

Exploring the Relationship between Critical Thinking Skills and Reading Comprehension of Advanced EFL Learners

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ABSTRACT

This study examines the relationship between advanced-level male and female EFL learners' critical thinking (C.T henceforth) and reading comprehension (R.C henceforth) capabilities. A standardized test was used to evaluate the R.C of the 89 participants in the sample, which included 46 female and 43 male students. The Honey Critical Thinking Questionnaire (2000), which assesses abilities like analysis, evaluation, and comprehension, was used to gauge C.T. Fisher's Z tests and Pearson correlation were used to examine gender-based differences in the data. The findings showed that both genders' R.C and C.T skills were positively correlated in statistically meaningful ways. Although it was not statistically significant, male participants showed a somewhat stronger correlation ($r = 0.506$) than female participants ($r = 0.396$). The results demonstrate how gender has no bearing on how R.C and C.T interact in advanced EFL contexts. In line with previous research that highlights the influence of C.T on students' cognitive and problem-solving skills, this study highlights the crucial role that C.T plays in improving R.C. It also implies that encouraging C.T in EFL classes may help close comprehension gaps and improve students' academic achievement. The insignificant effect of gender serves as more evidence that C.T techniques are universally applicable in EFL training.

Keywords: C.T, Reading Comprehension, English as a foreign language, gender.

İngilizceyi Yabancı Dil Olarak Öğrenen İleri Düzey Öğrencilerin Eleştirel Düşünme Becerileri İle Okuduğunu Anlaması Arasındaki İlişkinin Araştırılması

ÖZ

Bu çalışma, ileri düzey erkek ve kadın EFL öğrencilerinin okuduğunu anlama becerileri ile eleştirel düşünme yetenekleri arasındaki ilişkiyi incelemektedir. Örneklem, 43 erkek ve 46 kadın öğrenciden oluşan toplam 89 katılımcıyı içermektedir. Katılımcıların okuduğunu anlama becerileri standart bir testle değerlendirilmiştir. Eleştirel düşünme becerileri ise analiz, değerlendirme ve kavrama gibi yetkinlikleri ölçen Honey Eleştirel Düşünme Anketi (2000) ile incelenmiştir. Veriler, cinsiyet temelli farklılıkları değerlendirmek için Pearson korelasyonu ve Fisher Z testi ile analiz edilmiştir. Sonuçlar, her iki cinsiyet için de okuduğunu anlama ile eleştirel düşünme arasında istatistiksel olarak anlamlı pozitif ilişkiler olduğunu göstermiştir. Erkek katılımcılar, kadınlara kıyasla biraz daha yüksek bir korelasyon ($r = 0.506$) sergilemiş, ancak bu fark istatistiksel olarak anlamlı bulunmamıştır. Bulgular, eleştirel düşünme ile okuduğunu anlama arasındaki ilişkinin cinsiyet tarafından önemli ölçüde etkilenmediğini ortaya koymaktadır. Bu çalışma, eleştirel düşünmenin okuduğunu anlamayı geliştirmedeki kritik rolünü vurgulamaktadır ve mevcut literatürle uyumlu olarak, bu becerinin öğrencilerin bilişsel ve problem çözme yeteneklerini artırdığına işaret etmektedir. Çalışma ayrıca, EFL bağlamlarında eleştirel düşünme becerilerinin geliştirilmesinin öğrenme performansını artırabileceğini ve cinsiyet farkı gözetmeksizin bu stratejilerin evrensel olarak uygulanabilir olduğunu ortaya koymaktadır.

Anahtar Kelimeler: Eleştirel düşünme, okuduğunu anlama, yabancı dil olarak İngilizce, cinsiyet.

Introduction

In contemporary and global societies, effective communication skills are deemed paramount, necessitating proficiency in a shared language. Consequently, language emerges as an integral component of interpersonal interaction and human existence. Verbal and written forms represent the most prevalent modes of communication, with the former involving oral discourse among individuals and the latter entailing interactions between individuals and textual materials. Particularly within educational settings and English as a Foreign Language (EFL) context, a considerable portion of communication manifests through written exchanges, predominantly through reading and writing activities. Anderson (2003) asserts that authors must craft messages in a manner conducive to seamless transmission, while readers must employ appropriate strategies to enhance comprehension and foster effective communication between text and reader.

According to Vanden Broek and Espin (2012), reading comprehension (R.C henceforth) is a prerequisite for success in a variety of areas of life. The understanding of its critical role in language learning and teaching has motivated teachers to carefully investigate pedagogical approaches targeted at improving students' R.C in contexts where they are learning a second language (L2). According to Jalilifar (2010), learners may become less motivated and interested in academic reading if they have trouble understanding English literature, which could lead to academic losses.

To overcome these comprehension and motivational barriers, Forood and Farahani (2013) recommend that EFL students develop critical thinking (C.T henceforth) skills, which would help them become independent and have strong problem-solving capabilities. According to Freeley and Steinberg (2000), being able to evaluate, support, and discuss ideas, while using both deductive and inductive reasoning is what C.T is all about. C.T is the ability to evaluate, support, and discuss concepts to support both deductive and inductive reasoning. According to Ruggiero (1989), C.T gives students problem-solving skills that they may use in a variety of academic settings. According to Webster (2006), being able to think critically is crucial for making intelligent decisions and inferences.

Researchers have become interested in the gender-based association between comprehension of reading and C.T skills across EFL learners. While some research, like Heidari (2020), has found no appreciable differences in R.C performance between genders among students with different C.T abilities, other research, like Fahim et.al (2012) and Liu and Zhao (2023), has discovered a high correlation among C.T abilities and R.C. Furthermore, emerging evidence suggests that female students may demonstrate a proclivity towards leveraging metacognitive skills, such as planning, attributable to their heightened C.T acumen (Liu and Zhao, 2023). However, the body of literature on this topic is still small, indicating that further research is necessary to fully understand how R.C and C.T skills correlate to one another for EFL learners of both genders.

Consequently, the following research topics are intended to be addressed by the current study:

- 1) Is there a statistically significant correlation between the R.C and C.T abilities of female EFL learners?
- 2) Is there a statistically significant correlation between the R.C and C.T abilities of male EFL learners?
- 3) Does the relationship between the R.C and C.T skills of EFL learners change by gender?

Literature Review

Reading, an essential facet of language acquisition, represents an intricate cognitive undertaking wherein information is extracted and comprehended from written texts. Lundahl (1998) underscores reading as a skill that necessitates substantial practice for proficiency, while Yang and Wilson (2006) accentuate its inherent complexity, involving the amalgamation of the reader's knowledge and textual information to construct meaning.

R.C is closely tied to understanding, a challenging mental task as described by McNamara, Ozuru, Best and O'Reilly (2007). It involves correlating text with prior knowledge and evaluating its relevance to one's objectives. Effective reading, characterized by Ur (2007), is swift, focused on key details, predictive, and reliant on prior knowledge to make sense of the text. Birch (2002) and Gunning (2008) add that R.C requires precise knowledge and the practice of processing strategies. It's a dual cognitive and sensory process, dependent on visual recognition and interpretation. Reiser (2004) suggests that without word meanings and verbal reasoning, R.C cannot exist.

Studies reveal a noteworthy connection between EFL students' R.C and C.T skills. Mohseni, Seifoori, and Ahangari (2020) found that training metacognitive strategies and enhancing awareness of C.T significantly improved the R.C of Iranian EFL learners. Similarly, Yulian (2021) showed how the flipped classroom paradigm, which encourages self-directed learning, improved the C.T skills of EFL students for critical reading. These results were corroborated by Faravani and Taleb (2020), who demonstrated that using higher-order questioning strategies in the classroom enhanced the listening comprehension and C.T skills of Iranian EFL students. According to all of these research, C.T-based interventions may improve the R.C of EFL students.

Additionally, Batanieh (2019) examined the effects of questioning and self-questioning on the critical reading abilities of 85 EFL ninth-grade students in order to evaluate C.T. The results demonstrated that both questioning and self-questioning enhanced students' critical reading abilities, with questioning techniques demonstrating a greater level of progress than self-questioning. In a similar vein, Yahya and Kareem (2021) used the question-answer relationship (QAR) technique to improve the L2 reading proficiency of fifty English preparatory students while they investigated their metacognitive skills. Their study's findings showed that pupils in the experimental group who learned utilizing the QAR strategy outperformed those in the control group who learned utilizing the traditional approach. This shows that teaching R.C of English texts and enhancing metacognitive processes are two areas in which the QAR technique excels.

Studies examining the connection between gender, C.T, and EFL R.C reveal that while C.T abilities are essential for R.C in EFL courses, their relationship is not without its challenges. There could be several underlying reasons for the gender gap in R.C. Several studies have examined individual differences in second language (L2) R.C, as evidenced by the work of scholars such as Brantmeier (2001, 2003), Bugel and Buunk (1996), and Chavez (2001). Brantmeier's (2001) thorough analysis emphasizes gender and passage content as critical factors associated with disparate L2 R.C results. In this regard, in 1996, Bugel and Buunk examined the effects of passage topic on gender disparities in L2 R.C among 2,980 Dutch high school students. They analyzed eleven distinct English reading passages, with six having a "female" theme and five having a "male" focus. The results revealed significant comprehension differences for all male-oriented reading topics and five of the six female-oriented reading themes.

Brantmeier (2003) also studied the gender, enjoyment, interest, and L2 reading performance of readers. Recall comprehension, a gauge of reading proficiency, was shown to be significantly impacted by readers' gender and the passages' substance, whereas enjoyment and interest had a less significant effect. These findings are consistent with prior research on group mean differences on US standardized tests, including research by Doolittle and Welch (1989) and Hyde and Linn (1988). According to Hyde and Linn (1988), the primary cause of the gender gap in SAT verbal scores was the reading materials' content, which often focused on technical subjects like physics or chemistry, which disadvantaged women. Gender differences were observed at the item level among American college students by Doolittle and Welch (1989), who discovered that items with a humanities-oriented concentration tended to favor females while ones with a science-oriented focus tended to favor males.

The Korean college entrance exam's 38-item English R.C subtest was split into five groups for Pae's (2004) study. Female participants were believed to find it easier to answer the "Mood/Impression/Tone of a Reading Passage" questions. Male participants, however, found it easier to respond to questions classified as "Drawing a logical conclusion about what comes before or after a

reading paragraph from the passage itself" (p. 269). Research has shown that there are no statistically significant differences between the sexes in terms of L2 R.C or C.T, with the exception of the so-called genre or text type effect. For example, the results of Rianto (2021) and Deliany and Cahyono (2020), who found no significant gender differences in the use of metacognitive reading strategies among EFL students, may indicate that there is no significant gender difference in the relationship between R.C and C.T abilities.

In a complementary vein, Ghanizadeh and Moafian (2011) directed their attention to the interplay between C.T and emotional intelligence, incorporating age and gender as moderating variables. Their findings indicated robust associations between the flexibility and social responsibility dimensions of emotional intelligence and C.T. Interestingly, age and gender were not identified as significant factors influencing this correlation.

Research on the apparent relationship between EFL learners' R.C and C.T is clearly lacking, particularly when taking gender disparity and the Turkish context into account. This gap is currently being filled by investigating the connection between the R.C and C.T skills of Turkish EFL learners, with an emphasis on gender disparities. This area of research is significant because it could provide insight into how R.C, a crucial skill in language acquisition, might be enhanced through the use of C.T.

Methodology

With an emphasis on gender disparities, this study used a quantitative research approach to investigate the connection between advanced EFL learners' R.C and C.T capabilities. Prior to the primary assessments, the participants were homogenized using a standardized proficiency exam to guarantee the validity and reliability of the results. Data collection involved administering a C.T questionnaire and a R.C test. Statistical analyses, including Pearson correlation and Fisher's Z test, were utilized to investigate the strength of relationships and potential gender-based variations. This systematic approach ensures the rigor and replicability of the study's findings.

Participants

The first step in conducting the study was obtaining the necessary authorization from the university's ethical committee. Forty-four male and forty-nine female advanced EFL students were chosen from four full advanced classrooms to make up the study's sample. Forty-four male and forty-nine female students participated. The Michigan English Test (MET) was used to homogenize the chosen sample. Four students were identified as outliers based on the results of the homogeneity test, and their scores were not included in the data analysis. Consequently, 43 male and 46 female students were selected as research participants and given tests and questionnaires. By completing the participation form, participants indicated their consent to participate in the present investigation.

Data Collection Tools

The Language Proficiency Test

Although the sample of the study was selected among the existing advanced-level classes and learners in the Institute of Foreign Languages, the researcher used the Michigan English Test (MET) which is a standardized, highly valid, and reliable test ($r=0.90$). Since the main purpose of the study was to investigate the learners' R.C, the researcher used the vocabulary and R.C parts of the Michigan English Test to homogenize the learners. The reading section of the Michigan English Test included 15 R.C items designed to assess the comprehension of a variety of written texts. The vocabulary part included 25 vocabulary items. All of the items were multiple-choice, with only one correct answer. The correct answers received one point, while erroneous responses received zero. The test was scheduled to last 65 minutes.

Questionnaire on Critical Thinking (C.T)

This study also looked at advanced EFL learners' C.T skills using Honey's C.T Questionnaire (2000). Using Cronbach's alpha, the reliability of this questionnaire was found to be 0.79. The questionnaire was administered using a 5-point Likert scale, where 1–5 points were given for never, seldom, sometimes, often, and always. The thirty items in the questionnaire primarily assess three skills: analysis, assessment, and comprehension. In addition, the questionnaire assesses differentiating, comparing and contrasting, inductive and deductive reasoning, taking notes, summarizing, questioning, paraphrasing, researching, drawing conclusions, classifying, and outlining.

Reading Comprehension (R.C) Test

Following five reading passages chosen from the R.C section of the TOEFL (paper-based version), a multiple-choice exam consisting of 50 R.C questions was used to assess the participants' R.C abilities. The homogeneity of R.C abilities between male and female learners was assessed using these reading passages before the therapy began.

Procedures and Data Analysis

After selecting four intact classes randomly from the faculty, the sample was examined in terms of homogeneity and demographic data. Next, the participants took the R.C test to check their reading ability. Later, the C.T Questionnaire developed by Honey (2000) was administered. The students were provided with explanations on how to answer the items. After delivering all exams and questionnaires, the researcher scored the participants' responses using the current rubrics and entered them into the computer for statistical analysis. The data was examined with the SPSS software.

To find out if male and female learners had similar levels of language competency, we first scored the research participants' proficiency test and compared the findings using an independent samples t-test. This made it possible for the researcher to compare the association that was sought in the current investigation. The C.T questions were then reviewed and evaluated by the researcher. The Pearson Product Correlation coefficient was used to determine if R.C and critical skills among Turkish male and female EFL learners were significantly connected after interval data collection. To answer the third study question, the researcher employed a Fisher-Z test to assess the correlation between variables between male and female students.

Research Ethics

After planning the research process, the relevant application document of The Ethics Council for The Research in Social and Human Sciences was filled out fully and completely on 15.01.2024. At the end of the two weeks after the document was sent to the ethics committee, the necessary permission was obtained with the approval of the University's Ethics Council for The Research in Social and Human Sciences dated 30.01.2024 and numbered 386500.

Results

After the questionnaires and tests were taken by the participants, their scores on each questionnaire and test were calculated and later analysed in SPSS. The descriptive statistics drawn out from the proficiency test are presented in Table 1.

Table 1
The proficiency test results' descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Proficiency Test	93	18	39	36.11	4.044
Valid N (listwise)	93				

According to the information in Table 1, the proficiency test's mean score was $M = 36.11$, with a standard deviation of $SD = 4.044$. In order to select between parametric and non-parametric tests, the proficiency scores were analyzed to verify the distribution normality prior to comparing the group results to identify any potential differences between the gender groups. Therefore, three Kolmogorov-Smirnov tests were applied to the scores by the researcher. Table 2 displays the findings.

Table 2

Verifying the normality of the distribution of the proficiency test scores

		Homogeneity Test
N		89
N. P.	M.	37.28
	Std. D.	3.074
Most Extreme Differences	Abs.	.241
	Pos.	.092
	Neg.	-.241
T.Stat.		.241
Asymp. Sig. (2-tailed)		.091

The proficiency test scores, as indicated by Table 2, had a normal distribution because the significance level ($p = .09$, $z = .24$) was greater than the predetermined alpha level (0.05). Consequently, the scores were found to be regularly distributed, and the hypothesis about the scores' deviation was rejected. The researchers chose to perform parametric statistics as a result. The researcher compared the proficiency levels of the two genders using an independent t-test to ensure that the male and female groups had equal levels at the start of the study. Tables 3 present the findings.

Table 3

The descriptive statistics of the proficiency test results for both male and female participants

	G	N	M	S. D.	Std. Error Mean
Proficiency Test	male	43	36.70	2.858	.436
	female	46	35.54	4.996	.737

Since the mean scores for the male and female participants were $M = 36.7$ and $M = 35.54$, respectively, showing a minor difference between the groups, we used an independent samples t-test to assess whether the observed difference was significant (Table 3). The little mean proficiency difference between the gender groups is not statistically significant, according to the results of the independent samples t-test. [$p = .061$; $t(87) = 1.325$]. Thus, it can be said that in this study, the proficiency levels of men and women were comparable.

The same procedure described above was carried out for R.C and critical reading scores of participants. The researchers checked the normality distribution of respective scores and then ran a correlational test to find out any possible relationship between the variables in question.

Table 4

Verifying the normality of the distribution of the R.C and C.T test scores

		Female C.T	Male C.T	Female Reading	Male Reading
N		46	43	46	43
Normal Parameters ^{a,b}	Mean	78.74	86.49	23.15	22.21
	Std. Deviation	18.187	18.655	3.927	3.783
Most Extreme Differences	Absolute	.133	.103	.094	.101
	Positive	.082	.069	.094	.058
	Negative	-.133	-.103	-.076	-.101
Test Statistic		.133	.103	.094	.101
Asymp. Sig. (2-tailed)		.060	.105	.089	.176 ^d

Table 4 shows that the scores obtained from the R.C and C.T questionnaire have a normal distribution since the significance levels for male/female C.T scores and male/female R.C scores were

$p = .10$, $z = .103$, $p = .06$, $z = .133$ and $p = .17$, $z = .101$, $p = .08$, $z = .094$ which all were more than the set alpha level (0.05).

The data were analysed using the Pearson correlation test to answer the first study question and ascertain if the R.C and C.T abilities of female EFL learners were related, as shown in Table 5.

Table 5
The correlation between female EFL learners' C.T abilities and their R.C skill

	C.T.	R.C.
C.T.	1	.396*

* 0.05 level (2-t.)

The female participants' R.C and C.T skills were shown to be relatively positively and statistically significantly correlated, according to the results of the Pearson correlation study.

Table 6
The relationship between the R.C and C.T capabilities of male EFL learners

	C. T.	R.C.
C. T.	1	.506**

** 0.01 level (2-t.)

A statistically significant ($r=.506$) positive link between the R.C scores of male EFL learners and their C.T abilities is seen in Table 6. Compared to female students, male students had a stronger correlation between the two factors. The third study subject compared how the correlations of male and female learners differed. To make the required comparison, the researcher used Fisher's Z test. The results are shown in Table 7.

Table 7
Comparing the significance of the variations in the gender-group correlation coefficients

S.A		S. B	
r_a	.396	r_b	.506
n_a	46	n_b	43
Z			-.63
P	One-t.		.2643
	Two-t.		.5287

The researcher used MEDCAL Statistical software to compare the gender groups using Fisher's z test after statistically validating the relationship between R.C and C.T for both male and female advanced EFL learners. This was done to look for any differences in the correlation coefficients that were obtained. According to the calculations done on the coefficient scores, the z statistic for comparing the correlation coefficients of the groups equaled .63, and the p value was .52, which was higher than the predetermined value for this study and showed that there was no difference between the correlation coefficients. Consequently, it was concluded that the link between the C.T and R.C skills of EFL learners was independent of gender.

Discussion and Conclusion

After statistically confirming the association between R.C and C.T for both male and female advanced EFL learners, we utilized MEDCAL Statistical software to compare the gender groups using Fisher's z test. This was done in order to search for any variations in the acquired correlation coefficients.

The p value was .52, which was higher than the predefined value for this study and demonstrated that there was no difference between the correlation coefficients, and the z statistic for comparing the correlation coefficients of the groups equaled .63, based on the computations performed on the coefficient scores. Therefore, it was determined that gender had no bearing on the link between EFL learners' R.C and C.T abilities.

The primary objective of this study was to investigate potential relationships between the R.C and C.T abilities of advanced male and female EFL students. The R.C and C.T abilities of male and female EFL students were shown to be statistically significantly correlated by the study. In particular, students of both sexes showed comparable and significant relationships between their ability to think critically and their ability to understand written material, suggesting that gender had no discernible impact on the link between these variables.

Several researchers have emphasized the vital role that C.T plays as a basic talent that students must acquire. These scholars include Chance (1986), Heidari and Bahrami (2012), Cano and Martinez (1991), Meichenbaum and Goodman (1969), and Rezaei (2010). Expanding on this discussion, Ennis (1985) explains how C.T develops logical thinking by taking into consideration the abilities, preferences, and proficiencies of learners. This, in turn, promotes learning autonomy by encouraging accountability and C.T skills. The present study's findings align with Kenney's (2013) assertion that C.T equips individuals with the capacity to make judicious decisions amidst novel and challenging circumstances encountered in societal, occupational, and educational milieus, thereby facilitating independent learning and adept problem-solving.

Velayati, Muslem, Fitriani, and Samad (2017) support the discovered relationship between R.C and C.T ability, arguing that C.T provides students with the inferential and reasoning abilities required to make logical connections between textual information and relevant prior knowledge, which improves comprehension. These results are consistent with those of Boroushaki and Ng (2016), who found a strong correlation between students' use of vocabulary acquisition tactics and their capacity for critical thought. Furthermore, this study supports the findings of Nabi Karimi and Sarbazfard (2014) by showing that learners' lexical knowledge and C.T skills are significantly correlated, with gender having minimal bearing on this connection.

The results of an experimental study by Talebi and Marzban (2015) support the notion that teaching critical techniques is crucial to the development and reinforcement of EFL learners' capacity to deduce and retain the meanings of new lexical items encountered during reading activities. Similar findings are demonstrated by Yulianto's (2015) case study results, which demonstrate how integrating critical pedagogical principles into EFL instruction fosters self-awareness, enhances language proficiency, and helps students advocate for the rights of individuals with disabilities while also helping them develop their C.T abilities.

Albeckay (2014) found that EFL learners' critical reading abilities and their comprehension of textual material were significantly positively correlated. Thus, the study by Talebinezhad and Matou (2012) emphasizes the beneficial connection between C.T skills and R.C. Additionally, Faccione (1998) found a strong correlation between C.T and R.C. It is supported by Fahim, Barjesteh, and Vaseghi (2012), who demonstrated that C.T abilities enhance R.C.

Participating in critical literary practices (CLP) enhances EFL learners' coding, semantic, pragmatic, and critical competences, according to Liu's (2017) research. Additionally, it enhances their comprehension of what they read. Tous, Tahiri, and Haghghi (2015) discovered a reasonably strong positive relationship between C.T and critical R.C. Similarly, Barjesteh and Vaseghi (2012) discovered a significant association between EFL learners' R.C and C.T. Additionally, the use of problem-based learning strategies results in superior outcomes for learners' development of higher-order thinking skills when compared to traditional learning strategies (Suprpto, Fahrizal, and Basri, 2017). The authors claim that this approach enhances students' learning outcomes and promotes the development of their conceptual understanding.

Since learner-centered approaches are becoming the norm in language teaching and learning, as noted by Hashemi and Zabihi (2012), C.T becomes more important and demands attention from teachers, curriculum designers, and practitioners. This is especially true for English language acquisition, which involves many different historical, social, cultural, and political aspects. As such, the primary purpose of this study was to elucidate the link between R.C and C.T.

All things considered; C.T is an excellent teaching method that may be used to successfully meet the learning needs of advanced EFL students. According to Hooks (2010), C.T is a collaborative and participatory process that leads to enhanced performance; thus, educators must provide supportive learning settings for students to acquire C.T skills.

The Contribution of Researchers

The contribution of the researchers to this study is equal.

Conflict of Interest

This study has no conflicts of interest.

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Genişletilmiş Özet

Giriş

Çağdaş ve küresel toplumlarda etkili iletişim becerilerine çok önem veriliyor ve bu da en azından bir dilde yetkinlik kazanılmasını gerektiriyor. Dil, kişiler arası etkileşimin ve insan varoluşunun ayrılmaz bir bileşeni olarak ortaya çıkmaktadır. Sözlü ve yazılı biçimler en yaygın iletişim biçimlerini temsil eder; ilki bireyler arasındaki sözlü söylemi içerirken, ikincisi bireyler ve metinsel materyaller arasındaki etkileşimi gerektirir. Özellikle eğitim ortamlarında ve Yabancı Dil Olarak İngilizce (EFL) bağlamlarında, iletişimin önemli bir kısmı, ağırlıklı olarak okuma ve yazma faaliyetleri yoluyla yazılı alışverişler yoluyla ortaya çıkar. Anderson (2003), yazarların mesajları kesintisiz iletme yardımcı olacak şekilde hazırlaması gerektiğini, okuyucuların ise anlamayı geliştirmek ve metin ile okuyucu arasında etkili iletişimi teşvik etmek için uygun stratejiler kullanması gerektiğini ileri sürmektedir.

Vanden Broek ve Espin'e (2012) göre okuduğunu anlamak hayatın çeşitli alanlarında başarının ön koşuludur. Dil öğrenme ve öğretmedeki kritik rolünün anlaşılması, öğretmenleri öğrencilerin ikinci bir dil öğrendikleri bağlamlarda okuduğunu anlamalarını geliştirmeyi hedefleyen pedagojik yaklaşımları dikkatli bir şekilde araştırmaya motive etmiştir. Jalilifar'a (2010) göre, öğrenciler edebiyatını anlamakta zorluk çekerlerse akademik okuma konusunda daha az motive olabilirler ve bu da akademik kayıplara yol açabilir.

Mohammadi Forood ve Khomeinjani Farahani (2013), bu anlama ve motivasyon engellerinin üstesinden gelmek için, İngilizceyi yabancı dil olarak öğrenen öğrencilerin, bağımsız olmalarına ve güçlü problem çözme yeteneklerine sahip olmalarına yardımcı olacak eleştirel düşünme becerilerini geliştirmelerini önermektedir. Freeley ve Steinberg'e (2000) göre eleştirel düşünme, hem tümdengelimli hem de tümevarımsal akıl yürütmeyi desteklemek amacıyla kavramları değerlendirme, destekleme ve tartışma yeteneğidir. Ruggiero'ya (1989) göre eleştirel düşünme, öğrencilere çeşitli akademik ortamlarda kullanabilecekleri problem çözme becerilerini kazandırır. Webster'a (2006) göre insanların akıllı kararlar alabilmeleri ve çıkarımlar yapabilmeleri için eleştirel düşünme şarttır.

Cinsiyete dayalı olarak İngilizce öğrenen öğrenciler arasında okuduğunu anlama ve eleştirel düşünme becerileri arasında var olan ilişkiye akademik anlamda hem merak hem de literatürde eksiklik vardır. Heidari (2020) gibi bazı araştırmalar, farklı eleştirel düşünme becerilerine sahip öğrenciler arasında cinsiyetler arasında okuduğunu anlama performansında kayda değer bir farklılık bulmazken, Fahim, Barjesteh ve Vaseghi (2012) ve Liu ve Zhao (2023) gibi diğer araştırmalar, eleştirel düşünme yetenekleri ile okuduğunu anlama arasında cinsiyetin olası düzenleyici etkileriyle güçlü bir ilişki bulmuştur. Ayrıca, ortaya çıkan kanıtlar, kız öğrencilerin, artan eleştirel düşünme zekalarına atfedilebilecek, planlama gibi üstbilişsel becerilerden yararlanmaya yönelik bir eğilim gösterebileceklerini göstermektedir (Liu ve Zhao, 2023). Bununla birlikte, bu konuyla ilgili mevcut literatür sınırlı kalmakta ve yabancı dil öğrenenler arasında cinsiyete göre eleştirel düşünme yetenekleri ile okuduğunu anlama arasındaki ilişkiyi kapsamlı bir şekilde aydınlatmak için daha fazla araştırma yapılmasını gerektirmektedir.

Yöntem

Katılımcılar

Araştırmanın yapılabilmesi için ilk adım olarak üniversitenin etik kurulu'ndan gerekli izinler alınmıştır. Araştırmanın örneklemini seçmek için, 44 erkek ve 49 kadın ileri düzeyde İngilizceyi yabancı dil olarak konuşan öğrencilerden dört sınıf seçildi.

Veri Toplama Süreci ve Analizi

Fakülteden rastgele dört sınıf seçildikten sonra örneklem homojenlik ve demografik veriler açısından incelenmiştir. Katılımcılar okuma becerilerini kontrol etmek için okuduğunu anlama testine girdiler. Daha sonra Honey (2000) tarafından hazırlanan Eleştirel Düşünme Anketi uygulandı. Öğrencilere maddelere nasıl cevap verecekleri anlatıldı. Tüm testler ve anketler uygulandıktan sonra katılımcıların yanıtları mevcut rubriklere göre puanlandı ve istatistiksel analiz için bilgisayara girildi. Veriler SPSS paketi kullanılarak analiz edildi.

Elde edilen verileri analiz etmek amacıyla, öncelikle çalışmaya katılanların aldıkları yeterlilik testi puanlanmış, erkek ve kadın öğrencilerin dil yeterlilik düzeyi açısından homojenliğini kontrol etmek için bağımsız örneklem t-testi kullanarak bunlar karşılaştırılmıştır. Daha sonra eleştirel düşünme anketleri kodlanarak puanlanmıştır. Aralık verileri elde edildikten sonra, İngilizceyi yabancı dil olarak öğrenen Türk erkek ve kadın öğrencilerin eleştirel yetenekleri ile okuduğunu anlama yetenekleri arasında anlamlı bir ilişkinin varlığını incelemek için Pearson Çarpımı korelasyon katsayısına bakıldı. Üçüncü araştırma sorusunu ele almak için, erkek ve kadın öğrencilerin verilerindeki korelasyonu karşılaştırmak için Fisher-Z testini kullandı.

Bulgular

Mevcut araştırmanın temel amacı, ileri düzey erkek ve kadın Yabancı Dil Olarak İngilizce (EFL) öğrencileri arasında eleştirel düşünme ve okuduğunu anlama arasındaki potansiyel ilişkilerin incelenmesiyle ilgilidir. Bulgular, hem erkek hem de kadın İngilizce öğrenen öğrencilerin eleştirel düşünme yetenekleri ile okuduğunu anlama arasında istatistiksel olarak anlamlı bir ilişki olduğunu ortaya çıkardı. Cinsiyetten bağımsız olarak öğrencilerin eleştirel düşünme yetenekleri ile yazılı materyali anlama yeterlilikleri arasında benzer ve anlamlı ilişkiler sergiledikleri fark edildi; bu da cinsiyetin bu değişkenler arasındaki korelasyon üzerinde anlamlı bir etki yapmadığını ortaya koydu.

Sonuç, Tartışma ve Öneriler

Chance (1986), Heidari ve Bahrami (2012), Cano ve Martinez (1991), Meichenbaum ve Goodman (1969) ve Rezaei (2010) dahil olmak üzere çeşitli bilim adamları, eleştirel düşünmenin temel bir beceri gerekliliği olarak önemli rolünün altını çizmişlerdir. Bu söyleme dayanarak Ennis (1985), eleştirel düşünmenin mantıksal düşünmeyi teşvik ettiğini, öğrenenlerin yeterliliklerini, eğilimlerini ve kapasitelerini hesaba katarak, eleştirel düşünme uygulamalarına sorumluluk ve katılımın geliştirilmesi yoluyla öğrenmede özerkliği teşvik ettiğini açıklamaktadır. Bu çalışmanın bulguları, Kenney'nin (2013) eleştirel düşünmenin bireyleri toplumsal, mesleki ve eğitimsel ortamlarda karşılaşılan yeni ve zorlu koşullar altında mantıklı kararlar verme kapasitesiyle donattığı ve böylece bağımsız öğrenmeyi ve ustaca problem çözmeyi kolaylaştırdığı yönündeki iddiasıyla uyumludur.

Eleştirel düşünme yeteneği ile okuduğunu anlama arasında gözlemlenen korelasyon, eleştirel düşünmenin öğrencilere metinsel bilgiler ile ilgili arka plan bilgisi arasında tutarlı bağlantılar kurmaya yardımcı olan çıkarım yapma ve akıl yürütme becerileri kazandırdığını iddia eden Velayati, Muslem, Fitriani ve Samad (2017) tarafından da desteklenmektedir. böylece kavrama yeteneği geliştiği gözlemlenmiştir. Bu bulgular, benzer şekilde öğrencilerin eleştirel düşünme yetenekleri ile kelime öğrenme stratejilerini kullanmaları arasında anlamlı bir ilişki tespit eden Boroushaki ve Ng'nin (2016) bulgularını yansıtıyor. Ayrıca, Nabi Karimi ve Sarbazfard (2014) ile uyumlu olarak bu çalışma, öğrenciler arasında kelime bilgisi ile eleştirel düşünme becerileri arasındaki güçlü korelasyonu vurgulamaktadır; bu ilişkide cinsiyetin çok az etkisi bulunmaktadır.

Talebi ve Marzban (2015), bulguları, İngilizce öğrenenlerin okuma etkinlikleri sırasında karşılaştıkları alışılmadık sözcüksel öğelerin anlamlarını çıkarım yapma ve hatırlama becerilerini geliştirmek ve güçlendirmek için eleştirel stratejiler öğretmenin önemini doğrulayan deneysel bir çalışma yürüttü. Buna benzer şekilde, Yulianto'nun (2015) vaka çalışması sonuçları, eleştirel pedagojik ilkeleri yabancı dil öğretimine dahil etmenin, öğrencilerin eleştirel düşünme becerilerini

geliştirmelerine, dil yeterliliklerini geliştirmelerine ve insan haklarını savunarak özellikle İngilizce'de dilsel çeşitliliği anlamalarına yardımcı olduğunu göstermektedir.

Albeckay'ın (2014) araştırmasına göre, İngilizce öğrenenlerin yazılı bilgiyi anlama becerileri ile eleştirel okuma yeterlilikleri arasında anlamlı ve pozitif bir ilişki vardır. Bu doğrultuda Talebinezhad ve Matou'nun (2012) çalışması okuduğunu anlama ile eleştirel düşünme yeteneği arasında olumlu bir ilişki olduğunu vurgulamaktadır. Ayrıca Faccione (1998) de eleştirel düşünme ile okuduğunu anlama arasında anlamlı bir ilişki bulmuştur ve bu, Fahim ve diğerleri(2012) tarafından da doğrulanmıştır.