RL
-0.31	0.08	-0.06	-0.06	-0.15	-0.14	0.00	-0.14	-0.03	-0.03	1	-0.38	RLR
-0.06	-0.03	0.04	0.04	0.22	-0.09	0.62	-0.65	1.00	1	-0.03	-0.03	RFW
-0.06	-0.03	0.04	0.04	0.22	-0.09	0.62	-0.65	1	1.00	-0.03	-0.03	RDW
0.07	-0.13	0.09	0.09	-0.03	-0.02	-0.50	1	-0.65	-0.65	-0.14	0.12	RWR
0.04	0.63	-0.73	-0.73	0.23	0.06	1	-0.50	0.62	0.62	0.00	0.03	R/S
0.85	0.22	-0.13	-0.13	-0.42	1	0.06	-0.02	-0.09	-0.09	-0.14	0.59	SL
-0.29	0.02	-0.08	-0.08	1	-0.42	0.23	-0.03	0.22	0.22	-0.15	-0.15	SLR
-0.10	-0.83	1.00	1	-0.08	-0.13	-0.73	0.09	0.04	0.04	-0.06	-0.07	SFW
-0.10	-0.83	1	1.00	-0.08	-0.13	-0.73	0.09	0.04	0.04	-0.06	-0.07	SDW
0.15	1	-0.83	-0.83	0.02	0.22	0.63	-0.13	-0.03	-0.03	0.08	0.08	SWR
1	0.15	-0.10	-0.10	-0.29	0.85	0.04	0.07	-0.06	-0.06	-0.31	0.93	TSL
-0.44	0.07	-0.11	-0.11	0.48	-0.44	0.14	-0.13	0.12	0.12	0.78	-0.36	TLR
-0.11	-0.57	0.68	0.68	0.11	-0.15	-0.02	-0.42	0.76	0.76	-0.06	-0.06	TFW
-0.11	-0.58	0.70	0.70	0.11	-0.15	-0.04	-0.41	0.75	0.75	-0.06	-0.06	TDW
0.16	0.60	-0.52	-0.52	-0.02	0.14	0.04	0.72	-0.55	-0.55	-0.05	0.15	TWR
-0.19	0.35	-0.21	-0.21	0.17	-0.14	0.32	-0.20	0.20	0.20	-0.06	-0.19	CC

Correlation of traits at 8 dsm^{-1}

R/S	RWR	RDW	RFW	RLR	RL	
0.15	-0.01	0.19	0.19	-0.63	1	RL
-0.20	0.02	-0.24	-0.24	1	-0.63	RLR
0.60	-0.76	1.00	1	-0.24	0.19	RFW
0.60	-0.76	1	1.00	-0.24	0.19	RDW
-0.44	1	-0.76	-0.76	0.02	-0.01	RWR
1	-0.44	0.60	0.60	-0.20	0.15	R/S
0.07	-0.12	0.04	0.04	-0.07	0.48	SL
-0.05	0.16	-0.04	-0.04	-0.15	-0.09	SLR
-0.83	0.03	-0.07	-0.07	0.07	-0.04	SFW
-0.83	0.03	-0.07	-0.07	0.07	-0.04	SDW
0.74	-0.02	0.03	0.03	-0.07	0.05	SWR
0.13	-0.07	0.15	0.15	-0.46	0.90	TSL
-0.19	0.11	-0.22	-0.22	0.78	-0.58	TLR
-0.27	-0.48	0.61	0.61	-0.10	0.09	TFW
-0.29	-0.47	0.59	0.59	-0.10	0.09	TDW
0.14	0.75	-0.58	-0.58	-0.01	0.01	TWR
-0.04	-0.01	-0.03	-0.03	0.08	0.02	CC

8 dsm^{-1} Salinity

CC	TWR	TDW	TFW	TLR
-0.19	0.15	-0.06	-0.06	-0.36
-0.06	-0.05	-0.06	-0.06	0.78
0.20	-0.55	0.75	0.76	0.12
0.20	-0.55	0.75	0.76	0.12
-0.20	0.72	-0.41	-0.42	-0.13
0.32	0.04	-0.04	-0.02	0.14
-0.14	0.14	-0.15	-0.15	-0.44
0.17	-0.02	0.11	0.11	0.48
-0.21	-0.52	0.70	0.68	-0.11
-0.21	-0.52	0.70	0.68	-0.11
0.35	0.60	-0.58	-0.57	0.07
-0.19	0.16	-0.11	-0.11	-0.44
0.05	-0.06	0.01	0.01	1
0.01	-0.74	1.00	1	0.01
0.01	-0.74	1	1.00	0.01
0.09	1	-0.74	-0.74	-0.06
1	0.09	0.01	0.01	0.05

CC	TWR	TDW	TFW	TLR	TSL	SWR	SDW	SFW	SLR	SL
0.02	0.01	0.09	0.09	-0.58	0.90	0.05	-0.04	-0.04	-0.09	0.48
0.08	-0.01	-0.10	-0.10	0.78	-0.46	-0.07	0.07	0.07	-0.15	-0.07
-0.03	-0.58	0.59	0.61	-0.22	0.15	0.03	-0.07	-0.07	-0.04	0.04
-0.03	-0.58	0.59	0.61	-0.22	0.15	0.03	-0.07	-0.07	-0.04	0.04
-0.01	0.75	-0.47	-0.48	0.11	-0.07	-0.02	0.03	0.03	0.16	-0.12
-0.04	0.14	-0.29	-0.27	-0.19	0.13	0.74	-0.83	-0.83	-0.05	0.07
-0.03	-0.01	0.00	0.00	-0.49	0.81	0.11	-0.04	-0.04	-0.64	1
-0.06	0.07	-0.01	-0.01	0.50	-0.37	-0.07	0.03	0.03	1	-0.64
0.01	-0.57	0.76	0.75	0.07	-0.04	-0.90	1.00	1	0.03	-0.04
0.01	-0.57	0.76	0.75	0.07	-0.04	-0.90	1	1.00	0.03	-0.04
0.08	0.64	-0.71	-0.70	-0.11	0.08	1	-0.90	-0.90	-0.07	0.11
0.00	0.00	0.06	0.06	-0.63	1	0.08	-0.04	-0.04	-0.37	0.81
0.04	0.03	-0.09	-0.09	1	-0.63	-0.11	0.07	0.07	0.50	-0.49
-0.01	-0.83	1.00	1	-0.09	0.06	-0.70	0.75	0.75	-0.01	0.00
-0.01	-0.83	1	1.00	-0.09	0.06	-0.71	0.76	0.76	-0.01	0.00
0.07	1	-0.83	-0.83	0.03	0.00	0.64	-0.57	-0.57	0.07	-0.01
1	0.07	-0.01	-0.01	0.04	0.00	0.08	0.01	0.01	-0.06	-0.03

12 dsm^{-1} Salinity

Correlation of traits at 12 dsm^{-1}

TSL	SWR	SDW	SFW	SLR	SL	R/S	RWR	RDW	RFW	RLR	RL	
0.84	-0.19	0.20	0.20	0.11	-0.01	-0.12	-0.01	0.11	0.11	-0.96	1	RL
-0.75	0.13	-0.13	-0.13	-0.17	0.12	0.08	-0.03	-0.06	-0.06	1	-0.95	RLR
0.01	-0.26	0.27	0.27	0.22	-0.16	0.48	-0.88	1.00	1	-0.06	0.10	RFW
0.01	-0.26	0.27	0.27	0.22	-0.16	0.48	-0.88	1	1.00	-0.06	0.11	RDW
0.01	0.16	-0.18	-0.18	-0.11	0.04	-0.46	1	-0.88	-0.88	-0.03	-0.01	RWR
-0.14	0.66	-0.69	-0.69	0.06	-0.06	1	-0.46	0.48	0.48	0.08	-0.12	R/S
0.53	0.09	-0.06	-0.06	-0.95	1	-0.06	0.04	-0.16	-0.16	0.12	-0.01	SL
-0.43	-0.13	0.12	0.12	1	-0.95	0.06	-0.11	0.22	0.22	-0.17	0.11	SLR
0.14	-0.96	1.00	1	0.12	-0.06	-0.69	-0.18	0.27	0.27	-0.13	0.20	SFW
0.14	-0.96	1	1.00	0.12	-0.06	-0.69	-0.18	0.27	0.27	-0.13	0.20	SDW
-0.12	1	-0.96	-0.96	-0.13	0.09	0.66	0.16	-0.26	-0.26	0.13	-0.19	SWR
1	-0.12	0.14	0.14	-0.43	0.53	-0.14	0.01	0.01	0.01	-0.75	0.84	TSL
-0.94	0.04	-0.05	-0.05	0.44	-0.47	0.11	-0.08	0.06	0.06	0.80	-0.81	TLR
0.09	-0.77	0.80	0.80	0.21	-0.13	-0.14	-0.66	0.79	0.79	-0.12	0.20	TFW
0.09	-0.78	0.81	0.81	0.21	-0.13	-0.15	-0.65	0.78	0.78	-0.12	0.20	TDW
-0.08	0.80	-0.78	-0.78	-0.16	0.09	0.17	0.72	-0.73	-0.73	0.07	-0.14	TWR
-0.04	0.17	-0.11	-0.11	0.04	0.03	0.11	-0.03	0.06	0.06	0.10	-0.06	CC

CC	TWR	TDW	TFW	TLR
-0.06	-0.14	0.20	0.20	-0.81
0.10	0.07	-0.12	-0.12	0.80
0.06	-0.73	0.78	0.79	0.06
0.06	-0.73	0.78	0.79	0.06
-0.03	0.72	-0.65	-0.66	-0.08
0.11	0.17	-0.15	-0.14	0.11
0.03	0.09	-0.13	-0.13	-0.47
0.04	-0.16	0.21	0.21	0.44
-0.11	-0.78	0.81	0.80	-0.05
-0.11	-0.78	0.81	0.80	-0.05
0.17	0.80	-0.78	-0.77	0.04
-0.04	-0.08	0.09	0.09	-0.94
0.13	-0.02	0.00	0.00	1
-0.03	-0.95	1.00	1	0.00
-0.03	-0.95	1	1.00	0.00
0.09	1	-0.95	-0.95	-0.02
1	0.09	-0.03	-0.03	0.13

Conclusion

In conclusion, the study demonstrated that salinity stress has a significant effect on the growth and weight of wheat seedlings. The results of the ANOVA analysis and Least Significance Difference test confirmed that high salinity levels caused decreased root length, fresh shoot weight, total dry weight, and reduced shoot/root ratios in the seedlings. The findings suggest that high salinity in soil leads to dehydration and ion toxicity, which affects the plant's ability to absorb water and essential nutrients, ultimately leading to reduced growth and weight. Although only seedling traits were studied in this research, the results suggest that certain genotypes such as 204164, 204171, and Johar showed better tolerance to salinity stress compared to others such as 10-SATY, PAK-15932 and SUTLEJ86. These findings could be useful in future wheat breeding programs aimed at developing cultivars that are capable of tolerating salinity stress.

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DICHOTOMY OF USING MIXED-INTERFACE FOR STATISTICAL DATA ANALYSIS

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Abstract

Most novice and intermediate data analysts consider the user interface while choosing the best programming languages or applications for data analysis. Although both have advantages and disadvantages, most users prefer utilizing a graphic user interface (GUI) to a character or command user interface (CUI). Even some analysts opposed integrating the two (GUI and CUI) during analysis, even if doing so would make the study simpler, quicker, and more accurate. Analysts found it challenging to code in CUI but find GUI to be more engaging. In contrast to relying solely on GUI, this paper examines the drawbacks of using either a GUI or a CUI for statistical data analysis and recommends that data analysts adopt both interfaces for quick and accurate analysis and timely implementation of the results. 80 data analysts from higher education institutions were chosen at random and questioned about how they felt about using GUI, CUI, or both when evaluating data. Utilizing Google Forms, the questions were created, formatted, and ultimately administered online. Within a week, all the instruments given out were recovered. The measurement of 0.788 for the instrument dependability index was made. Graphical charts and figures were used to compile and examine the data that had been obtained. The findings showed that the GUI approach to CUI was utilized by more data analysts, and several admitted that they had never considered integrating the two interfaces because doing so could lead to major inconsistencies. Data analysts should attempt to combine the two ways into a mixed interface since it is advised that the two interfaces be appropriate and relevant to specific areas of analysis.

Keywords: GUI, CUI, Mixed-Interface, Data Analysis, Statistics

Introduction

GUIs were first presented in the 1970s by Xerox's Palo Alto research laboratories. Following that, firms such as Apple (1983) and Microsoft (1985) created their operating system graphical user interfaces (GUIs) for personal computers, rather than only computer science research. We now have very complex graphical user interfaces on laptops, smartphones, and even in our cars and appliances. These graphical user interfaces make engaging with technology easier and more accessible to everyone, not only programmers, technology specialists, and scientists. (2023 Metwalli).

The graphical user interface (GUI) is a type of interface that allows users to manipulate screen elements with a mouse, a pen, or even their finger. This type of interface enables programs such as word processing or web design to provide WYSIWYG (what you see is what you get)

options. Before the introduction of the Graphic User Interface (GUI), the Command User/line Interface (CUI/CLI) was the first interface used by individuals. Users have to enter commands through this interface using lines of coded text. The commands ranged from simple instructions for accessing files or directories to significantly more complex instructions requiring several lines of code.

Browsing with CUI may be intimidating since, instead of pointing and clicking on links to visually attractive websites, users would have to navigate text-driven file directories and possibly recall long, intricate URLs to manually enter them. It was conceivable, and much meaningful computing was done when CLI systems dominated the market, but it may be time-consuming and was largely limited to work-related tasks. Viewing family photos, watching videos, or reading the news on a home computer or laptop will be a difficult chore because such actions require memorizing often long or complex command inputs. Though GUI systems make jobs more accessible to normal people, combining a keyboard with a mouse or some type of touchscreen can be time-consuming when the same operation can be completed without taking one's hands away from the keyboard. According to Adams (2021), if the purpose is to build an element for a web page or a software application with an exact width and height in pixels, it may be faster and more accurate to input those dimensions directly rather than attempting to draw the element with a mouse.

The way users interact with GUIs has evolved quickly with the development of technology. Within a few years, users transitioned from using a mouse and keyboard to touch screens and voice commands. Every GUI consists of a variety of pictures, forms, and colours that are configured to carry out particular functions. These graphics are frequently picked to be straightforward for users to comprehend. Because an email is an electronic letter, for instance, the icon for your email inbox is shaped like an envelope (Metwalli 2022).

Many modern electrical gadgets and mobile applications use GUI. Currently, GUI use is supported by operating systems including Windows, IOS, MacOS, and Android. Although GUI makes it easy for users to use software, it does have some limitations. A GUI has several benefits and drawbacks, just like other interface types. The Roomi (2021) GUI interface is user-friendly since even a novice may use it with ease. Since data is represented by symbols, shapes, and icons, users can categorize and traverse alternatives with ease. Because it uses symbols and other graphical data representations, it is more thorough than CUI and can be identified more quickly than textual/command forms. It is practical because a non-programmer doesn't need to be too familiar with computational commands. They are exempt from having to write and fix codes. Users may find GUI to be a simpler interface to understand as a result. In terms of aesthetics, a GUI interface is more appealing than a command user/line interface (CUI) since it is more fashionable and elegantly designed. Additionally, employing GUI makes it possible to use shortcut keys, which are among GUI's most notable features. When performing an activity that requires only a few steps, shortcut keys are very helpful. The process can be sped up with just the usage of two keys, which ends up saving a lot of time. In addition, GUI facilitates multitasking activities. Users can work on and watch two or more programs simultaneously. For instance, while watching a movie file in Windows, a user can also utilize other packages to analyze statistical data or a web browser to access the internet. Despite the benefits mentioned above, implementing a graphical user interface (GUI) can be difficult because it requires a lot of time, effort, and money to design. In contrast to CUI types, a GUI has many more moving parts and requires more time and energy to create. Therefore, a GUI is substantially slower than a command user line interface. The tasks we can perform in CUI/CLI more quickly cannot be performed in GUI. Above all, a graphical user interface often consumes more power and

computer memory than other types of interfaces due to the use of all graphical representations. An interface with graphics is not resource-efficient. As a result, a sizable quantity of computer resources will be used (Roomi 2021).

The command/Character User Interface is referred to as CUI. This kind of user interface only allows the keyboard to be used for computer interaction. Any action needs a command to be carried out. CUI, a forerunner of GUI, was employed by the earliest computers. In CUI, the user must utilize commands to communicate with the programs. CUI, to put it simply, is an interface that uses basic commands like text, symbols, and numbers. When compared to GUI, CUI is more difficult to use and can only handle one task at once. In CUI, commands are used for everything. Unlike GUI, where commands and their syntax must be learned, CUI is less popular and makes it impossible to preview the contents. CUI does not include any other elements like a text box, icon, desktop, pointing devices, etc. and solely employs the keyboard. The idea of many programming languages and users is not supported by CUI. CUI is quick because it requires less computing power than text- and symbol-based commands. In comparison to GUI, CUI doesn't need as much memory and may be implemented with less RAM. The Command/Character User Interface's look cannot be altered. When compared to GUI, CUI has greater Precision but less flexibility (Khan 2022).

A GUI can serve to lower the learning curve for utilizing software, expand the pool of prospective users, and eventually improve citations and impact, according to Lvarez (2021). Additionally, a well-designed GUI can perform validation, improve the results' robustness, and enable reproducibility, effectively separating developers from users.

A graphical user interface (GUI) is a program interface that uses the graphics capabilities of the computer to simplify the usage of the program. Users have a wide range of options for interacting with the software thanks to the graphical user interface (GUI). Graphical User Interfaces (GUIs) are among the software's most prominent and crucial components. Although GUIs make software easier to use for the user, they complicate the software development process (Azam and Talayeh 2016).

1. Is there any significant difference between beginner, intermediate and professional data analysts' perceptions of the use of Mixed-Interface in statistical data analysis?
2. Are there any significant pleasures data analysts derived from using GUI than CUI?

Significant Difference between GUI and CUI

The following table highlights all the important differences between GUI and CUI according to Panigrahi, (2022).

Key	GUI	CUI
Interaction	The user interacts with a computer using Graphics like images, and icons.	The user interacts with a computer using commands like text.
Navigation	Navigation is easy.	Navigation is difficult.
Peripherals used	Keyboard, mouse or any other pointing device.	Only keyboard.
Precision	GUI has low precision.	CUI has high precision.

Speed	GUI is of low speed.	CUI is of high speed.
Usage	Usage is easy.	Usage is difficult and requires expertise.
Memory requirement	High memory requirement.	Low memory requirement.
Flexibility	Highly flexible user interface.	Little flexible user interface.
Customize	GUI is highly customizable.	CUI appearance is not easily changeable.

Why people preferred GUI to CUI?

Although Command User Interface has more control over an OS or program, it manages many operating systems more quickly, can store scripts to automate routine operations and has a basic understanding of the command-line interface aids in troubleshooting, such as network connection problems.

1. Memorizing a series of commands
2. It is not flexible
3. It is not easily customizable
4. It can be carried out by Expertise
5. It is mostly done via keyboard

Why Knowledge of the Mixed-Interface is Necessary?

Particularly in data analysis, the combination of the two interfaces is more alluring and promising than using only one. Analysts may prefer utilizing Graphical User Interface over Command User Interface in most circumstances, however, there are times when using the command user interface will be more beneficial and professional.

The following are some advantages of combining Command User Interface (CLI) and Graphical User Interface (GUI) in analysis: CUI is faster and more efficient than GUI, especially for complicated or repetitive activities, and it gives analysts more control over the system and more precise task performance. However, GUI offers more visual feedback and interactivity than CUI, particularly for graphical or multimedia applications, and is more user-friendly and intuitive than CUI, especially for novices or non-technical users. Azam and Talayeh (2016) conducted a study on the difficulties and uses of graphical user interfaces. 33 documents in the area of Graphical User Interface were examined for the study. All of the results were evaluated critically and compared in terms of author or authors, publication year, type of publication, particular research field, significant findings, and upcoming studies. The difficulties we encountered in the early stages of a technology transfer project to integrate a test generator in a software company that creates Web-based Enterprise Resource Planning (ERP) solutions based on using CUI rather than GUI (Giovanni et al., 2019).

Methodology

The research used a descriptive design strategy. The study's sample included data analysts of all levels, including novice, intermediate, and professional analysts. 80 respondents were chosen at random from the population to make up the study's sample size using the convenience sampling method. Professional data analysts verified the validity of the instrument by scrutinizing all of its phrasing and contents. After that, the instrument copies were tested and

then retested among respondents from the population, but not among the sample size. Chronbach's Alpha reliability rating of 0.788 demonstrated the suitability of the instrument for the investigation. Within a week, the instrument was administered, and the results were examined using tables and charts.

Results



Fig. 1: Data analyst categories of the respondents

Figure 1 demonstrates that of the study's respondents, 47 were novice data analysts, followed by 29 intermediate data analysts, and just 4 were professional data analysts.

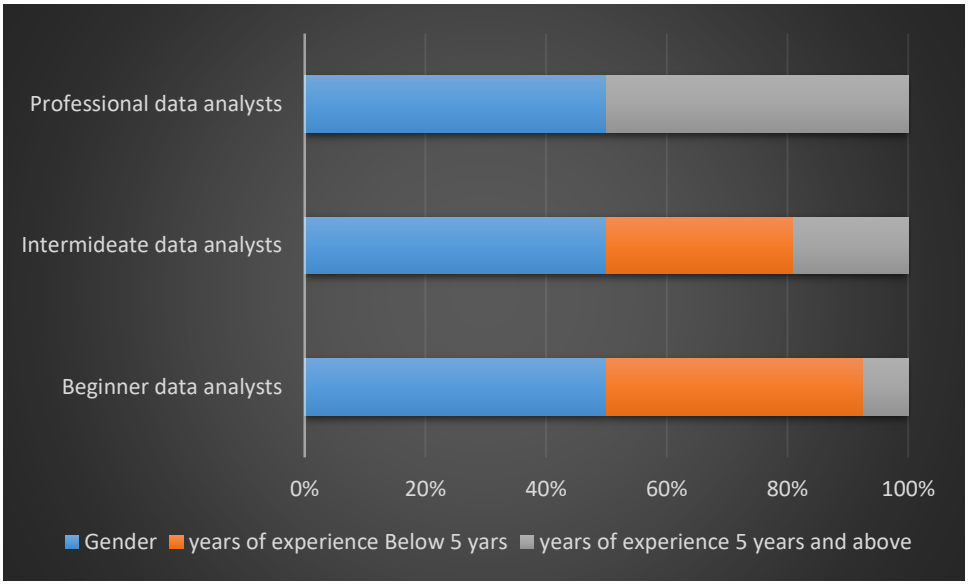


Fig. 2: Years of Experience

Figure 2 demonstrated that participants in the beginner and intermediate data analyst groups had more participants with less than five years of experience compared to participants with more than five years of experience, while participants in the professional data analyst group had 100% participants with more than five years of experience.

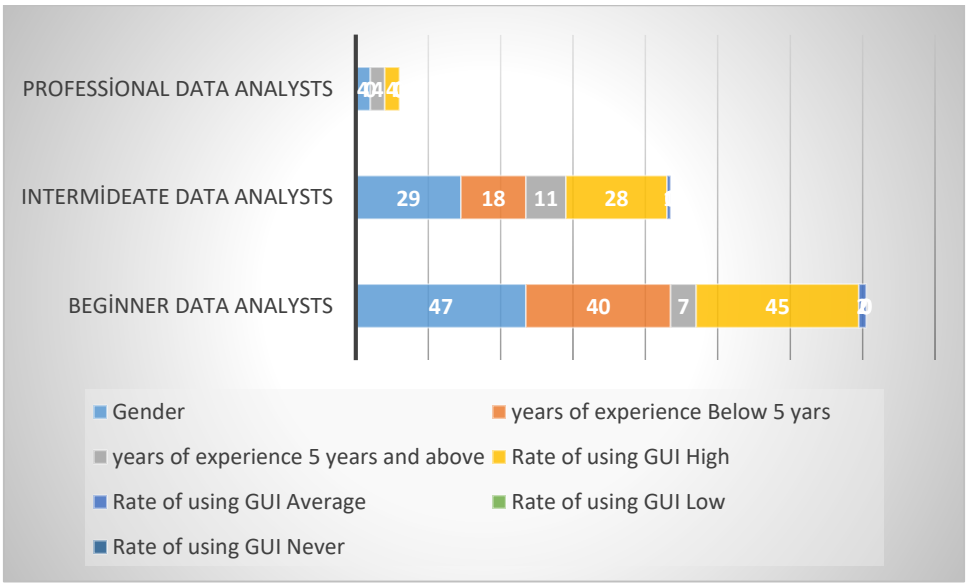


Fig. 3: Rates of using GUI

Figure 3 demonstrated that individuals using GUI experienced a greater rate than those using CUI.

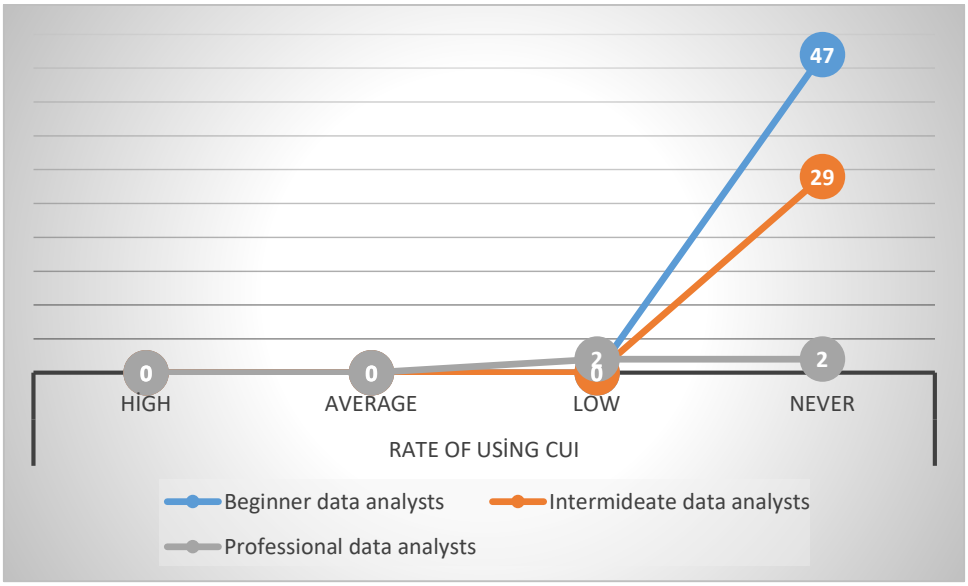


Fig. 4: Rates of using CUI

Figure 4 demonstrated that CUI users had a much lower rate than GUI users.

Discussion

The two research questions posed were addressed by the study's findings. The first research question, "Is there any significant difference between beginner, intermediate, and professional data analysts' perceptions on the use of Mixed-Interface in statistical data analysis?" The results demonstrated that there is no discernible perception gap across the categories of data analysts on the use of Mixed-Interface in statistical data analysis. Mixed-Interface was deemed difficult to utilize for analysis by beginner, intermediate, and professional data analysts alike. The nature of GUI, such as icons, images, diagrams, and other visualizations, helped data analysts to easily select options to implement good analysis than using CUI, which is solely based on texting

alone. In contrast, data analysts concurred that they derived a high degree of pleasure using GUI rather than CUI, which addressed the second research question, "Are there any significant pleasures data analysts derived from using GUI than CUI?".

Conclusion

In conclusion, GUI is a simpler method of utilizing modern computers than CUI is for individuals who are using them for the first time. Although, due to its speed and less precise command set, a computer science student might rely more on CUI.

Both GUIs and CUIs have advantages and disadvantages of their own. The primary distinction between a GUI and a CUI is that a GUI allows for user interaction with a computer through the use of graphics, such as images and icons, whereas a CUI allows for user interaction with a computer through commands, such as text.

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AZERBAIJAN CHILDREN'S LITERATURE IN 1960-1980
1960-1980 YILLARINDA AZERBAYCAN ÇOCUK EDEBİYATI
1960-1980-CI İLLƏRDƏ AZƏRBAYCAN UŞAQ ƏDƏBİYYATI

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Özet

1960'lar-1980'ler Azerbaycan çocuk edebiyatının gelişmesinde büyük rol oynamıştır. Farklı içeriklere sahip eserler çocuk edebiyatında ilgi çekici sayfalarla anılır.

Çocukların yaş seviyelerine göre ilginç düşünme biçimlerinin geliştirilmesi, Neriman Süleymanov ve Ali Samadlı'nın yaratıcılığının özelliklerinden biridir. Genç okul çocuklarının estetik ihtiyaçlarına ve zevklerine uygun olarak modern konularda yaşam olaylarını yazmak, yazarlar için ilginç ve zor bir yükseliş yoluydu. Milvarid Dilbazi, Aziza Ahmadova, Teymur Elchi, Tofig Mutallibov, Zahid Khalil vb. çocuk edebiyatının yeni bir gelişme yolunda ilerlediği şiirlerinde de görülmüştür. Bu yıllarda, yüzyılımızın teknik keşifleri fantastik eserlerin yaratılmasına ivme kazandırdı. Emin Mahmudov, Namig Abdullayev bilimin gelişimi ve teknolojinin geleceği hakkında ilginç eserler yazdılar. Günümüz çocuk edebiyatının yaratıcıları elbette saydığımız yazarlarla sınırlı değil. Son yıllarda çocuk edebiyatıyla ilgilenen yazarların sayısı oldukça arttı. Edebi geleneklere bağlı kalarak el yazılarıyla öne çıkmaya ve yeni güzel eserler yaratmaya çalışıyorlar. Modern çocuk edebiyatımız zengin gelenekler temelinde gelişmiş ve yeni niteliklerle zenginleştirilmiştir.

1960'lar-1980'ler, Azerbaycan çocuk edebiyatı nesirinin ana konusu ve fikri belirli tarihsel ve toplumsal temellerle ilgilidir. Bu yılların edebiyatı, modern çağın olayları tarafından organize edildi. Yeni olay örgüsü eserlerinin oluşturulması ve tema açısından kalıcı bir karaktere sahip olunması genel olarak çocuk yazarlarının temel amaçlarından biri olmuştur. İlginç olan, bu dönem hikâyelerinin sadece geleneksel olmakla kalmayıp yenilikçi özellikleriyle de dikkat çekmesidir. Bu, edebiyata sonradan gelen genç yazarlara örnek oldu. Son yıllarda Azerbaycan toplumunda başlayan çok yönlü karmaşık değişimler, hem çocuk hem de çocuk yazarlarının psikolojisini önemli ölçüde etkilemiştir. Bu karmaşık süreç, şüphesiz, hem edebi hem de pedagojik açıdan kapsamlı yorumlama ve mükemmel genelleme sonucunda literatürdeki etkisini iyi bir şekilde göstermiştir. Amacımız 1960'lar-1980'ler çocuk edebiyatının gelişim tarihini incelemek ve izlediği yola ışık tutmaktır.

Anahtar kelimeler: *karmaşık, işık, tema, sürec, kapsamalı, fantastik*

Abstract

The 1960s-1980s played a major role in the development of children's literature in Azerbaijan. Works with different contents are mentioned with interesting pages in children's literature.

The development of interesting ways of thinking according to the age level of children is one of the features of the creativity of Nariman Suleymanov and Ali Samadli. Writing life events on modern subjects in accordance with the aesthetic needs and tastes of young schoolchildren was an interesting and difficult way of ascension for writers. Milvarid Dilbazi, Aziza

Ahmadova, Teymur Elchi, Tofig Mutallibov, Zahid Khalil etc. It was also seen in his poems that children's literature progressed on a new development path. In these years, the technical discoveries of our century gave impetus to the creation of fantastic works. Emin Mahmudov, Namig Abdullayev wrote interesting works on the development of science and the future of technology. The creators of today's children's literature are of course not limited to the authors we have mentioned. In recent years, the number of writers interested in children's literature has increased considerably. Adhering to literary traditions, they try to stand out with their handwriting and create new beautiful works. Our modern children's literature has been developed on the basis of rich traditions and enriched with new qualities.

1960s-1980s, the main subject and idea of Azerbaijani children's literature prose is related to certain historical and social foundations. The literature of these years was organized by the events of the modern era. Creating new plot works and having a permanent character in terms of themes has been one of the main goals of children's writers in general. What is interesting is that the stories of this period are not only traditional but also attract attention with their innovative features. This set an example for young writers who came later to literature. The multifaceted complex changes that have begun in Azerbaijani society in recent years have significantly affected the psychology of both children's and children's writers. This complex process has undoubtedly had a good effect in the literature as a result of extensive interpretation and excellent generalization, both from a literary and pedagogical point of view. Our aim is to examine the development history of children's literature in the 1960s-1980s and to shed light on the path it followed.

Key words: complex, light, theme, process, inclusive, fantastic

Özet

1960-cı illərin əvvələrində cəmiyyətdə baş verən ictimai-siyasi dəyişikliklər mədəniyyətin bütün sahələrinə, o cümlədən ədəbiyyata da xüsusi təsir göstərirdi. Həmin dövrdə bu sahədə müəyyən əsaslı uğurlar qazanan T.Elçin, Zahid Xəlil, X.Əlibəyli, T.Mahmud, T.Mütəllimov, İlyas Tapdıq, Hikmət Ziya, Məmməd Aslan kimi müəlliflər fəaliyyət göstərirdilər.

Uşaq ədəbiyyatının bu mərhələsi tənqidi ədəbiyyatşünaslığın diqqətindən kənarda qalmışdı. 1960-ci ilərdə R.Rza xüsusi narahatçılıq hissilə yazırdı: «Azərbaycan uşaq ədəbiyyatının uzun illərdən bəri davam edən təcrübələri tənqidimizin nəzər-diqqətini cəlb etməmiş, daha doğrusu, tənqid, ədəbiyyatımızın bu sahəsinə bağışlanmaz bir laqeyidlik göstərmişdir».

Yazıçı ədəbiyyatşünas Z.Xəlil uşaq poeziyasının qarşısında duran vəzifələrdən biri öz oxucusuna mənəvi aləm haqqında yeni biliklər verməkdən, onun dünya görüşiinə təsir göstərməkdən çəkinmirdi. Burdan göründüyü kimi, həm də uşaq poeziyası öz oxucusunun fikrinə dünya görünüşünə təsir göstərmək, onu təbiət və cəmiyyət hadisələri ilə tanış etmək istəyən vahid məqsədə xidmət edir.

Uşaq ədəbiyyatında vətənə məhəbbət hissi aşılayan təbiət mövzuları içərisində dağlara, xüsusən meşə və onun ağaclarına ən çox poetik parçaları həsr edən şair M.Aslandır. Onun hətta «Dağları gəzib gəlmişəm» adlı bütöv bir şeir silsiləsi mövcuddur. Bu əsərlərin səciyyəvi cəhəti isə bir çox məqamlarda uşaqlara və böyüklərə həsr edildiyini ayırd edib müəyyənləşdirilməyin çətinliyi ilə bağlı şəkildə üzə çıxır.

Elə adını çəkdiyimiz silsilənin özündə bu tipli şeirlər çoxdur. M. Aslanın, uşaqlara müraciətlə («Görürsünüzmü, uşaqlar, bizim uca dağları?») başlanan «Bizim dağlar» şeirində elə obrazlı parçalar var ki, onlar ayrı-ayrı zehnli uşaqlardan əlavə böyüklərin anlayış və zövq dairəsinə daha çox uyğun gələn təbiət lirikası nümunələridir:

Rast gələrsə, əgər sizə,

Zirinc baş əyər sizə,

"Xoş gəldin" deyər sizə,

Cökənin budaqları.

Tərtər sahilində dur,

Dərə dərin, sular gur...

Dalğa gəlir vurhavur,

Döyür qayalıqları.

Bu cəhət T.Elçinin şeir və poemalarında da eyni səciyyə daşıyır – uşaqlara həsr etdiyi əsərlərdə bütün yaş mərhələləri üçün doğma və məhrəm olan bədii parçalar, böyüklərçin yazılan şeirlər uşaqların maraq və anlayış dairələrinə uyğun misra və bəndlər çox vaxt yanaşı düzülür.

Oyandı torağay, o nəğməkar quş,

Uçdu pırıltıyla sancıldı göyə.

Oyatdı səhəri öz nəğməsiylə,

Səsləndi, qoy gəlsin quşlar köməyə.

Torağay oxudu, səhərə vurğun,

Ürəyində sönməz bir eşq, bir həvəs.

Bütün nəğmələlər yığışsaydılar,

Ötüşə bilməzdi onunla heç kəs.

Təbiət hadisələrinə həsr edilən bəzi uşaq şeirlərində ən çox diqqəti cəlb edən yağış, qar və külək haqqında yazılmış müxtəlif səciyyəli poeziya nümunələridir. Qocaman uşaq yazıçımız M.Rzaquluzadə hələ 50-ci illərin ortalarında xüsusi narahatçılıq hissilə yazırdı ki, «uşaq və gənclərimiz üçün yazılan əsərlərdə canlı, təsirli, səmimi təbiət təsvirlərinə az-az rast gəlmək olur. Biz predmetsiz, boş-boşuna, səhər və axşam şəfəqləri qarlı dağlar, zərli buludlar təsvirinin tərəfdarı deyilik».

Bu dövrdə qələmə alınan uşaq əsərlərinin bir qismi uşaq psixologiyasına uyğun səciyyəvi xüsusiyyətlərə həsr edilib. Bu əsərlərin hər birində ayrı-ayrı fəsillərin səciyyəvi mənzərələrinə, onların insan həyatı ilə bağlı tipik xüsusiyyətlərinə maraq və məhəbbət hissi aşılamaq məqsədi əsasdır.

İstər şifahi xalq ədəbiyyatı nümunələri, istərsə də klassik irsimizdə uşaq tərbiyəsinə, ümumiyyətlə tərbiyəvi mövzulara həsr edilən əsərlər iki əsas tendensiya və təmayüllə əlamətləndirilir: birbaşa, yəni bəzən müsbət, bəzən mənfi mənada ritorik ifadə üsulunda əsaslanan öyüd-nəsihətin aparıcı vasitəyə çevrildiyi ədəbi istiqaməti və müəyyən həyat hadisələri fonunda irili-xırdalı məzmun və sujetlərdə göstərmə, əks etdirmə, ibarətləndirmə yolu ilə ümumiləşdirmə üsulu.

Peşəyə, sənətə, zəhmətə bağlılıq, yalan, böhtan, israf, haram, quldurluq kimi əxlaqi pozuntulara nifrət hissi aşılayan tərbiyəvi mövzularda qələmə alınan uşaq şeirləri məhz bu cür ikili ifadə üsuluna əsaslanır.

Müasir uşaq əsərlərində, o cümlədən onun yaranan nümunələrində də eyni üsullardan istifadə edilir. «Bizim onlar haqqında düşündüyümüzdən daha çox bilən» uşaqların psixologivası isə

hər iki üsulda irəli sürülən fikir və öyüdləri, onların ifadə vasitələrində mövcud olan incəlikləri dərk edib anlamağa qadirdir. Məqsəd bu psixologiyanı inkişaf etdirmək, yeni-yeni informasiyalar yolu ilə onu zənginləşdirməkdən ibarətdir.

S.Vurğun hələ 1945-ci ildə «Balalarımız üçün gözəl əsərlər yaradaq» məqaləsində yazırdı ki, «uşaq – insandır, onun sadə görünən oynaq, daim xoşbəxt və azad təbiətində böyük insanların bütün xassələri mövcuddur. Uşaq hər şeydə bir nəşə, bir sevinc, hər kəsdə hörmət, nəvaziş görür. Uşaq humanistdir. Onun mənəvi aləmi ən xeyirxah hisslər yuvasıdır. Ona görə də uşaq qəlbini tərbiyə etdiyimiz zaman o qəlbə həyat və təbiət həqiqətləri ilə qanad verməliyik».

1960-1970-ci illərdən əvvəl daha çox M.Seyidzadə, M.Rzaquluzadə, M.Dilbazi və s. uşaq şairlərinin əsərlərinin mahiyyətini müəyyən edən nəsihətçilik yavaş-yavaş unudularaq elmi-texniki tərəqqi, o cümlədən televiziya dövrünün yeni-yeni nailiyyətləri ilə əvəz olunur. Bu isə nəinki adları çəkilən müəlliflərin uşaq ədəbiyyatı sahəsindəki xidmətlərinə kölgə salınır, əksinə, ədəbi təkamülün yeni və təbii imkanlarından xəbər verir – dünya və keçmiş sovet respublikalarında xüsusən Baltik ətrafı ölkələrdə baş verən ədəbi proseslərə Azərbaycanda da müəyyən səviyyədə əks-səda verilir.

B.Q.Belinski yazır ki, «Uşağa həmişə ona yaxın olan şeylərdən danışın, ona nəql edin ki, evi necə tikirlər, hər gün yediyi çörəyi necə bişirirlər, oturduğu stulu necə düzəldirlər».

Bu illərin poeziyası nümunələrini araşdırarkən məlum olur ki, ədəbiyyatın bu konkret sahəsinin bütün nümayəndələri poema janrına müraciət etmiş, onu müxtəlif ideya istiqamətləri ilə zənginləşdirməyə çalışdırmışlar. İfadə tərzi və forma xüsusiyyətlərinə görə onları lirik və epik növlərə ayırmaq olar. F.Sadığın məşhur xalq əfsanəsi əsasında yazılmış «Ana əli» poeması istisna edilməklə, uşaq şairlərinin əksər poemaları daha cox sırf yaradıcı mahiyyət daşıyır.

Bu poemaların istər mənzum nağıl, istər nağıl-poema, istərsə də müasir nağıl və poemalar olsun – mövzu və ideya istiqaməti əsasən uşaq tərbiyəsi və ünsiyyətlə tərbiyəvi məsələlər ətrafında cəmləşir. Bu məzmun və istiqamətə uyğun olaraq seçilən əsərlər sistemi, T.Elçinin, Z.Xəlilin və F.Sadığın bu baxımdan orijinal quruluş və forma xüsusiyyətləri ilə diqqəti cəlb edən bəzi əsərləri istisna edilərsə, daha çox ənənəvi səciyyəyə malikdir.

T.Elçinin «Toğrul babanın nağıl ağacı» silsiləsindən olan «Kuklaların evində», «Kilimçi» və «Elçi gəldi Təpəgöz» kimi mənzum nağıllarında mətləb və hadisələr dəyişdikcə onların ahərginə uyğun olaraq poemada daxili bölgülər yaratmağa nail olur.

Əsrin əvvəllərində oxucular arasında geniş yayılan və orta məktəb dərsliklərinə daxil edilən C.Məmmədquluzadənin «Buz», «Saqqalı uşaq», S.S.Axundovun «Ümid çırağı», «Qatil uşaq», A.Şaiqin «Usta Bəxtiyar», «Köç» hekayələri bu gün də realist nəsrin əvəzsiz nümunələri sırasında dayanır. Sonralar müxtəlif mərhələlərdə ədəbiyyata gələn yeni qüvvələrin – S.Rəhimov, M.Hüseyn, Ə.Vəliyev, M.Cəlal, Ə.Məmmədxanlı, İ.Əfəndiyev və s. yazıçıların yaradıcılığında da realist uşaq hekayələrinə müəyyən yer verilmiş, orta məktəblərdə tədris edilmişdir. Əsrin ortalarında artıq peşəkar yazıçılar kimi formalaşan M.Rzaquluzadə, Əhməd Cəmil, M.Dilbazi, bir az sonra isə X.Əlibəyli Ə.Babayeva, və onların bir sıra gənc həmkarlarının sənət yolu da folklar ənənələri, alleqorik nəsr istiqamətləri ilə yanaşı, həm də realist nəsr mərhələsində fərdi axtarışları ilə uğurlu nəticələr qazanmışdılar. Realist uşaq hekayələri içində tarixi mövzulara həsr edilmiş əsərlərə də təsadüf edilir. Realist uşaq nəsri, indiyə qədər müxtəlif münasibətlərlə yaradıcılıq nümunələrinə daha çox müraciət edilən Z.Xəlil və Ə.Səmədli əlavə, 1970-80-ci illərdə bu sahədə daha çox fəaliyyət göstərən bütöv bir yazıçılar dəstəsinin də yeni imkanlarını üzə çıxarır. Nəriman Süleymanov, Əmrah Əmrahov, Əzizə Əhmədova, Lətifə Əhmədova, Bayram Həsənov, İsa Hümmətov və şairlərin uşaqlar üçün yazdıqları əsərlər daha çox həmin istiqamətdə inkişaf etmişdir. Bu vazıçıların əsərlərində

vətənpərvərlik motivləri ilə təbiət mövzusu əksər hallarda bir-birinə qovuşub bir-birini tamamlayır.

Uşaq tərbiyəsinin daha təsirli, daha əyani və yaradıcı mahiyyətdə olması üçün təkcə alleqorik poemaların deyil, ümumiyyətlə həmin istiqamətdə yaranan bütün sənət növlərinin, o cümlədən poeziya nümunələrinin xüsusi əhəmiyyəti vardır.

Uşaqlar üçün yazılmış alleqorik əsərlərə, mövzu baxımdan quşlar və heyvanlar, bitki və cisimlər, əşya və alətlər kimi təbiət varlıqlarını və bəzi məişət detallarını, hətta ilin fəsillərindən tutmuş hərf və rəqəmlərə qədər bir çox həyatı ştrixlərdən bəhs edən bədii nümunələr daxil edilə bilər. Uşaq yazıçılarının istisnasız olaraq demək olar ki, hamısı ədəbiyyatın həmin növündən müntəzəm şəkildə istifadə etmiş, bu sahədə müxtəlif səciyyəli əsərlər yaratmışlar. Xətaidən, Nizamidən, Füzuliyə qədər, A.Bakıxanovdan, Q.B.Zakirdən, S.Ə.Şirvaniyə, Sabirdən, A.Səhhətə qədər bir çox klassiklər sənətdə alleqoriya üsulunu təqdir etmiş, onu yüksək səviyyəli bədii əsərlərlə zənginləşdirmişlər.

Sovetləşmədən sonrakı dövrdə ilk nümunəsi S.Vurğunun «Çil toyuğun tək yumurtası» əsərindən başlamış, S.Rüstəm, R.Rza, Ə.Cəmil, O. Sarıvəlli, M.Dilbazi kimi ədiblərlə yanaşı, daha çox uşaq şairləri kimi tanınan M.Rzaquluzadə, M.Seyidzadə, Z.Cabbarzadə kimi müəlliflər poeziyanın bu sahəsində qələmlərini sınayaraq müəyyən uğurlar qazanmışlar. Alleqoriya uşaqlar üçün daha əyani və predmetli olmaqla, həm də onların maraq dairələrini, informasiya mənbələrini genişləndirmək baxımından da daha uyğun və məqsədli janr xüsusiyyətlərinə malikdir. Bu şairləri sadəcə olaraq alleqoriyanın hansı konkret mövzu və ideya xüsusiyyətlərinə, hansı bədii vasitələrə, bölgü və təsnifatlara daha çox meyl göstərməyi üstün tutmaları prinsipi ilə bir-birindən ayırıb fərqləndirmək olur. Birində daha çox quşlar və heyvanların həyat tərzi və onun təsviri, o birində bu həyatın insan maraqlarının istiqaməti ilə oxşar və bağlı cəhətlər, üçüncüdə onun insana göstərilməsi, dördüncüdə ümumilikdə insan cəmiyyətinin heyvanlar aləmi ilə birbaşa və ya dolayı yolla müqayisəsi, beşincidə eyni şeirdə insanla (daha çox uşaqlar) heyvanın müştərək, bərabər hüquqlu personajlar kimi iştirakını təmin etmək yolu ilə yaradılan paralel müqayiəsələr bu və ya digər mənada üstünlük təşkil edir. Konkret olaraq götürülsə, məs., Z.Xəlilin əsərlərində bilavasitə heyvan və bitki növlərinin, təbiəl detallarının alleqorik-metaforik ifadə formasına əsaslanan əsərlər. «Uzun yol və kəpənək», «Qatır», «Bildirçin», «Qırqovul», «Leylək», «Bülbül», «Kəklik», «Toyuq», «Ləpələr», «Dovşan və kəpənək», «Canavarın yuxusu» və s. M.Aslanın, M.Namazın və İ.Tapdığın yaradıcılığında ağac və müxtəlif bitki növləri əsasında yaranan alleqoriyalar «Qoz ləpəsi», «Palıd kökü» və s. M.Aslanın «Bənövşə», M.Namazın «Kəklikotu», «Çiçəklərim», «Əncir», «Badam», «Zoğal ağacı», «Fındıq» və s. İ.Tapdıq, T.Elçin və X.Əlibəylinin həm uşaqlar, həm də böyüklər üçün eyni dərəcədə anlaşıqlı və maraqlı görünən, daha çox uşaq personajları ilə təbiət anlarının əlaqəsi şəklində ümumiləşdirilən sujetli alleqoriyalar həmin bölgü sistemində daha çox nəzərə çarpan mövzu, məzmunu, ideya yə ifadə vasitələrinin xüsusi istiqamətləri kimi nəzərə çarpır. Bu mövzularda yazılan əsərlər uşaqları əyləndirməkdən çox onları düzgün istiqamətlərə yönəltmək rolu oynayır.

Akademik M.İbrahimov haqlı olaraq H.Ziyanın kitabına yazdığı ön sözdə deyirdi ki, «Hikmət Ziya Azərbaycan yazılı ədəbiyyatı tarixində istedadını illər uzunu müntəzəm surətdə təmsil yazmağa həsr etmiş və bir janr olaraq təmsili ədəbiyyatımızda kamil dərəcəyə çatdırmış ilk sənətkardır».

Hikmət Ziyanın bir təmsilçi kimi ustalığı ondadır ki, heç kəsi təkrar etmir, həyatdan aldığı mövzuları özünəməxsus üsullarla və obrazlı ifadələrlə canlandırır, çıxardığı əxlaqi nəticə də Ümumiyyətlə müasir Azərbayean poeziyasında, o cümlədən 1970-1980-cı illər uşaq ədəbiyyatında təmsil janrının inkişafında H.Ziyanın xidmətləri əvəzsizdir. O bu şeir formasına

başqa uşaq şairləri kimi ötəri bir həvəs, epizodik hal kimi baxmayıb, ardıcıl və sistemli şəkildə ədəbiyyatın bu maraqlı və gərəkli sahəsinə istər ideya istiqaməti, istərsədə forma xüsusiyyətləri baxımından yeni keyfiyyətlər kəsb etməsinə çalışmış, ona ömür həsr etmişdir. Bu təmsillər mövzu və məzmun cəhətdən son dərəcə zəngin və çoxtərəflidir.

Z.Xəlil, H.Ziyanın təmsillərindən bəhs edərkən haqlı olaraq qeyd edir ki, «H.Ziyanı alleqorik tipləri bir-birindən fərqlənən rəngarəng obrazlar silsiləsini təşkil edir. Onun təmsillərində məişət əşyalarından tutmuş, bitki və heyvanlar aləminə qədər müxtəlif tiplərə rast gəlmək mümkündür. Bu surətlərin çoxu bizə folklordan tanışdır. H.Ziya öz əsərlərində ədəbiyyatın gözəl ənənələrini yaşadır, nöqsanlara xalq hikməti ilə gülür».Həyatın, cəmiyyət hadisələrinin elə bir sahəsi tapılmaz ki, H.Ziya öz təmsillərində onları yumor və satira süzgəcindən keçirməsin, alleqorik münasibətini bildirməsin. Təmsilə alleqoriyanın bir növü, ayrılmaz bir hissəsi kimi qəbul edənlər, yəqin ki, belə bir ədəbi-bədii amili də unudurlar ki, əslində alleqoriyanın özü təmsilin əsas ifadə vasitələrindəndir.

Bədii nəsr və dramaturgiya. 1960-cı illərdə uşaq nəsrinin ideya istiqaməti əsasən uşaqların «layiqli sovet vətəndaşı» kimi yetişməsinə doğru yönəlir, onları meydana çıxaran bədii vasitələr, yeni sənətkarlıq məsələləri arxa plana keçirdi. Uşaqların ümumi yaş səviyyəsinə, maraq dairəsinə, dünyagörüşünün formalaşmasına, müstəqil insan kimi yetişməsinə yönəldilən ictimai, sosial, ədəbi-bədii amillər ümumsovet idieologiyasının konkret tələblərinə uyğunlaşdırılırdı. Ə.Məmmədxanlının, «Buz heykəli», İ.Əfəndiyevin «Zəmidə bir turac səslənirdi» kimi əsərlər uşaqların həyatından götürülmüş hekayələr orta məktəb dərsliklərinə salınır, uşaq nəsrinin nümunələri kimi tədris edilirdi.

Dəyişməyən əsas amil isə uşaq ədəbiyyatını, xüsusən onun nəsr və nisbətən də dramaturgiya qolunu əlamətləndirən əsas bir cəhət – folklora münasibət və ənənənin yeni tarixi-ictimai şəraitdə davam etdirmək prinsipi ilə bağlı şəkildə meydana çıxırdı.

Dünya ədəbiyyatının, o cümlədən onun dramaturgiya qolunun təcrübəsi göstərir ki, istər mövzu və məzmun, istər ideya, istərsə də bədii element müxtəlifliyi müəyyən bir sistemə əsaslanan ardıcıllığa, dövr və zamanla səsləşən xüsusi bir məktəb səciyyəli ümumi istiqamətə xidmət etməlidir.

«Azərbaycan haqqında hekayələr» başlığı altında toplanmış əsərləri cəlb edir. Burada Azərbaycanın bir çox bölgə, şəhər və kəndlərini bir-biri ilə əlaqələndirməklə, sanki, yazıçı yuxarıda haqqında söhbət gedən əsərlərə cavab olaraq uşaqlarda vətənin bütövlüyü, bölünməzliyi ideyasını aşılamaq məqsədində olduğunu göstərir.

Silsilə «Qartal qanadlı ölkə» ilə açılır. Bu əsərdə Z.Xəlil Azərbaycanın xəritəsinin mənzərəsinin təsviri fonunda ümumilikdə söhbətin nədən gedəcəyi haqqında oxucuya ilk müjdə verməklə, onu sonrakı bədii parçaların mövzu, məzmun və ideya istiqamətinin mahiyyətini düzgün dərk etmək üçün hazırlayır: «Azərbaycan xəritəsinə diqqətlə baxsanız görərsiniz ki, o, qanadlarını yığıb şığıyan qartala oxşayır. Onun başı Abşeron yarımadasıdır. Xəzər dənizi bu qartalın qarşısında ucsuz-bucaqsız səma kimi açılır. Abşeron yarımadasında Xəzərin sahilində Bakı şəhəri yerləşir. Bura neft səltənətidir. Qartalın bir qanadı Lənkəran-Astara şəhərlərinin yerləşdiyi limonlu, portağallı bir diyardır. Bu diyarda ucsuz-bucaqsız çay plantasiyaları uzanıb gedir. O biri qanad zəngin təbiətli Quba-Qusar rayonlarıdır. Burada meyvə bağları nəhəng qartalın yaşıl qanadları kimi uzanıb gedir. Quşun bədəni pambıq plantasiyaları ilə şöhrət tapan Şirvan və Qarabağ torpağıdır. Azərbaycanın dövlət gerbinə baxsanız orada neft vışkası, pambıq və sünbül təsvirləri görərsiniz. Bu günəşli ölkənin adamları işgüzar, torpağı bərəkətlidir».

«Azərbaycan haqqında hekayələr» silsiləsi janr baxımından mənsur poemanı xatırladır. «Qartal qanadlı ölkə» onun proloqudur. Sonraki parçalar bu poemanın ayrı-ayrı fəsillərini təşkil edir.

Bu proqramlarda Z.Xəlilin şairliyindən gələn obrazlı düşüncə tərzi, lirik-romantik ifadə tərzi və s. poetik incəliklər aparıcı mahiyyət daşıyır. «Mavi küləklər şəhəri», «Dalğalar – qayalar», «Ellər gözəli», «Göy-gölün səhəri», «Parlaq damlalar» və s. əsərlərdə isə Azərbaycanın müxtəlif bölgələri, onun təbii sərvətləri bütöv bir bədənin üzvləri kimi hərəsi eyni canın həyat və yaşantısını təmin edən ayrılmaz varlıqlar şəklində təqdim edilir. Bu əsərlərdə Z.Xəlil bir ədib kimi özünün əsas funksiyasını – uşaq yazıçısı olduğunu da unutmur. Silsilənin ümumi üslubunda uşaq psixologiyasınıın incəliklərinə əməl etməklə yanaşı, onların həyatından götürülmüş, məktəb illərinə həsr edilmiş əsərlərə xüsusi yer verilir.

Elmi fantastika. Uşaq nəsri sahəsində elmi-fantastik janr da müəyyən yer tutur. Ancaq təəssüf ki, ədəbiyyatın bu maraqlı növü ilə məşğul olan nasirlər son dərəcə az olduğu kimi bu janrda qələmə alınan əsərlər də azlıq təşkil edir.

Bu dövrdə gələcək daha çox utopiya şəklində təsvir olunur. Bu cür ədəbiyyatın tipik nümayəndələri Jül Vern və Herbert Uellsdir. Zaman keçdikcə bu janrada Rey Bredberi, Ayzek Azimov, Robert Haynlayn, Artur Klark, Nelson Bond və s. kimi məşhur yazıçılar yazmışlar. Azərbaycan ədəbiyyatında elmi-fantastik janrın ilk nümunəsi Yusif Vəzir Çəmənzəminlinin 1933-cü ildə yazdığı "Gələcək şəhər" fantastik hekayəsidir. Azərbaycanda fantastika janrında ədəbiyyatın yaranması və inkişafında Emin Mahmudovun çox böyük xidmətiləri olmuşdur. Azərbaycan ədəbiyyatında elmi-fantastika janrında üç görkəmli yazıçının adı xüsusi qeyd olunmalıdır. Bunlar Namiq Abdullayev, Əhməd Xaspoladov və Emin Mahmudovdur. Sonrakı illərdə Namiq Abdullayev ("Sehrli oğlan", "Balaca kiberin macəraları", "Gecələr uzanaydı", "Piyada vəzirə çevrilir" və s.) və Sonralar Azərbaycan Yazıçılar Birliyinin sədri Anar da "Əlaqə" povesti ilə bu janrda oxucularına öz töhfəsini vermişdir. Azərbaycanda elmi-fantastika janrının azsaylı nümayəndələrindən biri olan Emin Mahmudov bu sahədə yazan ilk yazarlarımızdan biri olduğu üçün müəyyən çətinliklərlə qarşılaşmışdır. Lakin rus və dünya elmi-fantastik janrının ən gözəl nümunələrini mütaliə etməsi, elm və texnikanın nailiyyətləri ilə yaxından tanış olması gənc yazıçıya çox kömək etmişdir.

Yaradıcılığa uşaqlar üçün hekayələrlə başlayan E.Mahmudov zaman keçdikcə daha iri həcmli əsərlər yazmağa başlamışdır. Emin Mahmudovun "RT-1" adlı ilk elmi-fantastik hekayəsi, "Günəş şəhəri" adlı ilk elmi-fantastik hekayələr toplusu "Muğanda qütb parıltısı" və "Kainat gəmisi", "Veneranın göyləri od içindədir", "Zülmət dənizi", "Atlant qızı" və s. povestlərin, çox sayda hekayələrin müəllifidir. Emin Mahmudov publisist, jurnalist və tərcüməçi kimi də fəaliyyət göstərmişdir. Onun elmi-kütləvi, yumoristik, satirik məqalələri, kiçik hekayə və miniatürləri dövrü mətbuatda dərc olunmuşdur. Yazıçı bir çox Azərbaycan müəlliflərinin əsərlərini rus dilinə, çox sayda xarici müəlliflərin əsərlərini isə doğma dilimizə tərcümə etmişdir. Görkəmli yazıçımızın əsərləri əsasən uşaq və yeniyetmələrə ünvanlandığı ədəbiyyat həm dəqiq, həm təbiət elmləri, həm də humanitar elmlər sahəsində fantastik ideyalara, fikirlərə, bəzən də spekulyasiyalara əsaslanır. Elmi fantastika təxəyyül məhsulu olan texnologiyaları və elmi kəşfləri, mümkün gələcəyi və tarixin alternativ inkişafının gedişatını, həmçinin bütün bunların insan cəmiyyətinə və şəxsiyyətinə təsirini təsvir edir.

Bu janrda yazılmış əsərlərdə hadisələr adətən gələcəkdə baş verir. Bu janrın meydana çıxması XIX əsrdəki sənaye inqilabı ilə bağlıdır.

Azərbaycan ədəbiyyatında elmi-fantastik janrın xüsusi ənənəsi yoxdur. Müasir uşaq nəsrində bu janrın ilk peşəkar nümunələrinə əsasən müharibədən sonra ədəbi fəaliyyətə başlayan Emin Mahmudov və Namiq Abdullayev yaradıcılığına rast gəlirik. Bu illərdən onun bir-birinin ardınca mətbuat səhifələrində dərc olunan bir sıra hekayə və povestləri, «Kainat gəmisi», «İtirilmiş dünya», «Dəniz necə ayaq açdı», «Qeyb olmuş səslər» və s. kitablarında toplanan əsərləri elmi-fantastik janrın əsas nümunələrini təşkil edir lakin bir şeyi də təəssüf hissilə qeyd

etmək lazımdır ki, 1970-ci ildən sonra E.Mahmudovun elmi-fantastik janrda yazdığı əsərlərə təsadüf edilmir.

KAYNAKÇA

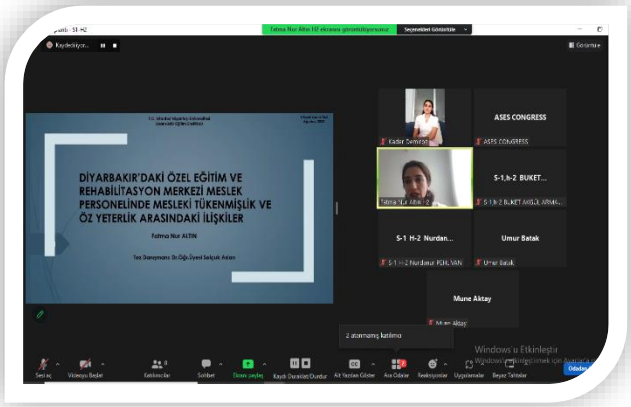
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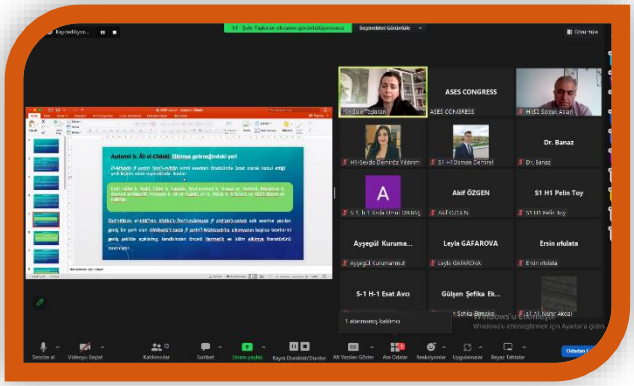
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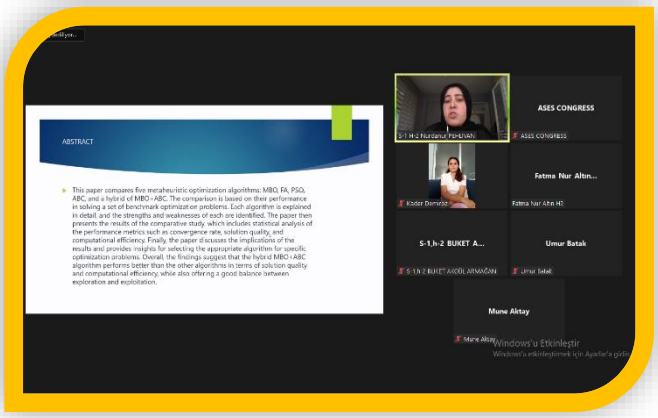
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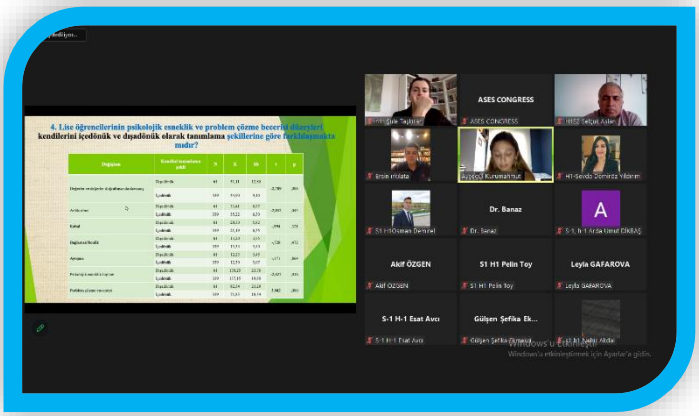


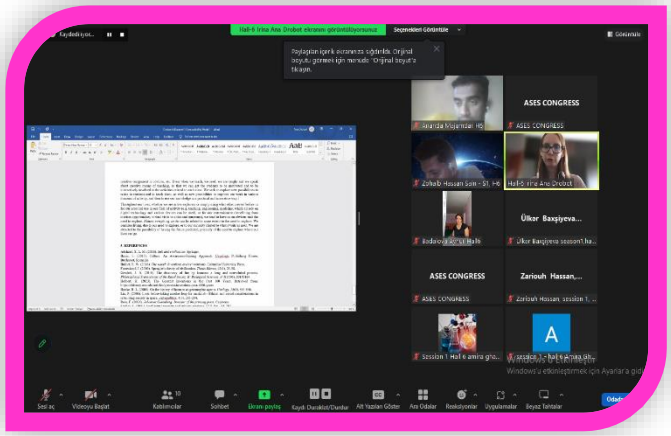


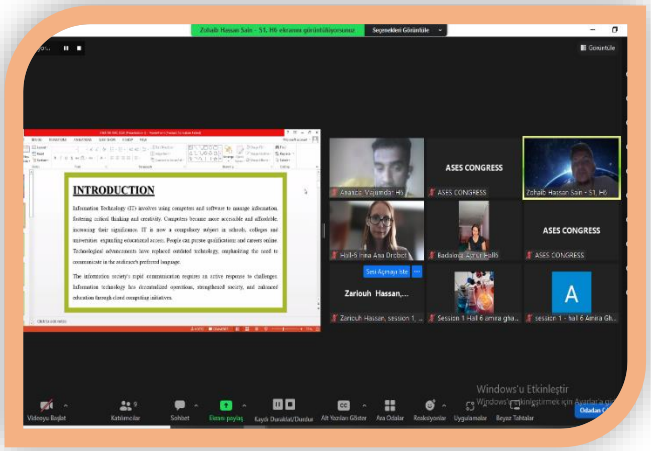


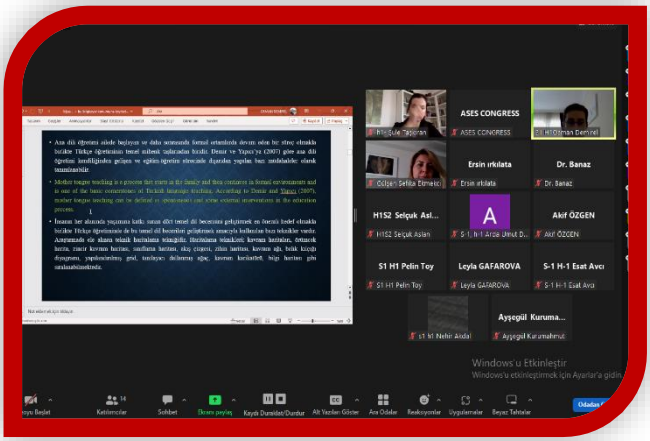


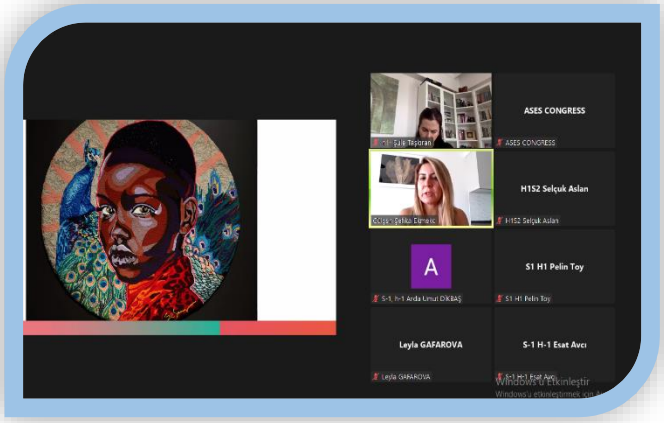


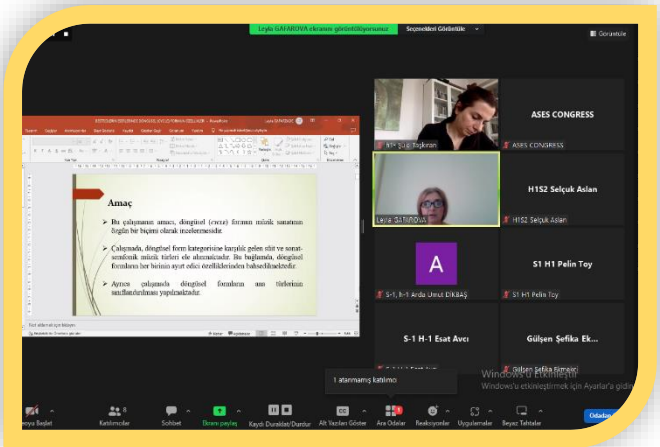


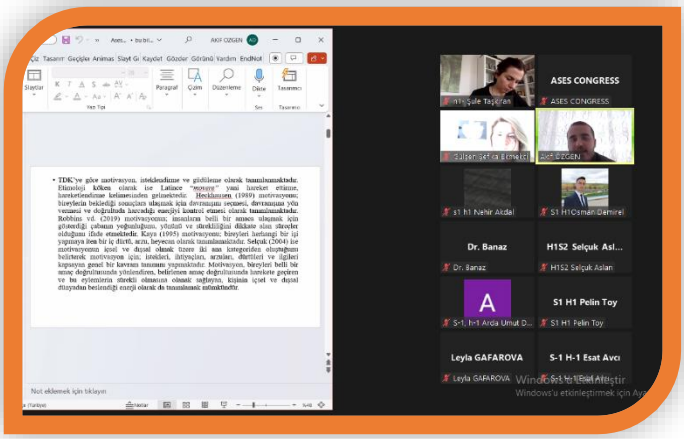

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