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Message from the Editor,

I am very pleased to inform you that we have published the second issue in 2024. As an editor of International Online Journal of Primary Education (IOJPE), this issue is the success of our authors, very valuable reviewers who undertook the rigorous peer review of the manuscripts, and those of the editorial board who devoted their valuable time through the review process. In this respect, I would like to thank to all reviewers, researchers and the editorial board members. The articles should be original, unpublished, and not in consideration for publication elsewhere at the time of submission to International Online Journal of Primary Education (IOJPE). For any suggestions and comments on IOJPE, please do not hesitate to send me e-mail. The countries of the authors contributed to this issue (in alphabetical order): Cyprus, Taiwan, and Turkey.

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EXAMINING THE PROFESSIONAL DEDICATION LEVELS OF SPECIAL EDUCATION TEACHERS WORKING IN PRIMARY SCHOOL ACCORDING TO DIFFERENT VARIABLES

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Abstract

The purpose of this research is to examine the professional commitment levels of special education teachers working in inclusive classes in the Turkish Republic of Northern Cyprus (TRNC), according to different variables. This study used a relational survey model, which is a quantitative research method. A total of 130 special education teachers working in special education schools participated in this research during the 2021-2022 academic year. In the study, "Demographic Information Form" and "Teaching Professional Commitment Scale" were used as data collection tools. According to the findings obtained from the research, no significant differences were found in special education teachers' professional commitment according to age, gender, marital status, professional seniority, support from colleagues, and support from administrators. Significant differences were found in special education teachers' professional commitment according to educational status, job satisfaction, and wage satisfaction. According to the findings obtained as a result of the research, it has been revealed that special education teachers who are satisfied with their job are highly committed to their profession, self-sacrificing and devoted to their students.

Keywords: Professional commitment, special education, special education teacher, profession.

INTRODUCTION

In today's education system, the professional dedication levels of special education teachers working in preschools have a significant impact on the quality of education and student achievement (Fernandes, Jardim, & Lopes, 2021). Therefore, understanding the dedication of these teachers to their profession and identifying the factors that influence it have become focal points in educational research. This study aimed to examine the professional dedication levels of special education teachers working in preschool institutions according to different variables. Factors influencing teachers' professional dedication levels range from individual characteristics to institutional factors. For example, factors such as teachers' educational level, professional experience, characteristics of the institution they work for, student profiles, and professional support can influence their levels of professional dedication. This study provides an opportunity to better understand the impact of these factors on teachers' dedication to their profession (Gul & Gul, 2022).



Special education is education conducted in appropriate environments with specially trained personnel, developed educational programs, and methods based on the characteristics of individuals with special needs in all areas of development and their competencies in academic disciplines (Francisco, Hartman, & Wang, 2020). Özyürek (2008) stated that a scientific approach must be applied to solve existing educational problems and that only through this approach can qualified and competent teachers be trained. The shortage of teachers in this field is filled by appointments made by regular school and classroom teachers. The selection and in-service training of these teachers are important management issues. Administrators working in special education institutions are also expected to be proficient and experienced in the field. Special education administrators should strive to develop themselves in two ways. First, they should closely follow national and international innovations and developments related to special education and convey these changes to their staff, thereby contributing to their professional development. Second, they should remain up-to-date and renew themselves in the field of management. The administrator should be well-informed about the personnel's rights and adopt an attitude that ensures they do not suffer any losses (Özsoy et al., 2001).

One of the greatest challenges is special education teachers' commitment to their institutions. This is due to the increasing number of students with special needs and the significantly lower number of qualified special educators. In such cases, it is crucial to develop a skilled workforce and create healthy working environments that ensure the participation of special educators (Nance & Calabrese, 2009). Ingersoll (2011) reported that 25% of teachers leave the organization, and among them, 50% leave within the first five years of their career. This has become a serious issue in the public sector, as there are not enough teachers to meet the increasing number of children with special needs. Repetto, Cavanaugh, Wayer and Liu (2010) researched the issues related to special education and reported a significant increase in children with disabilities.

Various studies have associated teachers' commitment to their profession with different factors and conducted research in this direction (Evans & Tribble, 1986). Research shows that workload, the needs of children with special needs, paperwork, and administrative policies cause stress and low job satisfaction and commitment among teachers (Billingsley, 2004). In a national study, the Council for Exceptional Children (CEC) found that 1,000 special education teachers working in less privileged environments experienced burnout and high levels of attrition (Bibi et al., 2019).

Effective and qualified education is important for individuals' development. In this context, teachers play an important role in the education system. Therefore, teachers committed to their profession have a great need for effective teaching (Hoy & Miskel, 2010). There are several definitions of professional commitment. According to Shukla (2014), individuals' sense of attachment to the profession in a professional group is called their professional commitment. Butucha (2013) revealed that the commitment of individuals in any occupational group to their work strengthens their profession. Contributing to the development of students, increasing their academic success, giving importance to the profession, and attributing value is a dedication to the teaching profession.

When the characteristics of dedicated teachers are examined, the fact that teachers are proud of doing this profession while continuing their teaching profession and that they are very eager for professional development shows that they are dedicated to the profession. These teachers not only try to progress professionally but also make an effort and care for their students to reach a more advanced level (Shukla, 2014). Among the most important characteristics of teachers devoted to their profession are that they want to be better teachers than they can be, strive to convey new and different current changes to their students, fulfill their professional duties and be aware of their responsibilities, and accept that all their students are valuable and give the same importance to all of them. In addition, they are willing to spend extra time with their students and collaborate with their families (Jung & Sheldon, 2020). The dedication of teachers to the profession and the effort they make to their profession are directly related to each other (Turhan et al., 2012).



For teachers committed to the profession, work is the most important part of their lives. The fact that teachers are active in decision-making situations increases their dedication to the profession and enables them to continue their profession satisfactorily (Bogler & Somech, 2004). Committed employees are those who have a strong relationship with the work to be done and can compete with the obligations of their profession (Mostert & Rathbone, 2007). It is thought that there are three different components of professional commitment and these three components are behavioral (for example, “I spend a lot of energy doing my job.”), emotional dimension (for example, “I do my job with all my heart.”) and cognitive dimension (for example, “I do my job with concentration and I don’t notice how time passes.”) (Attridge, 2009). Professional commitment can be described as giving importance to one’s job, being enthusiastic, feeling inspired, honored, and risking everything (Antonison, 2010; Sawang, 2012; Schaufeli & Bakker, 2004). For this reason, it is seen that the importance of teachers in the education system is crucial, and teachers constitute the basic building blocks of the education system.

According to Shann (2014), teachers’ professional satisfaction plays an important role in their desire to continue their profession and their commitment to the profession. In addition, the importance of professional commitment greatly affects the success of teachers while performing the profession (Turhan et al., 2012). Bakker and Bal (2010) explained the importance that the most effective motivation source of the work performance of those who do the teaching profession is commitment, and as a result, they found that commitment has a significant effect on the work performance with their study among teachers. In a study conducted by Oncel (2007) on the relationship between teachers’ job engagement levels and their performance and intention to leave their workplace, it was observed that committed teachers moved away from their intention to leave their job. Hakanen, Bakker, and Schaufeli (2006) examined teachers’ job engagement and burnout and found that, as the level of work engagement increased, the burnout level of teachers decreased. Therefore, for teaching to be efficient, teachers who are committed to the profession are needed (Tindowen, 2019).

In recent years, studies on students in need of special education have increased, and new practices have been introduced to expand and improve them (Er-Sabuncuoglu, 2016; Ozdemir et al., 2022; Yildiz et al., 2016). It is predicted that individuals who differ significantly from their peers in terms of their individual characteristics and educational qualifications need special education for various reasons. It is known that a job or profession takes an important time in an individual’s life and plays an undeniable role in the economic survival of the individual (Koustelios, 2001).

In special education, the preparation of the education and teaching plan according to the needs of the students, their individual characteristics, and their inadequacies play an important role. The quality of education depends on the qualifications of the teachers (Ibrahim & Iqbal, 2015). The skills gained by special education teachers, both in undergraduate education and in-service training, increase in quality (Ergul et al., 2013). In this context, before providing students with the knowledge and skills they will provide to individuals with special needs, it is among the primary objectives to be able to continue living independently in society and educate them as individuals who adapt to the world in which they live (Eldeniz-Cetin, 2017). In a study, determined that teachers who work with children who need special education are more prone to burnout than other teachers because of the environment in which they teach (Emery & Vandenberg, 2010; Nuri et al., 2017). Studies in the field of education have shown that organizational support is positively related to professional commitment (Cheung & Hukuk, 2008; Kaplan & Ögüt, 2012; Köse & Gönüllüoğlu, 2010; Piercy et al., 2006; Turunç & Çelik, 2010). Employees who receive sufficient support from their managers demonstrate greater commitment to their organizations. This finding indicates a positive relationship between organizational support and the three dimensions of organizational commitment (affective, continuance, and normative commitment) (Edwards & Peccei, 2010; Sofdel et al., 2013). Higher organizational support not only increases job satisfaction, but also improves the relationship between employees and the organization (Rhoades & Eisenberger, 2002).



When the literature is examined, it is seen that the most frequently studied subjects include teachers' professional commitment levels, the problems they experience, and factors affecting professional commitment levels, such as motivation, trust, and emotional intelligence (Billingsley, 2004; Emery & Vandenberg, 2010; Ibrahim & Iqbal, 2015; Stempien & Loeb, 2002).

Other studies have concluded that case load, student needs, paperwork, tasks, and demands in policies contribute to increased stress levels, reduced job satisfaction, and decreased commitment among special education teachers (Billingsley, 2004). Hulpia and Coladarci (1992) noted that “encouraging a teacher's sense of competence can promote that teacher's commitment to the organization and, consequently, to teaching.” Among the factors affecting the professional commitment of special education teachers, this appears to be the most critical, yet the least studied. Research indicates the need for further investigation into the factors contributing to special education teachers' professional burnout and commitment, as well as those that help motivate teachers in challenging situations (Billingsley, 2004; Billingsley & Cross, 1992; Franse, 2008).

Additionally, in their study of professional commitment and professionalism, Guarino et al. (2006) stated that special education teachers' commitment varies. They noted that teachers' professional commitment in public schools might differ from that of the private sector. This study supports the need for further examination of this issue and comparison of professional commitment across different types of collaborative school environments.

No studies have examined the level of professional commitment of special education teachers according to various variables such as age, gender, marital status, professional seniority, education level, job satisfaction, wage satisfaction, support from colleagues, and support from administrators. In this respect, it is believed that this research will make an important contribution to the literature. In addition, it is thought that with the results to be obtained from this study, it can contribute to the professional development of teaching by determining and increasing the professional commitment levels of special education teachers who shape the future of special education and reducing their professional dedication problems. In this context, the aim of this study is to examine the level of dedication to the profession of special education teachers according to different variables. In line with this general aim, answers to the following questions were sought:

1. What is the level of the professional commitment of special education teachers?
2. Do professional commitment levels of special education teachers differ according to the variables including age, gender, marital status, professional seniority, education level, job satisfaction, wage satisfaction, support from colleagues and support from administrators?

METHOD

Research Model

In this study, the relational survey model, one of the quantitative research methods, was used. Relational survey is a research model used to determine whether and/or how many related changes exist in two or more variables (Karasar, 2015).

Population and Sample

The population of this research consists of special education teachers working in special education schools throughout North Cyprus during the 2021-2022 academic year. The sample constituted a limited part of the population studied to obtain information about existing features. Sampling describes the process of obtaining reasonable samples to reveal the existing characteristics of the population and to make predictions regarding all transactions established during that time (Buyukozturk et al., 2010). The research sample consisted of 130 special-education teachers working in North Cyprus. Table 1 shows the distribution of special education teachers included in the study according to their demographic characteristics.

**Table 1.** Demographic characteristics of special education teachers.

Variable		Number (n)	Percentage (%)
Age	21-29	36	27.27
	30-39	52	39.39
	40-49	34	25.76
	50 and above	10	7.58
Gender	Female	90	68.18
	Male	42	31.82
Marital status	Single	49	37.12
	Married	83	62.88
Professional seniority	1-10 years	52	39.39
	11-20 years	59	44.70
	21 years and above	21	15.91
Education level	Graduate	102	77.27
	Postgraduate	30	22.73
Job satisfaction	Yes	70	53.03
	No	62	46.97
Wage satisfaction	Yes	48	36.36
	No	84	63.64
Support from colleagues	Yes	113	85.61
	No	19	14.39
Support from administrators	Yes	97	73.48
	No	35	26.52

Table 1 shows that 27.27% of the teachers participating in the research were between the ages of 20-29, 39.39% between the ages of 30-39, 25.76% between the ages of 40-49, and 7.58% of those aged 50 and over. In addition, 68.18% of the teachers were female, 31.82% were male, 37.12% were single, 62.88% were married, 39.39% had a professional seniority of 1-10 years, % 44.70 had a professional seniority of 11-20 years, 15.91% had a seniority of 21 years or more, 77.27% had a postgraduate degree, and 22.73% had a graduate degree. It was determined that 53.03% of the teachers were satisfied with their jobs, 46.97% were not satisfied with their jobs, 36.36% were satisfied with the wages they received, and 63.64% were not satisfied with the wages they received. It was revealed that 85.61% of the teachers participating in the research received support from their colleagues, 14.39% did not receive support from their colleagues, 73.48% received support from administrators, and 26.52% did not receive support from administrators.

Data Collection Tools

In this section, the data collection tools “Demographic Information Form” and “Teaching Professional Commitment Scale” are explained.

Demographic Information Form

This form was prepared and used by the researchers in order to obtain information about demographic characteristics of special education teachers participated in the research such as age, gender, marital status, professional seniority, education level, job satisfaction, wage satisfaction, support from colleagues and support from administrators.

Teaching Professional Commitment Scale

In this study, the “Teaching Professional Commitment Scale” developed by Kozikoğlu and Senemoğlu (2018) was used as a data collection tool with 20 items in the scale. The scale has three sub-dimensions, the first eight items representing the “the commitment to the profession” dimension, the next 4 items the “dedication to the students” dimension and the last eight items the “devotion to the profession” dimension. The items in the scale were measured with a 5-point Likert type between “Strongly Disagree” and “Strongly Agree.” A high score on Likert-type scales indicates a high level of



the measured construct (Balci, 2021). To determine the reliability of the scale, Cronbach's alpha internal consistency coefficients were calculated as .92, .86, .70, and .90, for the first, second, third, and total scales, respectively. These values indicate that the scale was reliable.

Data Collection

In this study, special education teachers working in special education schools in North Cyprus were included in the study in order to collect data. Special education teachers participating in the research were obtained using the convenience sampling technique, a non-random sampling method. In the convenience sampling method, the researcher starts to create a sample from the most accessible respondent until he reaches a group of the size he needs or works on a case sample that is the most accessible and will provide the highest level of savings (Cohen, Manion, & Morrison, 2005). While using the convenience sampling method, it was thought that the sample should represent the main group well, and care was taken to reach schools in different regions as much as possible. Special education teachers were provided online in electronic media via Google Forms.

Data Analysis

The data were analyzed with the SPSS 25 program. Kurtosis and skewness values were checked to determine distribution normality. Parametric analysis was used depending on the normal distribution of the data on each scale. After the normality analysis, descriptive statistics for the demographic variables in the study were calculated. Before starting the analyses, the Cronbach Alpha test was applied to the teachers' responses to the "Teaching Professional Commitment Scale." According to the Cronbach Alpha test results, the alpha coefficient of the teachers' responses to the Teaching Professional Commitment Scale was found to be 0.936. The distribution according to the demographic characteristics of the teachers participating in the research was calculated by frequency analysis, and descriptive statistics were included for the Teaching Professional Commitment Scale scores. In Table 2, the normal distribution of the scores on the Teaching Professional Commitment Scale included in the study was examined with the Kolmogorov-Smirnov test, and it was determined that the data set did not show a normal distribution. For this reason, non-parametric hypothesis tests were used to test the hypotheses of the research.

Table 2. Teaching professional commitment scale normality tests.

	Value	Df	p
Commitment to the profession	.78	132	.000
Dedication to the students	.85	132	.000
Devotion to the profession	.91	132	.000
Teaching Professional Commitment Scale	.88	132	.000

The Mann-Whitney U test was used when the independent variable consisted of two groups and the Kruskal Wallis H test was used when it consisted of more than two groups.

RESULTS

Results on the Scores of Special Education Teachers from the Teaching Professional Commitment Scale

Table 3. Scores of special education teachers from the teaching professional commitment scale.

	n	\bar{x}	Sd	Min	Max
Commitment to the profession	132	4.31	.88	1.75	5.00
Dedication to the students	132	4.46	.58	2.75	5.00
Devotion to the profession	132	4.17	.74	2.00	5.00
Teaching Professional Commitment Scale	132	4.34	.62	2.25	5.00



When Table 3 is examined, it is seen that the average of 4.31 ± 0.88 points, a minimum of 1.75, a maximum of 5 points from the sub-dimension of commitment to the profession of the special education teachers participating in the research, an average of $4.46 \pm .58$ points from the sub-dimension of dedication to the students, a minimum of 2.75, a maximum of 5 points, an average of $4.17 \pm .74$ points, a minimum of 2 and a maximum of 5 points from the sub-dimension of devotion to the profession and an average of $4.34 \pm .62$ points, a minimum of 2.25 and a maximum of 5 from the general Teaching Professional Commitment Scale.

Results on the Comparison of the Scores of Special Education from the Teaching Professional Commitment Scale by Age Group

Table 4. Comparison of the scores of special education from the teaching professional commitment scale by age group.

	Age	n	\bar{x}	SD	M	SM	X ²	p
Commitment to the profession	20-29	36	4.56	.82	4.94	79.82	7.314	.063
	30-39	52	4.18	.89	4.50	58.13		
	40-49	34	4.29	.85	4.69	64.63		
	50 and above	10	4.20	1.07	4.75	68.40		
Dedication to the students	20-29	36	4.59	.45	4.63	74.46	3.518	.318
	30-39	52	4.35	.64	4.50	59.51		
	40-49	34	4.49	.56	4.75	67.78		
	50 and above	10	4.43	.77	4.75	69.85		
Devotion to the profession	20-29	36	4.38	.69	4.75	78.28	5.643	.130
	30-39	52	4.04	.74	4.00	59.03		
	40-49	34	4.15	.74	4.25	64.65		
	50 and above	10	4.20	.80	4.13	69.25		
Teaching Professional Commitment Scale	20-29	36	4.54	.48	4.63	78.88	6.344	.096
	30-39	52	4.22	.66	4.48	58.16		
	40-49	34	4.34	.61	4.55	65.32		
	50 and above	10	4.29	.76	4.50	69.30		

*p<.05

When Table 4 is examined, it was determined that there is no statistically significant difference between the general scores of Teaching Professional Commitment Scale and the sub-dimensions of the scale involving commitment to the profession, dedication to students and devotion to the profession according to age groups of the teachers participating in the research ($p > 0.05$). Regardless of the age groups of the teachers, the scores of commitment to the profession, dedication to students and devotion to the profession are similar.

Results on the Comparison of the Scores of Special Education from the Teaching Professional Commitment Scale by Gender

Table 5. Comparison of the scores of special education from the teaching professional commitment scale by gender.

	Gender	n	\bar{x}	SD	M	SM	Z	p
Commitment to the profession	Female	90	4.32	.92	4.88	68.67	-.979	.327
	Male	42	4.29	.82	4.75	61.85		
Dedication to the students	Female	90	4.45	.58	4.63	65.92	-.258	.796
	Male	42	4.48	.59	4.63	67.74		
Devotion to the profession	Female	90	4.16	.75	4.25	65.87	-.279	.780
	Male	42	4.20	.72	4.50	67.85		
Teaching Professional Commitment Scale	Female	90	4.34	.62	4.55	66.53	-.015	.988
	Male	42	4.35	.61	4.58	66.43		

*p<.05



The scores of the teachers on the scale of commitment to the teaching profession according to their gender were compared using the Mann Whitney U test. The results regarding this comparison are presented in Table 5. When the table is examined, it was determined that there was no statistically significant difference between the general scores of the Teaching Professional Commitment Scale and the scores of the sub-dimensions of the scale according to the gender of the teachers participating in the research ($p>.05$). The general scores of female and male teachers on the scale of commitment to the profession, the scores of commitment to the profession, dedication to students and devotion to the profession are similar.

Results on the Comparison of the Scores of Special Education from the Teaching Professional Commitment Scale by Marital Status

Table 6. Comparison of the scores of special education from the teaching professional commitment scale by marital status.

	Marital Status	n	\bar{x}	SD	M	SM	Z	p
Commitment to the profession	Single	49	4.29	.92	4.88	66.23	-.063	.950
	Married	83	4.33	.86	4.75	66.66		
Dedication to the students	Single	49	4.58	.54	4.88	74.60	-1.899	.058
	Married	83	4.39	.60	4.50	61.72		
Devotion to the profession	Single	49	4.31	.70	4.50	74.09	-1.770	.077
	Married	83	4.09	.75	4.25	62.02		
Teaching Professional Commitment Scale	Single	49	4.41	.58	4.55	71.59	-1.177	.239
	Married	83	4.30	.64	4.55	63.49		

* $p<.05$

When Table 6 is examined, it has been determined that there is no statistically significant difference between the general scores of the special education teachers participating in the research according to their marital status, and the scores of the sub-dimensions of commitment to the profession, dedication to the students and devotion to the profession ($p>.05$). The level of dedication to the profession among special education teachers is not affected by their marital status.

Results on the Comparison of the Scores of Special Education from the Teaching Professional Commitment Scale by Professional Seniority

Table 7. Comparison of the scores of special education from the teaching professional commitment scale by professional seniority.

	Professional Seniority	n	\bar{x}	SD	M	SM	X ²	p
Commitment to the profession	1-10 years	52	4.56	.71	4.88	77.32	7.697	.021*
	11-20 years	59	4.13	.93	4.50	57.74		
	21 years and above	21	4.19	1.00	4.50	64.33		
Dedication to the students	1-10 years	52	4.54	.51	4.63	71.89	4.441	.109
	11-20 years	59	4.37	.59	4.50	58.88		
	21 years and above	21	4.50	.72	4.88	74.55		
Devotion to the profession	1-10 years	52	4.25	.72	4.50	70.60	1.225	.542
	11-20 years	59	4.11	.72	4.25	62.65		
	21 years and above	21	4.15	.83	4.25	67.17		
Teaching Professional Commitment Scale	1-10 years	52	4.49	.50	4.58	74.90	5.312	.070
	11-20 years	59	4.22	.64	4.45	58.30		
	21 years and above	21	4.31	.76	4.60	68.74		

* $p<.05$



When Table 7 is examined, no statistically significant difference was found between the general scores of the Teaching Professional Commitment Scale according to professional seniority in the profession of the special education teachers participating in the research and the scores of the sub-dimensions of the scale ($p > .05$). The general scores of the teachers with a seniority of 1-10 years in the profession and the mean scores of the sub-dimensions of the scale were calculated higher, but this is not statistically significant. There is no difference in the level of dedication to the teaching profession among special education teachers based on their seniority. However, in the "Commitment to the profession" sub-dimension of the dedication to the profession scale, it can be interpreted that as seniority increases, professional commitment decreases.

Results on the Comparison of the Scores of Special Education from the Teaching Professional Commitment Scale by Education Level

Table 8. Comparison of the scores of special education from the teaching professional commitment scale by education level.

	Education Level	n	\bar{x}	SD	M	SM	Z	p
Commitment to the profession	Graduate	102	4.24	.93	4.75	63.90	-1.478	.139
	Postgraduate	30	4.55	.65	4.88	75.35		
Dedication to the students	Graduate	102	4.43	.58	4.63	63.64	-1.608	.108
	Postgraduate	30	4.56	.61	4.88	76.22		
Devotion to the profession	Graduate	102	4.11	.72	4.13	62.72	-2.118	.034*
	Postgraduate	30	4.38	.78	4.63	79.37		
Teaching Professional Commitment Scale	Graduate	102	4.29	.63	4.50	62.63	-2.145	.032*
	Postgraduate	30	4.52	.54	4.73	79.65		

* $p < .05$

When Table 8 is examined, it was revealed that there is a statistically significant difference between the scores of devotion to the profession and the general scores of the Teaching Professional Commitment Scale according to the educational status of the special education teachers participating in the research ($p < .05$). The sub-dimension of devotion to the profession scores and the overall scores of the scale among teachers with postgraduate degree were found to be statistically significantly higher than the scores of the teachers with graduate degree.

Results on the Comparison of the Scores of Special Education from the Teaching Professional Commitment Scale by Job Satisfaction

Table 9. Comparison of the scores of special education from the teaching professional commitment scale by job satisfaction.

	Job Satisfaction	n	\bar{x}	SD	M	SM	Z	p
Commitment to the profession	Yes	70	4.70	.51	5.00	83.17	-5.455	.000*
	No	62	3.87	1.00	4.00	47.68		
Dedication to the students	Yes	70	4.61	.50	4.75	76.50	-3.242	.001*
	No	62	4.28	.63	4.31	55.21		
Devotion to the profession	Yes	70	4.38	.64	4.50	76.71	-3.291	.001*
	No	62	3.94	.78	4.00	54.98		
Teaching Professional Commitment Scale	Yes	70	4.60	.42	4.73	82.22	-5.025	.000*
	No	62	4.05	.67	4.20	48.75		

* $p < .05$

According to Table 9, it was determined that there was a statistically significant difference between the general scores of the Teaching Professional Commitment Scale and the sub-dimensions of the scale including commitment to the profession, dedication to students and devotion to the profession



based on the job satisfaction of the participating special education teachers ($p < .05$). In general, it was found that teachers who are satisfied with their job got higher scores when compared to the teachers who are not satisfied with their job.

Results on the Comparison of the Scores of Special Education from the Teaching Professional Commitment Scale by Wage Satisfaction

Table 10. Comparison of the scores of special education from the teaching professional commitment scale by wage satisfaction.

	Wage Satisfaction	n	\bar{x}	SD	M	SM	Z	p
Commitment to the profession	Yes	48	4.65	.63	5.00	82.59	-3.746	.000*
	No	84	4.12	.95	4.50	57.30		
Dedication to the students	Yes	48	4.57	.55	4.81	74.65	-1.879	.060
	No	84	4.39	.60	4.63	61.85		
Devotion to the profession	Yes	48	4.34	.76	4.50	77.16	-2.445	.015*
	No	84	4.07	.71	4.00	60.41		
Teaching Professional Commitment Scale	Yes	48	4.56	.54	4.63	81.11	-3.324	.001*
	No	84	4.22	.63	4.38	58.15		

* $p < .05$

When Table 10 is examined, it has been determined that there is a statistically significant difference between the general scores of the Teaching Professional Commitment Scale and the scores of the sub-dimensions of commitment to the profession and dedication to the students according to the satisfaction with the wages of the special education teachers participating in the research ($p < .05$). In conclusion, it can be said that the monthly salary of special education teachers affects their professional commitment and dedication to their work.

Results on the Comparison of the Scores of Special Education from the Teaching Professional Commitment Scale by Support from Colleagues

Table 11. Comparison of the scores of special education from the teaching professional commitment scale by support from colleagues.

	Support from Colleagues	n	\bar{x}	SD	M	SM	Z	p
Commitment to the profession	Yes	113	4.39	.82	4.88	69.22	-2.040	.041
	No	19	3.84	1.11	4.00	50.34		
Dedication to the students	Yes	113	4.49	.57	4.63	68.16	-1.235	.217
	No	19	4.28	.65	4.25	56.63		
Devotion to the profession	Yes	113	4.17	.73	4.25	66.13	-.272	.786
	No	19	4.20	.78	4.00	68.68		
Teaching Professional Commitment Scale	Yes	113	4.39	.58	4.55	68.35	-1.360	.174
	No	19	4.09	.77	4.00	55.47		

* $p < .05$

When Table 11 is examined, it is seen that there is no statistically significant difference between the general scores of Teaching Professional Commitment Scale and the scores of the sub-dimensions of commitment to the profession, dedication to students and devotion to the profession according to the support status of the special education teachers participating in the research from their colleagues ($p > .05$). It can be inferred that support from colleagues does not have a statistically significant effect on professional commitment, dedication to students and devotion to the profession. It was concluded that special education teachers are committed to their profession whether they receive support from their administrators or not.



Results on the Comparison of the Scores of Special Education from the Teaching Professional Commitment Scale by Support from Administrators

Table 12. Comparison of the scores of special education from the teaching professional commitment scale by support from administrators.

	Support from Administrators	n	\bar{x}	SD	M	SM	Z	p
Commitment to the profession	Yes	97	4.36	.86	4.88	68.10	-0.822	.411
	No	35	4.18	.93	4.50	62.06		
Dedication to the students	Yes	97	4.48	.59	4.63	68.09	-0.809	.418
	No	35	4.41	.57	4.50	62.09		
Devotion to the profession	Yes	97	4.20	.75	4.25	68.35	-0.935	.350
	No	35	4.09	.71	4.00	61.37		
Teaching Professional Commitment Scale	Yes	97	4.37	.62	4.55	68.84	-1.169	.242
	No	35	4.25	.60	4.45	60.03		

*p<.05

According to Table 12, there is no statistically significant difference between the general scores of the Teaching Professional Commitment Scale and the scores of the sub-dimensions of commitment to the profession, dedication to the students and devotion to the profession based on the support from administrators among special education teachers participating in the research ($p>.05$). The scores of the special education teachers who received support from the administrators and those who did not receive the support from the administrators were found to be similar.

DISCUSSION, CONCLUSION, and SUGGESTIONS

In this study, professional commitment levels of special education teachers were examined according to various demographic variables, and it was determined that the professional commitment levels of the teachers were high. There was no statistically significant difference between the general scores of the special education teachers' scores on the Teaching Professional Commitment Scale and the scores they obtained from the sub-dimensions of the scale according to gender. Erturk (2011) also found that female teachers' commitment to the teaching profession was higher than that of male teachers, and their commitment to school and colleagues was lower than that of male teachers. On the other hand, other studies indicate no significant difference in terms of professional commitment according to gender among teachers (Artun, 2008; Apak, 2009; Eroglu, 2007; Zog, 2007). Therefore, it can be inferred that there are contradictory results in the literature on teachers' professional commitment and gender. This can be explained by the fact that female teachers are more affectionate, emotional and attached to children with the sense of motherhood stemming from their gender characteristics, while male teachers are more responsible for meeting the economic needs of the family.

There was no statistically significant difference between special education teachers' professional commitments according to marital status. When the literature is examined, it is seen that there are not many studies in the literature that deal with teachers' professional commitment levels according to their marital status. When the literature is examined, it is seen that there are not many studies in the literature that deal with teachers' professional commitment levels according to their marital status. The findings obtained from this study suggest that marital status does not have distinctive features in terms of commitment to the teaching profession. Results from the present study showed that there was no statistically significant difference between special education teachers' professional commitment and their seniority. Kozikoglu and Ozcanlı (2020) investigated teachers' 21st century teaching skills and their commitment to their profession and concluded that teachers with 1-5 years of experience have a higher level of commitment to the profession than teachers with 6-10 years of experience. Aydin, Sarier, and Uysal (2013) concluded in his study with school administrators and teachers that the level of commitment to the profession does not differ according to seniority and their ideas about



professional dedication are similar. According to the results of this research, it has been determined that the variable of professional seniority is not an effective variable in teachers' commitment to the profession. It was found that there is a statistically significant difference between the scores of devotion to the profession and the general scores of the Teaching Professional Commitment Scale according to the educational status of the special education teachers participating in the research. On the other hand, Turhan et al. (2012) revealed in their research that classroom teachers with graduate degrees perceived less difficulty than teachers with postgraduate degrees. In addition, Canli (2020) concluded that there is no difference in teachers' views on dedication, commitment to the profession, and self-sacrificing work according to their education level. Teachers with postgraduate education are considered to have more theoretical knowledge of their profession, and their willingness to apply this theoretical knowledge increases their level of dedication to the profession. The results revealed a significant difference between special education teachers' professional commitment and job satisfaction. In other words, special education teachers who are satisfied with their jobs are highly committed to their profession. It is thought that teachers who are satisfied with their jobs will have a positive effect on their commitment to the profession. It can be inferred that the opposite is true for teachers who are not satisfied with their jobs. It is also considered that dissatisfaction with their job will cause special education teachers to show less patience and be less productive while performing their profession and this might negatively affect their commitment to the profession. When other studies in the literature are examined, there are few that address teachers' commitment levels according to their job satisfaction. It was also determined that there was a statistically significant difference between special education teachers' professional commitment and wage satisfaction. Accordingly, since teachers who are satisfied with their wages may be less worried about meeting their vital needs, they may work more selflessly in their profession and their dedication to the profession may be high. Teachers who are not satisfied with the wage they receive may have low motivation while performing their profession and may be dissatisfied while doing their job. It is thought that this situation will cause their professional commitment to be low. When the research is examined, it is seen that there are few studies in the literature that deal with teachers' commitment levels according to their satisfaction with wages. Therefore, it is important for further research to investigate the relationship between teachers' professional commitment levels and demographic variables such as job and wage satisfaction.

It was determined that there is no statistically significant difference between special education teachers' professional commitment and their perceived support from their colleagues. According to the results of the present study, this might be due to the fact that special education teachers continue to work individually in line with the needs of their students with special needs. The fact that most of the special education teachers have chosen this branch with their own preferences makes us think that they are self-sacrificing in terms of their personality traits. This idea supports the conclusion that there is no significant difference between special education teachers and their colleagues who receive support, even if they do not receive support from their colleagues. When other studies in the literature are examined, there are not many studies that examine teachers' commitment levels according to their support status from their colleagues.

Results showed no significant difference between special education teachers' professional commitment and their perceived support from administrators. Few studies have examined the professional commitment of special education teachers to the teaching profession according to support from administrators. Teachers working with students with special needs require more professional competence, sacrifice, patience, skill and a sense of teacher self-efficacy than teachers working with children with typical development (Karahan & Uyanik-Balat, 2011). In this study, on the other hand, based on the idea that special education teachers have personality traits that include these qualities required by the profession, it was supported that whether the teachers received support from the administrators did not make a significant difference in their commitment to teaching profession.



Based on the results of the study, some recommendations can be presented for further research and practices. Teachers can be provided with working environments where they can interact more with their colleagues, develop positive relationships and benefit from each other's experiences. By emphasizing the impact and important role of the teaching profession on society, it can be ensured that teachers are motivated by the dignity of their profession rather than financial factors. Organizations such as panels, symposiums, conferences and workshops can be organized for teachers who do not want to do postgraduate education. This study is limited to the online data collection method and quantitative research design. In future studies, the scales can be applied by directly reaching the teachers. In addition, the subject can be explored in depth through a qualitative or mixed research design. By improving the economic and social rights of teachers, it can be ensured that they create a more positive perception towards their profession. Different related factors that affect teachers' commitment can be explored.

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Contribution Rate of Authors

The authors contributed equally to this article.

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CREATIVE WRITING INSTRUCTION FOR PRIMARY STUDENTS: AN IN-DEPTH ANALYSIS IN THE CONTEXT OF CURRICULUM REFORM IN VIETNAM

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Abstract

In Vietnam's 2018 Literacy Education Curriculum Guideline, creative writing is a new requirement, emphasized for its goals of developing primary students' language competencies, critical thinking, and problem-solving. This new requirement offers teachers an opportunity to help students enhance their writing competencies and presents a challenge, as it requires them to have specific competencies, professional development, and specific guidelines. When it comes to the current situation of creative writing instruction in primary schools, it has many limitations and requires improvement. While instructional materials significantly influence teachers' instruction by establishing suitable educational objectives, methodologies, and contents, the coverage of contents on creative writing instruction in some reference materials is very limited, leading to confusion among teachers and ineffective practices in actual classrooms. Therefore, an in-depth analysis of some key reference documents is crucial to come up with suggestions to improve the quality of creative writing instruction in primary schools, which is the focus of this study. The findings revealed some problems with possible suggestions for the four following issues: (1) approaches for creative writing for primary students, (2) approaches for assessing students' creative writing competencies, (3) time allocation for creative writing instruction, and (4) contents on creative writing instruction in Vietnamese Textbooks.

Keywords: Creative writing instruction, primary students, curriculum reform, Vietnam.

INTRODUCTION

Creativity has been identified as one of the top competencies that future workers need to obtain to survive and work effectively (Uslu & Uslu, 2021). When it comes to young learners, creative writing instruction has a direct impact on the development of their critical thinking and problem-solving skills (Barton et al., 2023). Therefore, creative writing instruction for students is teachers' imperative task.

Due to the significance of creative writing instruction, there has been significant focus on creative writing practices in primary schools (Graham et al., 2012, revised 2018; Göçen, 2019; Barton et al., 2023). Besides several positive signals, several challenges have been recognized, which consist of teachers and students' misconception of creative writing, leading to ineffective pedagogy. Also, standardized testing and limited amount of instructional time have negatively impacted writing instruction, hindering students' creative writing development. Besides, there is a lack of quality professional development for creative writing instruction.

Since 2018, Vietnam has implemented curriculum reform from content approach to competence approach (MOET, 2018a). In this context, the 2018 Literacy Education Curriculum (LEC) Guideline



was established in 2018 and has been officially implemented since the 2020 – 2021 school year with an important task to help primary students build and develop their Vietnamese language competencies through four skills, namely listening, reading, writing, and speaking so that they can use Vietnamese as a tool to study well and conduct social communication effectively (MOET, 2018b). In comparison to the 2006 LEC Guideline, creative writing is a new requirement emphasized with the goals of fostering students' writing, critical, and creative thinking skills as well as their abilities to express their thoughts and emotions honestly (MOET, 2018b). This is both an opportunity for teachers to help their students develop their writing competencies and a challenge since it requires teachers to have several specific competencies, professional development, and specific guidelines.

In Vietnam, despite the importance of creative writing instruction for primary students, it has not received attention. While existing studies focused on the implementation of the 2018 LEC Guideline in general or reading instruction, only a few papers mentioned creative writing instruction for primary students (Le, 2018; Do, 2023). Do (2023) commented that the current situation of creative writing instruction in primary schools has many limitations and needs to be improved. One of the factors directly affecting teachers' instruction is instructional materials, which teachers mainly rely on to determine appropriate teaching goals, methods, and contents (Le, 2018; RGEP, 2020a; Do, 2023). However, contents related to creative writing in some key reference documents are limited, leading to confusion among teachers and ineffective practices in actual classrooms (Do, 2023). Thus, how creative writing instruction is guided in some key reference documents introduced in the MOET's online training modules for primary teachers needs to be analyzed to come up with suggestions to improve the quality of creative writing instruction, which is the focus of this study.

Literature Review

Theoretical basis of creative writing instruction and Perspectives on creative writing

Based on previous studies' views on "creativity" (Cropley, 2011), "writing" (Murray, 2009; Ulu, 2019; Göçen, 2019; Barton et al., 2023), and "creative writing" (Wang, 2019; Uslu & Uslu, 2021; Barton et al., 2023), in this study, "creative writing" is identified as the process of creating texts in which writers express their opinions, ideas, and feelings about new things or familiar things in a unique way to communicate with their target readers and the world around them.

Approaches for creative writing instruction for primary students

Up to now, creative writing instruction has been viewed different perspectives, but the four following approaches have been worth noting:

The writing process approach

Calkins Lucy (1994), Paul (2005), Murray (2009), Göçen (2019), Ulu (2019), Barton et al. (2023) argued that teaching creative writing is teaching a specific process. Murray (2009) argued that writing should be taught as a process where writers express their thoughts, experiences, and emotions with others through language. When it comes to the writing process, writers need to experience ideational stages, including prewriting, writing, rewriting (Paul, 2005; Murray, 2009). In these steps, correct spelling, grammar, punctuation, coherence and cohesion, suitable vocabulary and sentence usage are essential (Kellogg, Bascom, & Raulerson, 2007; as cited in Ulu, 2019). Therefore, to guide students to write, teachers need to give them opportunities to experience consecutive stages of the writing process, namely planning, drafting, sharing, revising, editing, evaluating, and publishing (Calkins Lucy, 1994; Murray, 2009; Graham et al., 2012, revised 2018). Furthermore, to motivate students to experience their writing process, teachers should respect and encourage students to share their ideas and emotions as well as attempt any form of writing they want to communicate with others (Calkins Lucy, 1994; Murray, 2009; Ulu, 2019).



Creative writing is a practical competence

Graham et al. (2012, revised 2018), NCTE (2016), Ulu (2019) appreciated the essential role of practice. NCTE (2016) argued that writing competencies develop through reflective practices because writers use their writing skills to transform their knowledge, experiences, and emotions to respond to their target readers, purpose of the writing task, genre and context, length, style, and format, from which they continuously develop writing skills throughout their writing lives, as they have to take on new tasks in new genres for new readers. Therefore, teachers need to provide adequate daily time for students to practice writing with various communication purposes (Graham et al., 2012, revised 2018).

Creative writing is to express students' imagination and emotions

Paul (2005), Cheung et al. (2013), Uslu and Uslu (2021), Barton et al. (2023) concentrated on the important role of students' imagination and emotions as main ingredients in creative writing. Paul (2005), Cheung et al. (2013) pointed out that imagination is the foundation for creative writing, followed by inspiration and original ideas. Therefore, students must have opportunities to make decisions about ideas, vocabulary, sentence, text structure, and forms to attract readers (Barton et al., 2023). In other words, creative writing only happens when students have opportunities to use their imagination to create unique writing. Hence, creative writing instruction is guiding students to express their experiences, imagination, and emotions through language.

Creative writing is to develop students' communicative competencies in language

Regarding MOET (2018b), the goal of language education is to help students develop their language competencies to study, work, and communicate including multimodal communication through the four main skills, namely listening, speaking, reading, and writing. From this point of view, creative writing instruction not only focuses on guiding students in writing techniques, but also instructing them to write various genres with specific procedures to meet their communication purposes. Thus, teachers need to guide primary students to write some prominent text types, namely descriptive, narrative, and expository texts. Also, teachers should teach students to write several simple informational documents to meet communication needs in life such as autobiographies, messages, invitations, timetables, letters of inquiry, newspapers, short reports about group or class activities, written instructions for activities, and common forms. Through writing with various genres, students can communicate with diverse communication partners such as their families, teachers, and peers.

In summary, there are at least four strategies teachers need to apply to help primary students to become effective writers, including: (1) instruct them to use the writing process for various purposes; (2) provide adequate daily time for students to write; (3) instruct them to express their unique thoughts, experiences, and emotions; (4) create an engaged community of writers where students can be heard, share, and receive feedback on their writing.

Current situation on creative writing instruction for primary students in Vietnam

Current situation on creative writing instruction for primary students in general

Creative writing instruction for primary students has received a lot of attention (Graham et al., 2012, revised 2018; Göçen, 2019; Barton et al., 2023). Besides several positive signals, several challenges have been recognized, namely teachers and students' misconception of creative writing, leading to inappropriate strategies. Also, the negative impact of high stakes testing, and limited amount of instructional time have hindered students' writing development. A shortage of teachers' professional development about creative writing instruction are also typical difficulties. Moreover, the above international studies mainly focus on the current situation of developed countries, without an understanding of that in developing and underdeveloped countries, including Vietnam, which require further explorations.



Current situation on creative writing instruction for primary students in Vietnam

The implementation of the 2018 Literacy Education Curriculum Guideline

The 2018 LEC Guideline was approved by the MOET in 2018 and it has been carried out in 2020. As a result, it has been gradually being implemented year by year. The implementation timeline for the 2018 LEC Guideline is as follows: Grade 1 (2020–2021), Grade 2 (2021–2022), Grade 3 (2022–2023), Grade 4 (2023–2024), and Grade 5 (2024–2025).

The 2018 LEC Guideline was designed to help students build and develop their Vietnamese language competencies through four skills, including listening, reading, writing, and speaking so that they can use Vietnamese to study and communicate effectively (MOET, 2018b). Besides several main requirements about four main skills, the 2018 LEC Guideline emphasized that students need to have competencies to study and work with multimodal texts, which requires creative and innovative instructional strategies (MOE, 2018b).

Requirements for creative writing instruction for primary students

When it comes to requirements for writing skills, compared to the 2006 LEC Guideline, creative writing is a new requirement emphasized with the goals of helping primary students develop their holistic writing skills, critical, and creative thinking skills as well as their abilities to express their ideas and emotions (MOET, 2018b). This is both an opportunity for teachers to help their students develop their language competencies and a challenge since it requires them to have specific insights and skills.

The 2018 LEC Guideline determined two essential elements making up primary students' writing competencies, including writing techniques and text creation competences (MOET, 2018b). In this study, the author focuses on the second factor: Text creation competencies. MOET (2018b) emphasized that primary students need to have the ability to create a text reflecting a specific problem by synthesizing their knowledge and experiences and reflecting their own thoughts, feelings, and attitudes toward the issue mentioned in their texts. These are four important requirements for primary students' creative writing competencies:

Table 1. Requirements for primary students' creative writing competencies.

Creative writing requirements	Description
Text genres	- Students can write different text types, namely narrative, descriptive, expository, and simple informational texts.
Text creation competencies	- Students can carry out the writing process, starting from generating ideas and implementing them creatively. - Students can determine writing contents, collect materials; form ideas, write drafts, fix errors; edit written texts.
Contents	- Beside the content that the assignment requires, students need to demonstrate interpersonal contents such as their own views, feelings, and attitudes toward the problem and object of their writing. - From there, students gradually build for themselves a way of looking, thinking, and living reflecting their own personal styles.
Assessment	- Students can rely on comments and assessments from their teachers and friends to edit, supplement, and complete their writing.

Current situation on creative writing instruction for primary students.

Although creative writing instruction in primary school is essential, this era has just been mentioned in a few studies (Le, 2018; Do, 2023). In terms of the current situation of this era, Do (2023) indicated that it has many limitations and needs to be improved. While instructional materials significantly influence teachers' instruction in establishing educational objectives, methodologies, and contents (Le,



2018; RGEP, 2020a; Do, 2023), contents on creative writing instruction in some key reference materials are very limited, leading to teachers' confusion and ineffective practice in actual classrooms (Do, 2023). Thus, an in-depth analysis of key reference documents is crucial to come up with suggestions to improve the quality of creative writing instruction in primary schools.

Based on this context, this study focuses on how creative writing instruction is guided for implementation in some key instructional materials. The following research questions were proposed to guide the study:

1. How is creative writing instruction for primary students guided and directed in the 2018 Literacy Education Curriculum Guideline and Teacher Training Materials?
2. How are Vietnamese Textbooks designed to support creative writing instruction for primary students?

METHOD

According to Ary et al. (2010), Cohen et al. (2018), the document analysis approach can help researchers understand important characteristics of a phenomenon through studying certain documents. Therefore, this approach is employed in this study to find out how creative writing instruction for primary students is guided for implementation in some key reference documents.

In the context of educational reform, the MOET has organized many training modules to help teachers gain essential insights to implement 2018 curriculums. Each module relates to one specific topic and has specific training materials. When it comes to the 2018 LEC Guideline implementation, these three following important materials were introduced, namely:

- (1) The 2018 Literacy Education Curriculum Guideline (MOE, 2018b).
- (2) Teacher Training Material: Using Teaching and Education Methods to Develop Primary Students' Quality and Competencies in the Vietnamese Subject [TTMA] (RGEP, 2020a).
- (3) Teacher Training Material: Testing and Assessing Primary Students' Quality and Competencies in the Vietnamese Subject [TTMB] (RGEP, 2020b).
- (4) Vietnamese Textbooks 1, 2, 3 (Bui & Nguyen, 2020; Nguyen & Trinh, 2021; 2022).

The analysis mainly focuses on four following issues: (1) approaches for creative writing for primary students, (2) approaches for assessing primary students' creative writing competencies, (3) time allocation for creative writing instruction, (4) contents on creative writing instruction in Vietnamese Textbooks.

RESULTS, DISCUSSION, and CONCLUSION

Approaches for creative writing instruction for primary students

The 2018 LEC Guideline (MOET, 2018b) recommended an integrated teaching strategy for teaching writing: through learning to read, students can find a "model" to learn to write, they also need to have opportunities to develop their speaking competencies through presenting their writing. Simultaneously, the model practice method needs to be used to guide students to analyze and create texts of the same genre. Besides, compared to the 2006 LEC Guideline, teachers need to spend more time sharing, commenting, and correcting students' written products. However, the orientations of teaching writing in general and creative writing in particular mentioned in the 2018 LEC Guideline are somewhat unclear and not specific, as it did not mention the approaches and methods that can be applied for creative writing instruction. Also, compared to the orientations of teaching reading, those of teaching writing are much fainter.



The TTMA (RGEP, 2020a) emphasized that teachers need to focus on two stages of writing instruction: (1) guiding the writing process and (2) organizing practice activities for writing different genres. The teaching method in the first stage focuses on assigning tasks for students to perform step by step: (1) determine the purpose and content of writing; (2) collect documents, form ideas, and create an outline for the writing; (3) write a draft and then complete the writing; (4) based on rereading and comments from teachers and friends to edit the writing. This approach comes from the idea that through each writing lesson, if the teacher guides students know what to do by following each step in the process, they will have the habit of writing based on that process. In the second stage, the teacher should instruct students to practice writing each part and paragraph with prominent characteristics of text type:

Table 2. Instructional orientations for each text type in the training material.

Text genres	Instructions
Descriptive texts	<ul style="list-style-type: none"> - Teachers need to guide students to write descriptive paragraphs with images and feelings. - Teachers need to assign tasks to students to write a descriptive paragraph before writing the whole essay (write the introduction, write a paragraph describing the shape, write a paragraph describing activities, and write conclusion).
Narrative texts	<ul style="list-style-type: none"> - Teachers need to instruct students to write narrative paragraphs with attractive narration from the narrator or from the characters. - Teachers need to assign students the task of writing narrative paragraphs before writing the whole essay. In each storytelling, teachers need to ask students some suggestive questions: What event does the paragraph tell? What did the main character do and say? What were the results? (write the introduction, write some paragraphs telling important events, and write conclusion).
Expository texts	<ul style="list-style-type: none"> - Teachers need to assign students the task of writing an expository paragraph about an object. For example: Teachers can ask students to write paragraphs introducing a favorite toy with the following suggestions: (1) Name of the toy? When did you get it, who gave it to you?; (2) The shape and color of the toy and what material is it made of?; (3) How do you play with that toy? What do you find interesting about that toy?; (4) How does that toy help you, how do you take care of it?

However, the instructions mentioned in the TTMA (RGEP, 2020a) are still general and mainly use suggestive questions without really mentioning specific methods and techniques for each type of text. To summarize, RGEP (2020a) introduced the traditional way to teach writing for each type of text is analyzing sample paragraphs and essays, then practicing writing according to the sample, revising and editing the writings. Also, integrating reading and writing instruction is emphasized since reading texts are considered model texts for students to learn the characteristics of each text type as well as ways to express ideas and emotions so that they can create their own texts.

The TTMA (RGEP, 2020a) presented writing teaching orientations more clearly and specifically than the 2018 LEC Guideline (MOET, 2018b). Like the 2018 LEC Guideline, the TTMA emphasized the importance of integrating reading and writing instructions with the view that reading texts are models for students to practice writing. However, the document still mainly focused on instructing students to write to meet structural requirements and characteristics of each text genre rather than to express their imaginations, emotions, and attitudes. According to Barton, et al. (2023) creative writing only happens when students have opportunities to use their imagination to create unique writing. Thus, strategies to guide students to express their unique ideas, experiences, and emotions need to be presented more clearly in these documents.

In terms of teaching creative writing as a process, international literature review has emphasized that students need to go through consecutive stages of their writing, including planning, drafting, sharing, revising, editing, evaluating, and publishing (Calkins Lucy, 1994; Murray, 2009; Graham, et al., 2012, revised 2018; Ulu, 2019). However, these above materials only focus on guiding students in the step of writing, without paying attention to instructing them to rehearsal, present, evaluate, edit, and



publish their writing. According to Graham, et al. (2012, revised 2018), through presenting, sharing, and publishing writing texts, students begin to consider themselves as professional writers, which motivates and stimulates them to write more. Therefore, these reference documents need to complement additional guidelines on strategies, methods, and forms to guide students to present, edit, and publish their writings.

Another gap is that these documents mainly focused on teaching students to write by hand on paper, which does not meet the 2018 LEC Guideline’s requirements of developing their competencies to learn and work with multimodal texts (MOE, 2018b). This gap requires innovative strategies. Some international studies mentioned using picture books as a model for students to follow in terms of ideas, organization, vocabulary and sentence usage, and images (Pérez & Vargas-Daza, 2019; Wang & Lin, 2019). According to these studies, picture books function as a bridge supporting students to apply these certain writing qualities into their own writing. Furthermore, through picture books, students understand that they can express their ideas not only with written language but also with visual, aural, gestural, and spatial modes. This is a new strategy that educators in Vietnam should consider in creative writing instruction for primary students.

Approaches for assessing primary students’ creative writing competencies

In terms of assessing primary students’ language competencies, the 2018 LEC Guideline (MOET, 2018b) did not propose any method, technique, tool, or criteria to assess primary students’ creative writing, which may lead to limitations and ineffective practices in real classrooms. Meanwhile, the TMB (RGEP, 2020b) suggested some methods such as: (1) using written tests; (2) observation methods; (3) question-answer methods; (4) portfolio assessment methods with some tools like checklist and rubric. However, these tools mainly focus on elements of structure, content the assignment requires, grammar, spelling, and presentation, but do not pay attention to creative elements, while international studies (Ulu, 2019; Uslu & Uslu, 2021; Barton et al., 2023) emphasized that creative elements such as originality of ideas, fluency and flexibility of thoughts, emotions, word richness, and writing style need to be paid attention to. Hence, these key reference documents need to clearly offer guidelines on methods, tools, and forms of evaluating creative elements in students’ writings.

Time allocation for creative writing instruction for primary students

The time spent on teaching Vietnamese language in general and writing instruction in particular at each grade level is allocated as follows (MOET, 2018b):

Table 3. Time allocation for creative writing instruction.

Grade	Total lessons/ 35 weeks	Total lessons/ a week	Writing lessons/ a week	Writing time/ a week
1	420	12	1	30 minutes
2	350	10	1	35 minutes
3	245	7	1	40 minutes
4	245	7	2	40 minutes
5	245	7	2	40 minutes

In the first grade, a lesson lasts 30 minutes, in the second grade, it is 35 minutes, and 40 minutes belongs to grades 3 to 5 (MOET, 2018a). Notably, in the first grade, from week 21, teaching sentence writing is not separated into an independent lesson but is integrated into two lessons during the week. Specifically, after each lesson there is usually a writing requirement, which accounts for about 15 minutes.

Table 3 shows that primary students in general have limited time to practice writing in their classroom, notably under one hour per week for grades 1 to 3. Graham et al. (2012, revised 2018) suggested that students need to have enough daily time to write, at least one hour a day for writing, beginning in the first grade. The hour should include at least 30 minutes for guiding some writing strategies,



techniques, and skills appropriate to students' development. The remaining 30 minutes should be allocated for writing practice, where students apply what they just learnt from their teachers' instruction. Therefore, not having enough daily time for writing practice everyday will limit students' writing habits, motivation, and competencies. To resolve this issue, writing practice should be integrated in other areas such as in reading lessons or in other subjects such as Science or Math (Graham et al., 2012, revised 2018), which requires clear and specific guidelines in the instructional documents.

The contents on creative writing instruction in Vietnamese Textbooks

Textbooks are one of the main reference sources for teachers' instruction and the main learning materials for students, so the contents in textbooks have an influence on students' creative writing learning process (RGEP, 2020a, 2020b). The MOET allowed the use of many sets of textbooks. Based on the goals and requirements of the 2018 LEC Guideline, each set of textbooks was designed to instruct writing skills for students in a different way and process. Within the limitation of the study, the authors only mention contents on creative writing instruction for grades 1, 2, and 3 in the "Creative Horizon" Vietnamese Textbooks series, which have been chosen in most of primary schools in the South of Vietnam in general and in Ho Chi Minh City, a metropolitan city in Vietnam in particular.

Based on the perspective on "creative writing" mentioned in section 2.1.1, the article identifies contents on creative writing instruction as contents in which students have opportunities to conduct their writing to express their unique ideas, experiences, and emotions. The following criteria are given to identifies contents on creative writing instruction in Vietnamese Textbooks:

Criteria 1: The content provides space for students to do their own writing rather than copying or following a pre-given outline.

Criteria 2: In the writing activity, students have opportunities to express their own ideas, experiences, and emotions in various forms.

Based on these above criteria, the number of creative writing contents in textbooks for each class is identified as follows: Grade 1 (13 contents), Grade 2 (23 contents), and Grade 3 (28 contents).

The contents on creative writing instruction in the Vietnamese Textbook 1

In the Vietnamese Textbook 1 (Bui, H. M., Nguyen, K. T. L., 2020), after students learn all the sounds and rhymes in week 20, they will perform general practice exercises from week 21. From week 21, each week is divided into four lessons, writing contents are usually integrated in lesson 2, lesson 3. The paper identifies 13 topics creating spaces for students to conduct their creative writing. In general, these contents allow students to express their own ideas and emotions based on suggested images and questions, which make their sentences original, creative, and diverse. Another notable point is that these assignments integrate enhancing students' creative speaking competencies before writing, clearly demonstrating the concentration on integrating teaching language skills in a lesson of the 2018 LEC Guideline.

 Giới thiệu một đồ vật được tặng mà em thích theo các gợi ý sau:
– Đồ vật đó có tên là gì?
– Ai tặng đồ vật đó cho em?
– Vì sao em thích món đồ đó?



 Viết vào vở nội dung em vừa nói.

1) Introduce a gift that you like according to the following suggestions: What is that gift?; Who gave it to you?; Why do you like that gift?

2) Write in your notebook what you just said.

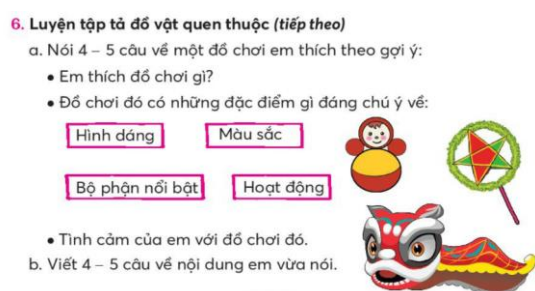
Figure 1. Lesson 3, week 26, page 78, Vietnamese Textbook 1, Volume 2.



According to the requirements of this topic, students are free to choose a gift they like, they have chances to express their thoughts and feelings about their gifts through their own original sentences. However, the number of creative writing contents is limited for first graders to develop their sentence writing skills in comparison to the level of writing activities students need to practice every day to develop their writing competencies (Graham et al., 2012, revised 2018).

The contents on creative writing instruction in the Vietnamese Textbook 2

The Vietnamese Textbook 2 (Nguyen & Trinh, 2021) has two lessons each week, the contents of speaking and writing is taught integrated together at the end of the second lesson of the week. 23 topics were identified as contents on creative writing instruction, which are mostly designed by using the modelling method, meaning the authors provide a sample text and students will analyze the sample with teachers' guidance. The Textbook either creates a framework for students to shape their writing or provide picture materials and asks students to write sentences describing, introducing, and sharing feelings about some familiar objects or write about a person and that person's story either as a witness or as a participant:



6. Practice introducing familiar objects (continued)

a. Speak from 4 to 5 sentences about a toy you like according to the following suggestions: Which toy do you like?; What notable features does that toy have? (shape, color, outstanding parts, activities); Your feelings for that toy.

b. Write from 4 to 5 sentences about what you just said.

Figure 2. Lesson 4, week 16, pages 145, Vietnamese Textbook 2, Volume 1.

Besides creative writing contents, some other writing contents set many limits or gives too detailed and specific suggestions, limiting students' creativity:

c. Viết đoạn văn 4 - 5 câu giới thiệu chiếc thước kẻ dựa vào tranh và từ ngữ gợi ý:



c. Write a paragraph from 4 to 5 sentences to introduce your ruler based on the suggested picture and words: centimeter graduations, rectangle, thin and flat, yellow, measure and draw.

Figure 3. Lesson 2, week 12, page 105, Vietnamese Textbook 2, Volume 1.

Instead of giving direct characteristics of the ruler in the picture, the Textbook should only give suggestions that direct students to observe to determine some outstanding characteristics of the rulers they are using. For example: *What shape is your ruler?; What special parts does your ruler have?; What is the color of your ruler?; What do you use your ruler for?.*

The contents on creative writing instruction in the Vietnamese Textbook 3

Continuing the Vietnamese Textbook 2, the writing contents designed in the Vietnamese Textbook 3 (Nguyen & Trinh, 2022) are clearly called "Creative Writing". This is a huge step forward, demonstrating the book series' concentration on meeting the 2018 LEC Guideline's requirements for creative writing (MOE, 2018b). In terms of duration, the Vietnamese Textbook 3 allocates one lesson



(40 minutes) per week for creative writing topics. Regarding strengths, many topics still provide suggested pictures and mind maps that create opportunities and fulcrums for students to write. Although a specific process for writing paragraphs is not given, the mind maps in the Textbook are very effective in supporting students in finding and developing main ideas in their paragraphs:



Write a short paragraph from 6 to 8 sentences to share your feelings for your friends or your teachers according to the following suggestions: Who do you want to write about?; Describe that person’s appearance, interests, personality, and dreams; How do you feel about that person?

Figure 4. Lesson 2, week 10, page 81, Vietnamese Textbook 3, Volume 1.

Besides some common writing topics, the authors also help students become familiar with reading and writing emails, which meets the 2018 LEC Guideline’s requirements (MOE, 2018b) in developing students’ competencies to work with multimodal texts. These types of activities give students opportunities to apply their writing abilities to solve real-life problems, making their learning meaningful. However, like the Vietnamese Textbook 2, some writing contents in the Vietnamese Textbook 3 set many limits or gives too detailed directions, limiting students’ creativity:

2. Giúp bạn Vân Anh viết thư trả lời bạn Hồng Hạnh theo một trong hai tình huống sau:
- Lớp bạn Vân Anh hẹn cùng tham gia quyền góp sách vở với lớp bạn Hồng Hạnh.
 - Lớp bạn Vân Anh có kế hoạch khác.

Help Van Anh writing an email replying to Hong Hanh in one of two situations:



- Van Anh’s class make an appointment to donate books with Hong Hanh’s class.
- Van Anh’s class has other plans.

Suggest: How will you address yourself?; What content will you tell Hong Hanh?

Figure 5. Lesson 4, week 8, page 67, Vietnamese Textbook 3, Volume 1.

In this assignment, although students have chances to practice writing emails, they are placed in the situation of writing emails to solve another person’s specific problem, not their own actual problems. This cannot give students the motivation and force to write as well as limit their creativity because creative writing can only happen when students have opportunities to express who they are and what is happening around them (Cheung et al., 2013; Uslu and Uslu, 2021; Barton et al., 2023). Instead of doing the above assignment, students should have chances to write emails to fulfil a practical purpose that they desire such as writing emails to ask about the life of a relative, a teacher, or a friend they have not seen for a long time. Therefore, although the Vietnamese Textbook 3 allocates one lesson (40 minutes) per week for contents on creative writing, only 28 contents are identified as creative writing contents among the 34 contents mentioned in the Textbook.

Another limitation is some topics like “write a short paragraph expressing feelings and emotions about people and scenes” are taught for many weeks but the connection between weeks is weak because the arrangement of topics having same requirements is not consecutive but alternating, causing difficulties for learners since they do not have chances to practice with new and difficult content types regularly in a specific period. For instance, in the Vietnamese Textbook 3, Volume 2, in lesson 2, week 32, page



111, students learn to write a short paragraph giving reasons for liking or disliking a character in a story. However, in lesson 4, week 33, page 119, students learn to write to narrate an action that contributes to protecting the environment and in lesson 6, week 34, page 126, students practice again with the writing content of lesson 2, week 32.

Through analyzing the contents on writing instruction for primary students in the “Creative Horizon” Vietnamese Textbooks series, some ideas of creative writing instruction in the Textbooks were realized. Notably, the Vietnamese Textbook 3 names the writing contents “creative writing”, which is a prominent point. However, besides some topics creating spaces for students’ creativity, some are designed with many limits or give too detailed directions, limiting students’ original and unique elements. Also, in comparison to the amount of daily time students need to practice writing (Graham et al., 2012, revised 2018), the duration of writing contents in this Vietnamese Textbook series are still limited, which is not enough for students to develop their creative writing competencies, especially their writing habits. Therefore, the number of contents related to creative writing in textbooks needs to be increased and more integrated into other skill contents such as reading, listening, and speaking.

Conclusion

Creative writing instruction is a new requirement emphasized in the 2018 LEC Guideline. This study analyzed how creative writing instruction is mentioned and guided for implementation in four Vietnam’s essential reference documents, which teachers mainly rely on to conduct their daily instruction (Le, 2018; RGEP, 2020a; Do, 2023) to propose some suitable recommendations to increase the quality of creative writing instruction in primary schools.

The findings revealed that although some reference documents proposed several creative writing instruction ideas (MOE, 2018b; RGEP, 2020a; Le, 2018; Do, 2023), they mainly focus on teaching students to write to meet requirements about structure, grammar, and characteristics of each text genre rather than to express their thoughts, experiences, and emotions. These documents also focused solely on guiding students in the step of writing, overlooking crucial processes such as presenting, evaluating, editing, and publishing. Additionally, these documents only emphasize handwritten activities and assignments, not aligning with the 2018 LEC Guideline’s mandate to enhance students’ competencies to work with multimodal texts. To address these gaps, these materials should explicitly provide strategies and methods for guiding students in expressing their imagination and creativity in their texts, sharing and publishing their writings, as well as working with various forms of texts, especially picture books, which is proved to help students understand that they can express their ideas not only with linguistics but also with multimodal elements (Pérez & Vargas-Daza, 2019; Wang & Lin, 2019).

Besides, existing documents guide teachers to assess primary students’ creative writing competencies based on structural aspects, assignment content, grammar, spelling, and presentation (MOE, 2018b; RGEP, 2020a, 2020b), leading to a lack of emphasis on creative elements. Hence, outline guidelines for assessing creative aspects in primary students’ writings, consisting of methods, tools, and forms need to be complemented.

Also, the time allocation specified in the 2018 LEC Guideline (MOE, 2018b) as well as creative writing contents in Vietnamese Textbooks (Bui & Nguyen, 2020; Nguyen & Trinh, 2021; 2022) are limited, requiring guidelines for appropriate strategies such as integrating in other areas such as integrating writing instruction in other language skills lessons and subjects such as Science or Math.

Although the study has several essential contributions discussed above, several limitations need to be pointed out. Firstly, because of the limitation of this study, the authors only mention four main reference materials. To make more contributions, further studies should study more documents, namely teachers’ lesson plan reference books, students’ workbooks, and “Creative Horizon” Textbooks for grades 4 and 5 as well as textbooks from other publishers. Secondly, the authors



employed the document analysis approach, which only reflects to a certain extent the current situation on creative writing instruction for primary students on a theoretical level. Further studies should focus on teachers and students in actual classrooms for more practical data.

Ethics and Conflict of Interest

All requisite research ethics guidelines were meticulously followed during the study's execution. Furthermore, the authors affirm that no conflicts of interest exist among them about this article's research, publication or authorship.

Contribution Rate of Authors

The authors contributed equally to this article.

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PARENTAL READINESS SCALE FOR EARLY LITERACY TEACHING IN PRIMARY SCHOOL: A VALIDITY AND RELIABILITY STUDY

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Abstract

This study aimed to develop a valid and reliable measurement tool that will determine the readiness of parents of students starting the first grade of primary school to support their children during the first formal teaching of reading and writing skills. The sample consisted of 524 parents of students starting the first grade in the provinces of Ankara, Samsun, and Bartın. The scale development study was begun by first creating an item pool in line with the literature, after which a draft form was prepared on the basis of the opinions of language, field and measurement and evaluation experts. The final form was delivered to the parents online and in person, and exploratory factor analysis was conducted for the collected data. As a result of the analysis, it was determined that the scale consisting of 17 items and five factors explained 67% of the variance. Confirmatory factor analysis was performed to determine the fit of the created factorial structure and it was determined that the model fit indices were between perfect and good fit. In determining the reliability, the McDonald's ω reliability coefficient, which is suitable for multi-factor structures, was calculated and the reliability of the entire scale was found to be .81. On the basis of these findings, the scale was found to be a reliable and valid measurement tool suitable for measuring parents' readiness in supporting their children in formal early literacy teaching.

Keywords: Early literacy, parent, readiness, scale.

INTRODUCTION

According to Ministry of National Education (2009), the concept of “readiness”, which can be considered as the level of prior knowledge and skill required to perform a specific task (Basaran, 1998), includes an individual's willingness to engage in a desired behavior as a result of their having reached a certain level of maturity and learning. More specifically, "school readiness" in a child can be defined as having the appropriate psychomotor, cognitive, linguistic, social and emotional development required to start primary education (Aslan & Coklar, 2009), as well as knowing what is necessary in various different academic fields before entering the classroom environment (Linder et al., 2013).

Child Trends (2001) states that three different components make up this readiness: the child's readiness, the school's readiness, and the family and environment's readiness. The National Education Goals Panel (NEGP, 1998) explained the process of school readiness with the sum in Figure 1 below:



Figure 1. School readiness process.

According to Figure 1, for a child to be ready for school, the family, communities, services and schools must all also be ready. In analyses of the process of readiness, the readiness of the family is most frequently mentioned. What is meant by a “ready family” is the home environment the child is living in, including the parental education level, parental age, and whether there is any abuse and



neglect present (National School Readiness Indicators Initiative, 2005). According to the environmentalist approach, a child's environment has a major impact on their development and school readiness (Meisels, 1998). Although it is generally thought that the responsibility of the family, which constitutes the child's most immediate environment, decreases with school age and will be to some extent replaced by stakeholders such as teachers and specific academic programs of study, this does not eliminate the importance and responsibility of the family; on the contrary, the particular family and its unique characteristics remain the most important factor in success at school (Celenk, 2003; Susar Kırmızı & Ünal, 2017; Suskind, 2020). Values such as love, respect, tolerance and responsibility should be established in the family and their development should be supported, thus ensuring that they will contribute towards the child's achievements at school (Hokelekli & Gunduz, 2007). Families are not only the first teachers of children, but also partners in children's education along with their official teachers at school (Keceli Kayisili, 2008). There are many studies in the literature showing that factors such as family structure, the economic situation of the family, the social status of the family, and the education level of the parents have an impact on the child's readiness for school (Emig, 2000; Harman & Celikler, 2012; Zaslow et al., 2000; Bruce et al., 2017; Erkan, 2002).

The most important skills that students need to gain in the first year of primary school are reading and writing. However, these should not be reduced to simply being able to read and write the letters of the alphabet. Akyol (2015) examined the process of learning to read and write from a broad perspective, including aspects such as comprehending punctuation marks, developing written and oral communication skills, building vocabulary, being able to read quickly and with understanding, and using the Turkish language correctly and effectively. A number of different methods can be adopted when formally teaching reading and writing for the first time and these depend on when the desired transition to reading and writing should occur and may also use different starting points (Akyol & Temur, 2008). The letter method, sound method, syllable method, word method, sentence method, teaching with mixed letters and the sound-based sentence method are the most common techniques that have been used in teaching reading and writing in Türkiye (Akbayir, 2006; Cemaloglu & Yildirim, 2008; Celenk, 2013; Gunes, 2000; Keskinilic 2002; Sagirli & Atik, 2022; Sahbaz, 2013). At present, the sound-based reading and writing method is used, which is based on the principle of combining letters to make a sound into a syllable, syllables into words, words into sentences and sentences into full texts (Gunes, 2007). However, families who are not themselves familiar with this method may not be able to adequately teach sounds and may thus have problems supporting the child (Gozukucuk, 2015).

School (teacher) and family (parental) cooperation contributes to children's development of reading and writing skills as well as enabling them to become more socially ready (Ekinici & Vural, 2012; Günes, 2007). Basaran and Ates (2009) state that the child's attitude, motivation and positive feelings towards reading will have an impact on their learning processes in the following years and throughout their life. Therefore, families should aim to help their child develop positive attitudes when starting literacy education. In addition to the impact of the family on affective factors such as attitude and motivation, it can also have an effect academically. For example, Isaac (2012) emphasizes the importance of familial support in the academic success of children who have not yet acquired the ability to work independently and states that families play a key role in this.

In order to add the acquisition of reading and writing to the listening and speaking skills already acquired by the child, primary education is a language teaching process that requires cooperation between the school and the family, and the role of the family has been highlighted (Bas, 2006). In studies examining the effect of family on children's reading and reading comprehension, both familial support and the education level of the parents have been found to make a positive contribution to the process (Ferah & Saydam, 2021; Ozcan & Ozcan, 2016; Basar & Tanis-Gurbuz, 2020, Erbasan & Erbasan, 2020; Sagirli, 2022; Sarioglu, 2016).



There has been a continuous increase in the number of studies examining the impact of the family on the early development of literacy in recent years (Basar & Tanis-Gurbuz, 2020; Bektaş, 2007; Erbasan & Erbasan, 2020; Ferah & Saydam, 2021; Ozcan & Ozcan, 2016; Rotzon et al., 2007; Sagirli, 2022; Sarioglu, 2016). In line with this, various different scales have been used to measure children's school readiness in Türkiye and in the international literature (Baranline, 2023; Canbulat & Kiriktas, 2016; Oktay, 1983; Sak & Yorgun, 2020; Unutkan, 2003). However, no measurement tool aimed at determining parents' readiness for their children to begin to develop literacy in a formal setting has been found in the national and international literature. In this regard, the main motivation for the development of the Parental Readiness Scale for Early Literacy Teaching was the lack of a reliable and valid scale suitable for use in research that directly measures parents' readiness. The aim of the present study was thus to test the validity and reliability of the Parental Readiness Scale for Early Literacy Teaching in order to develop a measurement tool with established validity and reliability for use in studies related to family and literacy teaching in Türkiye. In this context, answers were sought to the following questions:

1. Has the scope and construct validity of the Parental Readiness Scale for Early Literacy Teaching been established?
2. Has the reliability of the Parental Readiness Scale for Early Literacy Teaching been established?

METHOD

Research Model

The research was designed as a descriptive survey, which is one of the quantitative research types. The aim of this research model is to determine the attitude of one or more groups towards a situation, event or phenomenon (Karasar, 1999). The processes followed and the characteristics of the working group participating in the development of the Parental Readiness Scale for Early Literacy Teaching are discussed below.

Sample

The study group consisted of parents of first-grade students who were about to begin studying in different schools across Türkiye. In determining the sample, the purposeful sampling method was used for Explanatory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA), since only parents whose children were going to start first grade for the first time were selected. When using this method, it is essential to identify strong cases that serve the study's purpose in order that limited resources can be used effectively (Palinkas et al., 2015). Erkus (2012) states that since it is important to reflect the range of the feature being measured, purposeful sampling based on volunteering rather than random sampling is the most appropriate sampling method in scale development.

Different study groups were studied during the EFA and CFA phases of the research. Henson and Roberts (2006) emphasize that when determining construct validity, it is necessary to start with EFA and to then conduct CFA with a different sample group. In this regard, Table 1 contains information about the two different samples.

Table 1. Sample distribution for factor analysis.

Factor Analysis Type	Variables	n	Mean
Explanatory Factor Analysis (EFA)	Female	269	84.6
	Male	49	15.4
	Total	318	100
Confirmatory Factor Analysis (CFA)	Female	168	82.35
	Male	36	17.64
	Total	204	100



Bryman and Cramer (2001) state that a value between 5 and 10 times the number of items is sufficient to determine the number of participants, while Kline (1994) states that 200 samples are sufficient for factor analysis. As can be seen in the Tables, in the current study 522 parents were studied, 318 for EFA (269 women, 49 men) and 204 for CFA.

Process

The studies first started with a literature review. An attempt was made to obtain scales with similar content developed domestically in Türkiye and internationally. However, no scale was found regarding parents' readiness for the formal process of beginning to develop literacy. It was determined that those studies covering the parental readiness and early literacy development were generally qualitative studies, using interview forms, observation forms and interview records to collect data. In line with the findings obtained from the literature, an item pool was first created and then given to experts to obtain their opinion. The content validity of the scale was ensured using the Davis technique (Davis, 1992). In this technique, each item is evaluated using a four-point rating scale and items are selected with the content validity index (CVI) obtained. In the current study, evaluations were obtained from two subject area experts, a language expert and a measurement and evaluation expert, and as a result, it was determined that three items should be removed from the 25-item draft scale, while four items needed to be amended. Information about the experts' evaluations of the Davis technique results is shown in Table 2.

Table 2. Content validity determination table based on expert opinion with the Davis Technique.

Items	Linguist	Measurement & evaluation expert	Field Expert 1	Field Expert 2	CV Index
Sketch1	A	A	B	A	1
Sketch 2	A	A	A	B	1
Sketch 3	A	A	A	A	1
Sketch 4	A	A	A	A	1
Sketch 5	A	A	A	A	1
Sketch 6	A	A	A	A	1
Sketch 7	A	A	A	A	1
Sketch 8	A	A	A	A	1
Sketch 9	A	A	A	A	1
Sketch 10	C	B	A	A	0.75
Sketch 11	A	A	B	A	1
Sketch 12	A	A	A	A	1
Sketch 13	A	A	A	A	1
Sketch 14	A	A	A	A	1
Sketch 15	C	C	B	A	0.50
Sketch 16	A	A	A	A	1
Sketch 17	A	A	A	A	1
Sketch 18	A	A	A	A	1
Sketch 19	A	A	A	A	1
Sketch 20	B	A	A	A	1
Sketch 21	A	A	A	A	1
Sketch 22	A	A	A	A	1
Sketch 23	C	B	A	B	0.75
Sketch 24	A	A	A	A	1
Sketch 25	B	A	B	A	1

A = The item represents the property B = The item should be slightly revised C = The item needs major revisions D = The item does not represent the property

As seen in Table 2, for each item, only evaluations A and B were collected and these were divided by the number of experts to determine the CVI. As a result of these evaluations, items 11, 15 and 23, which had less than 0.8 points, were removed, and a form consisting of 22 items was obtained.



In order to develop the scale, data collection was carried out in two stages. In the first stage, data was collected from 318 parents online and in person using the scale forms for EFA. The data obtained were first transferred to the SPSS program and outlier, normality, linearity and missing data analyses were performed. For each form, blanks with a maximum of two questions were filled with the arithmetic average. In addition, in the EFA, CFA and reliability analyses, five items were removed because they were at extreme values and negatively affected the normality of the data set. Whether the appropriate sample size for factor analysis had been reached was tested with the Kaiser-Meyer-Olkin (KMO) coefficient and Bartlett's sphericity test. Additionally, through the analysis, the loadings of the items to be accepted into the scale were determined as .30 (Büyüköztürk, 2007).

To determine the CFA fit of the scale, 204 pieces of data from a different sample group were obtained using online and face-to-face scale forms and the model fit was checked. RMSEA, CFI, RMR, IFI values from multiple fit indices were taken as the bases. For the fit indices CFI and IFI, these had to be greater than 0.90. For RMSEA and RMR, it was determined that they should be less than 0.08 and the chi square value should be less than 3 (Cole, 1987; Kline, 2005).

McDonald's ω internal consistency analysis was performed to determine the reliability of the scale. It is emphasized in the literature that more advanced alternatives such as omega, stratified alpha, and maximal reliability should be used instead of the alpha coefficient in order to determine reliability in multidimensional measurement tools (Dunn et al., 2014; Graham, 2006; Revelle & Zinbarg, 2009). Since the McDonald's ω coefficient determines reliability according to the common factor model, it is also called "structural security" (Soysal, 2023).

RESULTS

This section first explains the findings related to EFA and CFA with regard to the construct validity of the development of the measurement tool, followed by the findings related to reliability studies.

Exploratory Factor Analysis (EFA)

The construct validity of the scale was determined by factor analysis. Before proceeding with the analysis, the KMO coefficient and Bartlett's sphericity test were used to understand the suitability of the data for factor analysis. As a result, the KMO value of the scale was found to be .73, while the Bartlett test was found to be significant ($P = .00$). According to the results obtained, it was determined that the scale had an appropriate sample size for factor analysis.

Table 3. Exploratory factor analysis (EFA) results.

	Common Factor Variance	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
M5	.546	.919				
M17	.492	.904				
M6	.613	.823				
M3	.575	.729				
M12	.884	.684				
M11	.739		.948			
M1	.578		.945			
M2	.505		.671			
M4	.904			.851		
M7	.478			.832		
M8	.549			.542		

**Table 3 (Continued).** Exploratory factor analysis (EFA) results.

	Common Factor Variance	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
M16	.562				.697	
M9	.888				.655	
M10	.430				.624	
M15	.903					.727
M13	.904					.700
M14	.856					.668
Explained Variance: (%) 67.09		28.34	14.28	8.48	8.21	6.75

The values obtained by factor analysis revealed that the scale had a structure consisting of 17 items and five factors and explained 67% of the total variance. In addition, five items in the scale were removed from the scale form because their factor loadings were low and negatively affected reliability.

Confirmatory Factor Analysis (CFA)

Data were collected again to demonstrate the validity of the structure created with EFA. A total of 204 pieces of data collected through online and face-to-face forms were transferred to the AMOS 23 program and CFA was performed. According to the results obtained from the analyses, the chi-square fit value ($X^2=211.102$, $SD=107$, $p=.000$) of the 17-item and five-factor structure was determined to be significant and the X^2/sd value was determined as 1.97. Fit indices were found to be as follows: RMSEA: .69; RMR: .08; CFI: .94; IFI: .94.

The CFA findings performed to determine the model fit of the factorial structure of the scale are shown in Table 4.

Table 4. Findings on CFA fit indices.

Index	Perfect Fit Measure	Acceptable Fit criteria	Research Finding	Result
X^2/df	0 to 2	2 to 3	1.97	perfectly matched value
RMSEA	.05 and below	.08 and below	.06	acceptable fit value
RMR	.05 and below	.08 and below	.08	acceptable fit value
CFI	.95 and above	.90 and above	.94	perfectly matched value
NFI	.95 and above	.90 and above	.88	acceptable fit value
IFI	.95 and above	.90 and above	.94	perfectly matched value
RFI	.95 and above	.90 and above	.85	perfectly matched value
GFI	.90 and above	.85 and above	.89	perfectly matched value
AGFI	.90 and above	.85 and above	.85	acceptable fit value

When Table 4 is examined, it can be seen that the RMSEA, RMR, AGFI and NFI indices have acceptable fit values, while the X^2/df , CFI, IFI, RFI, GFI indices have perfectly matched values. The path diagram of the scale is shown in Figure 2.

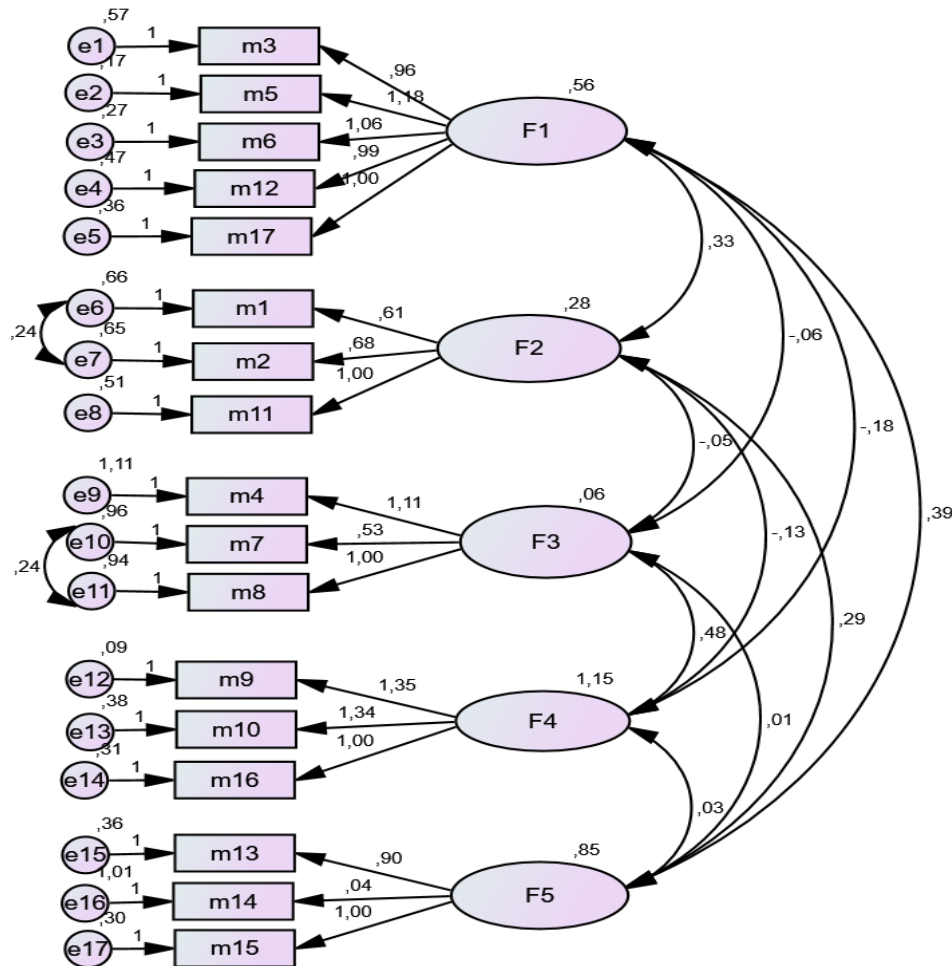


Figure 2. CFA result for the scale.

Reliability

The internal reliability of the scale was calculated with the McDonald's ω reliability coefficient. The reliability values of the scale are shown in Table 5.

Table 5. Reliability values of the scale's sub-dimensions.

Sub-Dimensions	Item	Factor Load	McDonald's ω Coefficient
Knowledge (Factor 1)	M3	.82	.82
	M5	.80	
	M6	.80	
	M12	.83	
	M27	.87	
Implementation (Factor 2)	M1	.56	.65
	M2	.39	
	M11	.62	
Expectation (Factor 3)	M4	.63	.58
	M7	.33	
	M8	.36	

**Table 5 (Continued).** Reliability values of the scale’s sub-dimensions.

Sub-Dimensions	Item	Factor Load	McDonald’s ω Coefficient
Anxiety (Factor 4)	M9	.48	.73
	M10	.52	
	M16	.77	
Preparation (Factor 5)	M13	.07	.54
	M14	.42	
	M15	.20	
Full Scale			.81

As can be seen, the scores were $\omega=.86$ for “Knowledge”, which is the first sub-dimension of the scale; $\omega=.65$ for the second sub-dimension “Implementation”; $\omega=.58$ for the third sub-dimension “Expectation”; $\omega=.73$ for the fourth sub-dimension "Anxiety"; and $\omega=.54$ for the fifth dimension "Preparation". The reason for the low reliability in some of the dimensions is due to the small number of items and according to the literature, this situation is supported (Çimen et al., 2005).

DISCUSSION, CONCLUSION, and SUGGESTIONS

In preparing a child for their first formal experience of learning to read and write, it has been proven that many variables have an effect, including the familial level of knowledge, the family’s capacity to support the child's development, their ability to communicate healthily, their socio-economic status, and their education level (Emig, 2000; Harman & Celikler, 2012; Oktay, 2010; Peterson et al., 2017; Ratzon et al., 2007; Sagırlı, 2022). Although the literature demonstrates that parents have an effect on their children, in addition to how ready the child themselves is, when the child first experiences the formal teaching of reading and writing, no measurement tool could be found that measured the influence of the family at this early stage. The current study was thus conducted with the aim of developing a scale to measure the readiness of the parents of students starting the first grade of primary school.

The Parental Readiness Scale for Early Literacy Teaching is a measurement tool consisting of five factors and 19 items, developed to determine the extent to which parents of students starting the first grade of primary school are cognitively, socially and psychologically ready for their children’s first experience of the formal teaching of reading and writing.

In terms of the items the scale has a five-point Likert-type structure consisting of the following options: “Strongly agree” (5); “Agree” (4); “Unsure” (3); “Disagree” (2); and “Strongly disagree” (1). The reliability of the scale is .81. The loadings of the scale items vary between 0.43 and 0.90 and explain 67.09% of the total variance. Items 4, 7, 8, 9, 10, 14, and 16 in the scale are reverse-coded. The lowest score a participant can obtain from the scale is 17 and the highest score is 85. The sub-dimensions that make up the scale are as follows:

Factor 1 (Knowledge)

This dimension was named "Knowledge" because it seeks to answer questions measuring parents' knowledge about the first formal teaching of reading and writing. The items belonging to this dimension are:

- “I know at least part of the order of sounds” (e.g. the first five letters).
- “I know how to write sounds for homework.”
- “I know how my child should combine sounds in their homework.”
- “I have some knowledge about what kind of system will be used to teach reading and writing” (sound-based, sentence method, voucher, etc.).



- “I read books with my child.”

Factor 2 (Application)

This dimension was named "Application" because it seeks to answer questions about parents' actions while their child is being taught literacy.

- “I know what I will encounter when my child is learning to read and write.”
- “I know how to hold a pencil correctly.”
- “I know what to do if my child does not want to do the exercises needed to develop their muscles.”

Factor 3 (Expectations)

This dimension of the scale was named "Expectations" because it includes questions asked to determine the parents' expectations of the teacher, the school and their child during the formal teaching of reading and writing.

- “A good teacher should give plenty of homework and make children review their homework.” (reverse item)
- “I expect my child to complete learning reading and writing in two months at the latest.” (reverse item)
- “If my child still has not progressed to the syllable and word stage after the first four sounds, they will not be able to learn to read.” (reverse item)

Factor 4 (Anxiety)

The fourth dimension was named "Anxiety" because it includes questions aimed at determining the level of anxiety that parents will have about their children if they fail to learn how to read and write.

- “If my child learns to read late, they will be unsuccessful at school in the future” (reverse item)
- “If my child's writing doesn't look nice, it means they will fail at school.” (reverse item)
- “If my child has problems with reading, it means there is a problem in their cognitive development.” (reverse item)

Factor 5 (Preparation)

The fifth factor was named "Preparation" because it covers questions about the preparations that need to be made before a child starts to formally learn reading and writing.

- “I have some knowledge about terms such as ‘dictation’, ‘syllables’, ‘sentences’, and ‘text’.”
- “If my child has not received a nursery education, they will not be ready to begin learning how to read and write.” (reverse item)
- “Before they began primary school, my child's eyes and ears were tested and I am aware of the results.”

The process of determining the validity and reliability of this scale was carried out with a normally distributed sample. The sample of the study was limited to parents with children in the first grade only. The fact that these parents may have previously had children attending first grade or may have been familiar with the first formal teaching of literacy for professional reasons can be considered as one limitation of the study. Nevertheless, since there are exceptions in the universe, this confirms the statement that there should be "a set of standard stimuli selected to represent the universe" based on the definition of the scale, in accordance with the structure of quantitative studies (Ozguven, 2012). In addition, using this scale in further studies examining its relationship with different variables thought to be related to parental readiness for early literacy teaching will strengthen its validity and reliability.



Ethics and Conflict of Interest

The ethical approval for this research was obtained from the Ethics Committee of the Harran University Rectorate on 19.01.2023 with the decision number 2023/164. The author of the study acted in accordance with ethical rules in all processes of the research.

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MINDFUL ATTENTION AWARENESS IN PRIMARY SCHOOL TEACHERS: HOW DOES CREATIVE AND REFLECTIVE THINKING OCCUR WITHOUT IT? A MIXED METHODS RESEARCH

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Abstract

This research, which aims to determine the regulatory role of mindfulness in the relationship between creative thinking and reflective thinking, is a mixed method research in which quantitative and qualitative research methods are used together. The research was designed in a mixed-method convergent parallel design. The quantitative part was conducted with a descriptive survey model and the qualitative part was conducted with a case study design. The quantitative sample of the research was selected by cluster and simple random sampling method from classroom teachers working in the central districts of Konya province. The qualitative sample was selected from teachers who had at least one study on creative, reflective thinking, and mindfulness; had completed postgraduate education, and had ten years or more of professional seniority with the criterion sampling method from the teachers in the quantitative sample. In the quantitative part of the study, "creative thinking, reflective thinking, and mindfulness" measurement tools were used after obtaining the necessary permissions. Confirmatory factor analysis and reliability analysis were performed separately for these measurement tools. In the qualitative part of the study, interviews were conducted with a semi-structured interview form. When the quantitative and qualitative findings of the study were evaluated together, it was concluded that mindfulness has a regulatory role in the relationship between creative thinking and reflective thinking.

Keywords: Creative thinking, mindfulness, mixed methods research, reflective thinking.

INTRODUCTION

In today's world, twenty-first-century skills are at the forefront of educational policies that students need to acquire (Welker & Mohr, 2017). Learning is not the passive reception of external knowledge, but the learner's engagement with the world (Hein, 1991). From this point of view, since it is thought that twenty-first-century skills cannot be acquired with teaching approaches that are seen as passive receivers of information, the traditional and teacher-centered approach has been replaced by the constructivist learning approach (Arslan, 2007). In addition, as a solution to the necessity of raising individuals who can keep up with the century we are in, it has been emphasized that educational studies should be revised and curricula and learning environments should be organized according to these requirements (Beghetto & Kaufman, 2010; Demir, 2015). In addition, the United States National Research Council Report emphasized that training for teachers and training of educators should be done promptly without lagging behind the age (NRC, 2012). In this way, both teachers and students will be able to keep up with the knowledge and skills required by the age and will not lag behind the time innovatively and creatively. Individuals of the innovative information age will also be able to keep up with these innovations, think creatively and scientifically, and adapt these thoughts to daily life (Demir, 2015). Because creativity includes both scientific thinking and daily life (Farooq, 2008).



In addition, creative thinking and creativity stem from the individual's self-realization attempts (Woodman, 1981). Since the concept of creativity is a subject that concerns all societies, it has been examined by different disciplines in recent years (Seidel et al., 2010). In the studies, creativity has been grouped as "person, process, and product" (Isaksen et al., 1993; Mackinnon, 1978; Rhodes, 1961; Treffinger et al., 1988). However, Boden (1996) stated that the product dimension predominates on the basis that creativity is to produce new products. Therefore, in educational institutions, students should be exposed to the problem-solving process to develop their creativity and produce products (Fisher & Williams, 2013). Individuals with creative thinking are expected to have high levels of conscious awareness using consciousness and cognition. Therefore, we can say that there is a relationship between creative thinking and mindfulness. Because cognition and consciousness are inherent in human beings (Nicoll, 2012; Topçular, 2014; Weinstein, Brown & Ryan, 2009). The main purpose of education is to gain insight from the experiences of the individual, to reveal his/her creative power, and to strengthen his/her potential (Beghetto & Kaufman, 2010; Greason & Cashwell, 2009; Miller et al., 1995). Mindfulness is the state of being aware of what is happening around us and being open to experiences (McKee, Johnston, & Massimilian, 2006). The essence of mindfulness is observing, taking action without judgment, and defining (Hayes & Shenk, 2004). Mindfulness is also a personality trait and can be developed through education (Brown, Ryan, & Creswell, 2007). Past experiences and learning play an important role in the level of mindfulness (Kabat-Zinn, 2003). Thanks to the events experienced and the existing past cognitive schemas, the individual using reflective thinking can make his/her evaluation more conscious (Brown & Ryan, 2003). Reflection values the experiences in the learning process and encourages the individual to benefit from them (Loughran, 1996). Thanks to the critical perspective brought about by reflection, the learner exhibits a realistic approach to making thoughtful choices and taking responsibility for the choices they make. In addition, with reflective thinking, the methods, learning outcomes, and materials used in the educational process are also reviewed and questioned (Norton, 1992). Reflective thinking supports higher-order thinking skills by encouraging students to associate prior knowledge with new information, to think in abstract and conceptual terms, to apply specific strategies in new tasks, and to make sense of the thinking strategies employed (Fogarty, 1994). Activities that include reflective thinking increase student-teacher interaction and motivation, enabling students to reach goals through natural problem-solving and improving the quality of teaching (Güven & Özerbaş, 2018). On the other hand, it helps students to support metacognitive skills by enabling them to plan, monitor, and evaluate their learning processes with reflective questions created during teaching (Şahin, 2011). Reflective thinking is based on the idea of increasing the recall of experiences and developing a conscious awareness of actions (Larsen, London & Emke, 2016). In this respect, we can say that the relationship between creative thinking and reflective thinking is realized with the regulation of mindfulness (Aşkın Tekkol & Bozdemir, 2018; Baysal & Demirbaş, 2012; Çelik & Dikmenli, 2021; Dover & Dierk, 2009; Erol et al., 2019). Students need to stop and think during the learning process, be aware of what they are doing, question why and how they do the activities they do, hold a mirror to the process they spend, develop and change their learning skills, and develop learning strategies (Ersözülü & Arslan, 2009). This will provide an important gain not only for shaping learning strategies but also as a reflective habit that can affect problem-solving skills in the steps of generating alternative solutions to the problem in problem situations, implementing and evaluating the result (Kızılkaya & Aşkar, 2009). For the reasons mentioned above, this study aims to examine the relationship between teachers' creative thinking and reflective thinking and the regulatory role of mindfulness in this relationship with both quantitative and qualitative methods. The rationale of the research shows that studies on creative thinking, reflective thinking, and mindfulness variables are largely concentrated in fields such as business, economics, psychology and health (Brown et al., 2007; Brown & Ryan, 2003; Greason & Cashwell, 2009; Hayes & Shenk, 2004; Isaksen et al., 1993; Kabat-Zinn, 2003; Larsen et al., 2016; McKee et al., 2006; Miller et al., 1995; Rhodes, 1961; Seidel et al., 2010; Şahin, 2011; Weinstein et al., 2009; Weinstein et al., 2009; Woodman & Mohr, 2017). Research on teachers working in educational institutions is quite limited (Aşkın Tekkol & Bozdemir, 2018; Baysal & Demirbaş, 2012; Çelik & Dikmenli, 2021; Demir, 2015; Ersözülü & Arslan, 2009; Erol et al., 2019; Mackinnon, 1978). This



situation reveals that the level of mindfulness in the relationship between creative and reflective thinking in educational institutions has not been sufficiently investigated. This study will fill an important gap in the field by examining the regulatory role of mindfulness in the relationship between creative thinking and reflective thinking of teachers working in educational institutions. In the existing literature, most of the studies on creative thinking, reflective thinking, and mindfulness are focused on fields such as business, economics, psychology, and health, while studies on teachers are quite limited. This situation creates a scientific gap in the field of education, especially in how teachers interact with these variables. Therefore, this study aims to fill this scientific gap by providing new information to guide educational programs in developing teachers' creative and reflective thinking capacities and increasing their mindfulness levels. It will also make important contributions to reshaping teacher training processes in education, updating courses and curricula, and increasing the inclusion of mindfulness among high-level skills in education. In this way, it is predicted that it will have positive effects on the professional development of teachers and indirectly on student achievement in the field of education in the long term. From this point of view, the main purpose of this study is to investigate the regulatory role of mindfulness in the relationship between teachers' creative thinking and reflective thinking both quantitatively and qualitatively with mixed methods. This purpose also constitutes the rationale of the study. Because, when the relevant literature is reviewed, it is seen that most of the studies on creative thinking, reflective thinking, and mindfulness variables are conducted in the fields of business, economics, psychology, and health (Brown et al., 2007; Larsen et al., 2016; Woodman & Mohr, 2017), while studies on teachers working in educational institutions (Aşkın Tekkol & Bozdemir, 2018; Çelik & Dikmenli, 2021; Mackinnon, 1978) are rare. This situation creates a scientific gap in the field of education, especially in how teachers interact with these variables. Therefore, this study aims to fill this scientific gap by providing new information to guide educational programs in developing teachers' creative and reflective thinking capacities and increasing their mindfulness levels. It will also make important contributions to reshaping teacher training processes in education, updating courses and curricula, and increasing the inclusion of mindfulness among high-level skills in education. In this way, it is predicted that it will have positive effects on the professional development of teachers and indirectly on student achievement in the field of education in the long term.

Problem Statement

What are the results of comparing quantitative and qualitative data collected through a mixed convergent parallel design regarding the regulatory role of mindfulness in the relationship between creative thinking and reflective thinking?

Sub-Problems for the Quantitative Section

1. What are the distribution levels of creative thinking, reflective thinking, and mindfulness?
2. Does mindfulness play a regulatory role in the influence of creative thinking on reflective thinking?

Sub-Problems for the Qualitative Section

1. How are creative thinking, reflective thinking, and mindfulness defined when evaluated from a teaching perspective?
2. From a teaching perspective, does mindfulness play a regulatory role between creative thinking and reflective thinking?

METHOD

Research Design

This study is a mixed-method research that aims to determine the regulatory role of mindfulness in the relationship between creative thinking and reflective thinking. The research was conducted using a combination of quantitative and qualitative research methods (Fetters, 2020). The quantitative process was conducted using a descriptive survey model. This model aims to describe the current situation (Creswell & Guetterman, 2019). The qualitative process was designed according to the nested



single-case design. This design is suitable for providing in-depth understanding and detailed information (Yin, 2018). The research was conducted with a mixed convergent parallel design (Mertens, 2023). This design means that quantitative and qualitative data are collected simultaneously and the findings from both types of data are compared [$MMR_{(f)} = \text{quantitative} + \text{qualitative}$]. The data were used to measure the relationship between reflective thinking, creative thinking, and mindfulness, and also included teachers' views on this topic. Mixed methods research offers an effective way of combining the advantages of different research approaches to answer research questions in an in-depth and comprehensive way.

Sampling

The study was conducted on teachers working in the central districts of Konya province using quantitative and qualitative samples. To determine the sample of the quantitative research, $\alpha=0.05$ table was taken as a basis and it was aimed to select a sample of at least $377 \pm$ people from the estimated study population of >10000 people (Zou & Xu, 2023). Cluster sampling and simple random sampling methods were used in the sampling process (Blair et al., 2023); first, classroom teachers were divided into groups and then classroom teachers were randomly selected from each group. The "criterion sampling" method was preferred to form the sample of the qualitative research (Okoko et al., 2023). With this method, six teachers selected from the main sample group from which quantitative data were collected were selected according to certain criteria. These criteria included having at least one study on creative and reflective thinking skills and mindfulness, having completed postgraduate education, and having a professional seniority of ten years or more. While these methods enabled the collection of quantitative data representing the general sample of the study, they also enabled the selection of classroom teachers with certain qualifications for in-depth analysis. Thus, the research aims to provide both general validity and in-depth understanding.

Data Collection Instruments

The Creative Thinking Disposition scale developed by Özgenel and Çetin (2017), the Reflective Thinking Disposition scale developed by Semerci (2007), and the Mindfulness scale developed by Brown and Ryan (2003) were used as quantitative data collection tools. Each of the scales used in the study was applied based on a single factor. Therefore, Harman's single-factor test was applied to each measurement tool. In Harman's single-factor test, it is concluded that there is a significant amount of common method variance if a factor emerges or a general factor explains the majority of the covariance between measurements (Harman, 1968). Accordingly, the Creative Thinking scale explains 39.724%, the Reflective Thinking scale explains 22.497% and the Mindfulness scale explains 37.611% of the total variance in one factor. Since the total variance explained by the scales in a single factor was less than 50%, it was seen that there was no common method variance in the measurement tools (Aguirre-Urreta & Hu, 2019). The scale items were administered in a five-point Likert style, with all items being positive and categorized as "1-Strongly Disagree" to "5-Strongly Agree". Confirmatory factor analysis and reliability analyses were conducted separately for the scales used in the study. These analyses show that the data collection tools of the study are reliable and valid, as well as the single-factor structures and methodological variances of the measurement tools are at an acceptable level. The results of the analysis are given in Table 1.

Table 1. Confirmatory factor analysis model fit criteria and model results.

Scales	CMIN/SD	p	CFI	RMSEA	GFI	RMR
Creative Thinking	3.083	.001	.975	.074	.965	.021
Reflective Thinking	2.210	.007	.991	.056	.982	.013
Mindful Attention Awareness	2.825	.002	.986	.069	.981	.015

n=384

When the model fit criteria are analyzed in Table 1, it is observed that the model has smaller values than both independent models and saturated models. Therefore, we can say that the scale models included in the study are close to the real models. Since the t values exceeded 2.58 in the diagrams of the scales, the p values were significant at the .001 level. The error variances of the observed variables



were found to be low. In this direction, it can be said that the scale items are quite good. The reliability coefficient of the Creative Thinking scale was $\alpha=.917$, the reliability coefficient of the Reflective Thinking scale was $\alpha=.862$ and the reliability coefficient of the Mindfulness scale was $\alpha=.873$. According to these results, it was concluded that the measurement tools used in the study were reliable (Yu, 2022). A semi-structured interview form was used as a qualitative data collection tool in the study. The purpose of the structured interview is to determine the parallelism and difference between the information given by the interviewees and to make comparisons within this framework. The names of the classroom teachers interviewed in the study were coded as "A-B-C-D-E-F-G" and their genders as "F-M".

Data Analysis

SPSS 25, AMOS 23, and PROCESS MACRO 4.1 programs were used for quantitative data analysis. Since the model is considered a complex model, certain assumptions need to be met. Therefore, calculations such as multiple normality, missing and extreme values, multicollinearity, and independence were made and it was seen that the measurement results met these assumptions. Descriptive statistical analysis results for the scales are given in Table 2.

Table 2. Descriptive statistical analysis results of scales.

Scales	Minimum Score	Maximum Score	Skewness	Kurtosis
Creative Thinking	1.80	5.00	.055	2.223
Reflective Thinking	2.80	4.74	-.397	1.208
Mindful Attention Awareness	2.40	5.00	-.814	.666

n=384

In this study, the kurtosis and skewness values were within the reference range of ± 3 , indicating that the data were normally distributed (Johnson & Christensen, 2020). The research examines how mindfulness modifies the effect of creative thinking on reflective thinking. This means that the moderating effect is used to understand how the effect of X on Y increases or decreases with W (Hayes, 2018). NVIVO 14 package program was used in the qualitative part of the study. Flexibility, creativity, and diversity were aimed at qualitative data analysis (Flick, 2022). Gunbayi (2023) classified qualitative data analysis as "theme analysis, descriptive analysis, content analysis, and analytical generalization". In this study, the data obtained through the semi-structured interview form were subjected to theme, descriptive, and content analyses, and were elaborated with analytical generalization in the discussion section. Fleiss Kappa analysis was performed for the reliability of the coding and the inter-coder reliability coefficient [$\kappa=.815$ $t=17.100$ $p=.001$] was found. This high value indicates that the inter-coder reliability is significantly high (Gwet, 2021).

RESULTS

In the quantitative part of the study, findings on the distribution levels of creative thinking, reflective thinking, and mindfulness are presented in Table 3, and findings on the regulatory role of mindfulness in the effect of creative thinking on reflective thinking are presented in Table 4; In the qualitative part, the findings on how creative thinking, reflective thinking and mindfulness are defined when evaluated from the perspective of teaching are given in Table 5, and the findings on how mindfulness plays a regulatory role between creative thinking and reflective thinking when evaluated from the perspective of teaching are given in Table 6.

Table 3. Correlation and descriptive statistical analysis results of scales.

Scales	Creative Thinking	Reflective Thinking	Mindful Attention Awareness	Mean	Std.Dev.
Creative Thinking	1			4.03	.438
Reflective Thinking	.824**	1		4.05	.304
Mindful Attention Awareness	.196**	.420**	1	4.28	.447

* $p<.05$; ** $p<.01$; *** $p<.001$ n=384



When the arithmetic mean and standard deviation values of the scales were examined, creative thinking was $4.03 \pm .438$ reflective thinking $4.05 \pm .304$ mindfulness $4.28 \pm .447$ were found. These values showed that teachers' creative thinking, reflective thinking, and mindfulness scores tended to increase. When the correlation analysis results were examined, there was a positive and statistically significant relationship between creative thinking and reflective thinking [$r=.824^{**}$], a positive and statistically significant relationship between reflective thinking and mindfulness [$r=.196^{**}$], and a positive and statistically significant relationship between mindfulness and reflective thinking [$r=.420^{**}$]. The highest relationship was found between creative thinking and reflective thinking. The findings regarding the moderating role of mindfulness in the effect of creative thinking on reflective thinking are given in Table 4.

Table 4. Analysis results on the moderating role of mindfulness in the effect of creative thinking on reflective thinking.

Variables	β	SE	t	p	Reflective Thinking (Y)	
					LLCI	ULCI
Creative Thinking (X)	.522	.0182	28.722	.001***	.486	.558
Mindful Attention Awareness Level (W)	.168	.0180	9.358	.001***	.132	.203
X*W (Interaction)	.129	.0332	3.906	.001***	.064	.195

* $p < .05$; ** $p < .01$; *** $p < .001$ $n=384$. $F_{(3,380)}=397.337$ $p=.001$ *** $R=.870$ $R^2=.758$ LLCI= Sub-Confidence Interval; ULCI= Upper Confidence Interval.

When the analysis results regarding the moderating role of mindfulness in the effect of creative thinking on reflective thinking are analyzed in Table 4, creative thinking positively and significantly affects reflective thinking [$\beta=.522$, $t=28.722$ 95% CI (.486, .558), $p=.001$] and mindfulness positively and significantly affects reflective thinking [$\beta=.168$, $t=9.358$ 95% CI (.132, .203), $p=.001$]. On the other hand, when mindfulness and creative thinking were included in the model together as an interactional term, they positively and significantly affected reflective thinking [$\beta=.129$, $t=3.906$, 95% CI (.064, .195), $p=.001$]. In addition, the interactional term explained approximately 75.6% of the model as a moderating variable ($R^2=.758$). The significant effect of the interactional term on the model is evidence that mindfulness has a moderating role. To test whether the effects of creative thinking on reflective thinking are significant when mindfulness is low, medium, and high, a slope graph was drawn and given in Figure 1.

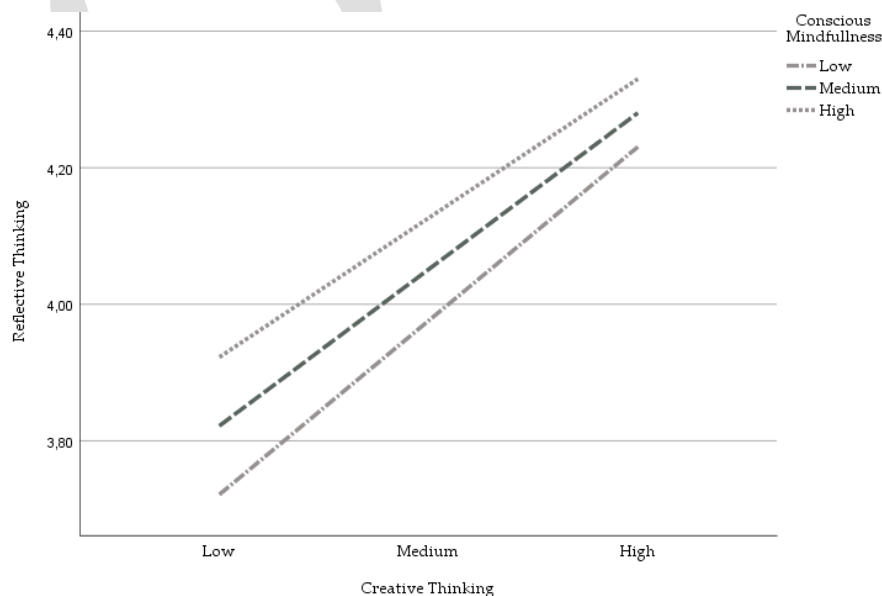


Figure 1. Graphical representation of regulatory variable effects (creative *thinking* x, reflective thinking y, and mindfulness w).



When the moderating effects of mindfulness on the relationship between creative thinking and reflective thinking are examined, the slope graph shown in Figure 1 clearly shows how mindfulness levels affect this relationship. When mindfulness is low, the relationship between creative thinking and reflective thinking is significant [$\beta=.464$, $t=18.183$, $p=.001^{***}$ 95% CI (.414, .514)]. This shows that there is a strong link between creative thinking and reflective thinking even at low levels of mindfulness. When mindfulness is at a moderate level, this relationship becomes stronger [$\beta=.522$, $t=28.722$, $p=.001^{***}$ 95% CI (.486, .558)]. When mindfulness is high, the relationship between creative thinking and reflective thinking becomes the strongest [$\beta=.580$, $t=27.351$, $p=.001^{***}$ 95% CI (.538, .622)]. In general, the beta coefficient tends to increase as the level of mindfulness increases, indicating that mindfulness strengthens the relationship between these two types of thinking. The confidence intervals (CI) of the findings do not include the zero value, which reveals that the results are statistically significant and reliable. Based on these findings, it can be concluded that mindfulness plays an important moderating role in the effect of creative thinking on reflective thinking. Table 5 presents the meta-themes, categories, and sub-themes of how teachers defined creative thinking, reflective thinking, and mindfulness from their perspectives.

Table 5. Themes, categories, and sub-themes related to creative thinking, reflective thinking, and mindfulness.

Main Theme	Category	Sub-Theme	A	B	C	D	E	F
Creative Thinking	Innovation Search	Preferring New and Different Ones	✓		✓		✓	✓
		Creating a New Idea and Product		✓		✓	✓	
		Ability to combine ideas with a new purpose		✓	✓	✓	✓	✓
	Curiosity	Don't Be Curious about Interesting Events, Situations, and Objects	✓	✓	✓			
		Don't Be Curious About What's Going on Around		✓		✓	✓	
	Flexibility	Ability to look at events from different perspectives	✓		✓	✓		
Ability to Think Independently		✓	✓	✓			✓	
Reflective Thinking	Mirroring	Ability to reflect on past learnings		✓		✓	✓	
		Using New Materials and Activities		✓	✓	✓		
		How to Skillfully Introduce and Explain a New Topic	✓		✓	✓		
	Understand	Ability to leave the subject incomplete and complete it		✓	✓		✓	
		Understanding the Individual Needs of Students			✓	✓		✓
Mindful Attention Awareness	Awareness	Focus on Everything That Happens	✓	✓		✓		
		Be Aware of What You Are Doing	✓		✓		✓	
		Paying Attention to What They Are Doing	✓	✓	✓	✓		
	Becoming Conscious	Don't Do What You Do Consciously		✓		✓		✓
		Being Aware of the Past and the Future	✓		✓		✓	

When the findings of the upper themes, categories and sub-themes related to creative thinking, reflective thinking and mindfulness are examined in Table 5, it is stated that the sub-themes of "preferring new and different ones, revealing a new idea and product, combining ideas with a new purpose" to the "Novelty Search" category, "curious about interesting events, situations and objects, The category of "Curiosity" was reached from the sub-themes of "wondering about what is happening in the environment", and the category of "flexibility" was reached from the sub-themes of "being able to look at things from different angles, to think independently". Regarding the upper theme of reflective thinking, the category of "Reflection" was reached from the sub-themes of "reflecting past learning, using new materials and activities, skillfully introducing and explaining a new subject", and the category of "Comprehension" was reached from the sub-themes of "leaving the subject incomplete and completing it, understanding the individual needs of the students". Regarding the upper theme of mindfulness, the category of "Being Aware" was reached from the sub-themes of "focusing on everything that occurs, being aware of what they are doing, paying attention to the work they do", and



the category of "Being Conscious" was reached from the sub-themes of "doing what you do consciously, being aware of the past and the future".

Teachers' statements regarding the categories of creative thinking, novelty seeking, curiosity, and flexibility are as follows:

"... When I think of creative thinking, I think of looking for innovation, I can call it creative thinking to prefer new and different ones." (A, M)].

"... I think creative thinking is curiosity, and through curiosity, we can develop creative thinking. I think being curious about interesting events, situations and objects around me is creative thinking." (B, F)].

"... Creative thinking means flexibility, not obeying authority, or being independent. You can only be creative by being able to think independently." (F, M)].

Regarding the upper category of reflective thinking, reflection, and comprehension categories, teachers' statements are as follows:

"... Reflective thinking is being able to reflect on past learning. It is to be able to reflect whatever object, event, information we have learned in the past to the new." (D, M)].

"... As a teacher, when I think of reflective thinking, I think of using new materials and activities. This is how I can reflect my old knowledge and experience." (C, M)].

"... Reflective thinking is being able to reflect on the topics I have learned in the past on new topics. In this way, I can skillfully explain and introduce a new topic." (A, M)].

Teachers' statements regarding the upper category of mindfulness, being aware, and being conscious are as follows:

"... Mindfulness means focusing on everything that is happening. In this way, awareness is realized by using consciousness." (A, M)].

"... Mindfulness is being aware of what you are doing. Mindfulness is the basis of mindfulness." (C, M)].

"... Teachers who are aware of the past and the future have high levels of mindfulness. I would describe the level of mindfulness as a combination of the past and the future." (E, M)].

When evaluated from the perspective of teachers, the findings and comments on the moderating role of mindfulness in the relationship between creative thinking and reflective thinking are presented under this heading. The parent themes, categories, and sub-themes created for the subject are given in Table 6.

Table 6. Theme, category, and sub-themes related to the moderating role of mindfulness in the relationship between creative thinking and reflective thinking.

Main Theme	Category	Sub-Theme	A	B	C	D	E	F	
The Moderating Role of Mindfulness in the Relationship Between Creative Thinking and Reflective Thinking	Regulating Mindfulness	Learning from Your Experiences	✓		✓	✓		✓	
		Self-Awareness		✓	✓	✓	✓		
		Facilitating a Sense of Acceptance	✓		✓		✓	✓	
		Be Aware of What You Are Doing	✓	✓		✓			
		Focus on Work	✓		✓	✓	✓		
	Regulating Awareness	Be Conscious of What You Do		✓			✓		✓
		Mindfulness in Seeking Innovations	✓		✓			✓	
		Awareness of Curiosity		✓	✓	✓	✓	✓	
		Awareness of Different Perspectives	✓				✓	✓	
		Be Aware of Past Learning		✓	✓	✓			✓
		Be aware of the level of reflection	✓		✓		✓	✓	

When the findings of the upper themes, categories, and sub-themes created regarding the regulatory role of mindfulness in the relationship between creative thinking and reflective thinking are examined in Table 6, it is stated that "learning from what you have experienced, being aware of oneself, facilitating the sense of acceptance, being aware of what you are doing, focusing on work, being aware of what you are doing" "Regulating Being Conscious" category, "awareness in searching for innovations, being aware of the sense of curiosity, being aware of different perspectives, being aware of past learning, being aware of the level of reflection, being aware of the level of reflection" from the sub-themes of "Regulating Awareness" category was reached.



Regarding the category of regulating awareness between creative and reflective thinking, the teachers' statements are as follows:

"... Creative thinking and reflective thinking are related concepts. The two complement each other. Between these two, mindfulness regulates being conscious by learning from what it has experienced, being aware of itself, and focusing on work." (C, M)].

"... Mindfulness regulates the relationship between creative thinking and reflective thinking through the teacher's self-awareness, facilitating the sense of acceptance, focusing on work, and being conscious." (E, M)].

"... By learning from what we do, being aware of what we do, it can strengthen the relationship between creative thinking and reflective thinking. This can only be regulated by being conscious." (F, M)].

Regarding the category of regulating awareness between creative and reflective thinking, the teachers' statements are as follows:

"... Mindfulness plays a regulating role in the relationship between creative thinking and reflective thinking. A sense of curiosity and awareness of past learnings can regulate this." (B, F)].

"... Mindfulness between creative thinking and reflective thinking can have a regulatory role by being aware of the sense of curiosity, being aware of the search for innovations, being aware of different perspectives, being aware of the level of reflection, in short, regulating awareness." (E, M)].

"... Mindfulness can have a moderating role between creative thinking and reflective thinking by regulating awareness. However, this can be like this. By being aware of past learning and being aware of the level of reflection, it can perform the regulatory mechanism. I would call it mindfulness regulation in the relationship between creative thinking and reflective thinking." (F, M)].

DISCUSSION, CONCLUSION, and RECOMMENDATIONS

In the quantitative part of this research, which includes both quantitative and qualitative findings, it was concluded that teachers' creative thinking, reflective thinking, and mindfulness distribution levels tend to increase; there is a positive and statistically significant relationship between creative thinking, reflective thinking, and mindfulness; and mindfulness has a regulatory role in the effect of creative thinking on reflective thinking. The fact that teachers' creative thinking, reflective thinking, and mindfulness distribution levels tend to increase is similar to the studies of Duban & Yelken (2010) and Zümbül (2019). The fact that there is a positive and statistically significant relationship between creative thinking and reflective thinking is similar to the studies of Aşkın Tekkol & Bozdemir (2018), Altın & Saracaloğlu (2018), Çelik & Dikmenli (2021), Erol et al. (2019) and Yıldız & Yılmaz (2020); and the positive relationship between mindfulness and reflective thinking is similar to Baysal & Demirbaş (2012). The emergence of original and new things is different from what is known as creative thinking (Tay & Öcal, 2015). People's ability to reflect on what they have learned in new situations is also expressed as reflective thinking (Uygun & Çetin, 2014). From this point of view, it seems inevitable that both creative thinking and reflective thinking are interrelated concepts. We can say that the individual's choice to think in an open and receptive way without avoiding or judging the experience (Tatlıoğlu & Deniz, 2011) regulates the relationship between creative thinking and reflective thinking as mindfulness. Because it was found that high levels of mindfulness change the direction of the relationship between creative thinking and reflective thinking positively (Table 4). At the same time, when mindfulness was low, the relationship between creative thinking and reflective thinking was found to be both high and statistically significant (Figure 1). This can be explained by the fact that these concepts are related to each other. From this point of view, teachers' high level of mindfulness increases the level of reflective thinking as well as creative thinking. Therefore, we can say that mindfulness has a regulatory role in the relationship between creative thinking and reflective thinking.

In the qualitative part of the study, it was concluded that when evaluated from the perspective of teaching, creative thinking was defined as "seeking innovation" by preferring new and different ones, creating a new idea and product, combining ideas with a new purpose, "curiosity" with being curious about interesting events, situations, and objects, "curiosity" with being curious about what is happening in the environment, "flexibility" with being able to look at things from different angles and think independently. Reflective thinking was defined as reflecting on past learning, using new materials and activities, skillfully introducing and explaining a new topic, and "reflecting", leaving a topic incomplete and having it completed, understanding students' individual needs and



"understanding". They defined mindfulness as "being aware" by focusing on everything that happens, being aware of what they do and paying attention to what they do, being conscious of what they do, and being aware of the past and the future. On the other hand, in the relationship between creative thinking and reflective thinking, it was concluded that mindfulness has a regulatory role in the mechanisms of learning lessons from what they have experienced, being aware of themselves, facilitating the sense of acceptance, being aware of what they have done, focusing on work and being aware of what they have done, and "regulating mindfulness", awareness in seeking innovations, being aware of the sense of curiosity, being aware of different perspectives, being aware of past learning, being aware of the level of reflection and "regulating mindfulness". Edwards (2008) defined creative thinking skills as "focusing, searching for what is overlooked, focusing on the goal..." Guilford (1968) "flexibility, coping with complexity..." Torrance et al. (2008) classifies it as "being aware and using emotions, combining and synthesizing, looking from different perspectives, curiosity...". In the study, when teachers' definitions of creative thinking were analyzed, the categories of novelty seeking, curiosity, and flexibility were obtained. This result is similar to the results of Edwards (2008), Guilford (1968) and Torrance et al. In addition, Torrance (1972) characterizes individuals who are flexible, novelty-seeking, fluent, and original thinkers as creative. What is meant by novelty seeking is the effort to come up with a new idea and product. In the sense of curiosity, it is curiosity about what is happening in the environment. In the concept of flexibility, what is meant is the ability to look at events, objects, or situations from different perspectives and to think independently without being subjected to any authority and obstacles. This result is also similar to Guilford's (1968) "mind structure model". From this point of view, we can say that teachers being flexible, having a sense of curiosity, and seeking innovation are important components in terms of having creative thinking. Dewey (1933) classifies reflective thinking skills as "having an open mind, being willing and taking responsibility...". In his reflective thinking model, Farrah (2012) refers to reflective thinking in general with the concept of "reflection" as "before reflection, during reflection, and after reflection". In the study, when teachers' definitions of reflective thinking were analyzed, the categories of reflection and understanding were obtained. This result is similar to the results of Dewey (1993) and Farrah (2012). On the other hand, Taggart & Wilson (2005) see reflective thinking as the process of making a logical decision by generating ideas on an educational problem and evaluating and interpreting this decision. Therefore, teachers' past learning, developing the materials they used in their past learning and using them in new activities, skillfully introducing and explaining a new subject can be explained by the concept of reflection. According to Demir & Arslan (2021), teachers' reflective thinking positively affects both their professional attitudes and the teaching process. In addition, completing the subject by leaving it incomplete with comprehension category activities and conducting reflective thinking activities by understanding the needs of individual students show teachers' reflective thinking activities. Therefore, we can say that it is important for teachers to reflect on what they have learned and improve themselves in terms of comprehension activities in terms of reflective thinking. In the study, when teachers' definitions of mindfulness were examined, the categories of being aware and being conscious were obtained. This result is similar to the results of Brown & Ryan (2003), Germer (2004) and Lau et al. (2006). In the study, when teachers' definitions of mindfulness were analyzed, the categories of being aware and being mindful were obtained. According to Brown & Ryan (2003), mindfulness is the awareness and consciousness of the individual's inner world and stimuli such as the environment and others. Germer (2004) defines mindfulness as focusing on the present moment without focusing one's attention on the past or the future. From this point of view, teachers' focusing on everything at the moment, being aware of what they do, and paying attention to what they do were categorized as "being aware" in mindfulness, and acting consciously and being aware of the past and future were categorized as "being conscious" in mindfulness. This result is also similar to the literature of Lau et al. (2006) and Coffye & Hartman (2008). Because mindfulness is the state of creating awareness by participating in mindfulness meditation. In addition, in mindfulness, there is a state of being aware of all experiences and perceiving what happened as close to reality. Therefore, we can say that it is important for teachers to be aware and conscious in terms of mindfulness. Teachers state that mindfulness has a regulating role in the relationship between creative thinking and reflective thinking



with the categories of "regulating being conscious and regulating being aware". Torrance (1972) characterizes individuals who are flexible, novelty-seeking, fluent and original thinkers as creative thinkers. Dewey (1933), on the other hand, refers to individuals who are open-minded, willing and take responsibility as individuals with reflective thinking. As can be seen, both creative thinking and reflective thinking are related and interrelated concepts. These two related concepts indicate that only the concepts of "being conscious and being aware" regulate mindfulness. This situation also shows that the increase in teachers' mindfulness levels also increases the relationship between creative and reflective thinking. According to Coffye & Hartman (2008), mindfulness is defined as the state of creating awareness. The fact that teachers are conscious and aware shows that they play a regulatory role in the relationship between creative thinking and reflective thinking. In light of these results, the following suggestions were developed for the research and researchers. Limitations of the study are also given in detail below.

Limitations of the Study and Recommendations

The first limitation of this study was to explain to teachers how a variable plays a regulatory role. This situation was overcome with difficulty by associating with current examples. The second limitation was experienced in finding teachers with ten years or more seniority who had done postgraduate studies with the variables of creative thinking, reflective thinking, and mindfulness. Because, considering the difficulty of overcoming the first limitation of the research, working with a teacher who was not familiar with these concepts would mean that the research would not be finalized. The third and last limitation was the use of ready-made measurement tools due to the time problem. Consequently, the number of measurement tools created for these concepts is quite small and needs to be organized in terms of their application to teachers working in educational institutions. Although CFA analyses and reliability analyses were conducted, a measurement tool developed with the scale development sub-design of the mixed method research, exploratory sequential design, and trying to measure these variables would be more valid and more reliable for educational institutions. This situation also constitutes a scientific gap for researchers who will work with these variables in the future. In addition, time limitations, participant adequacy, and study design limitations may have been experienced. Since the research was conducted in a specific period, it may be affected by seasonal or temporary factors. This may affect the validity of the findings in general. There may be individual differences and experiences that affect teachers' levels of creative thinking, reflective thinking and mindfulness. This may make it difficult for the results of the study to provide a general measure. About the use of mixed methods, there may be methodological challenges and consistency issues in integrating quantitative and qualitative data. This may affect the accuracy and reliability of the results. Based on these limitations, the following recommendations are made.

Recommendations for Practitioners

In this study, it was determined that mindfulness has a regulatory role in the relationship between creative thinking and reflective thinking. In this respect, the concept of mindfulness should be given as a related concept in creative thinking and reflective thinking trainings and curricula to be given to teachers by the ministries of education.

Recommendations for Researchers

In this study, creative thinking, reflective thinking and mindfulness measurement tools were used readily due to the time problem. However, with the scale development sub-design of the mixed method exploratory sequential design, the development of more useful and advanced measurement tools for educational institutions is of urgent importance in terms of the relevant literature.

Ethics and Conflict of Interest

It was confirmed that this study's author has contributed sufficiently to the research. He also confirmed that it acted following ethical rules at all stages of the research as stated in the approval granted by the Ethics Committee of Çukurova University (Date:22.06.2023, number: E-95704281-604.02.02-731555). There is no conflict of interest between the authors.



Contribution Rate of Authors

All authors' contributions to the article are equal in every aspect. All authors have read and agreed to the published version of this work.

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AN ANALYSIS OF THE EFFECT OF USING COLLABORATIVE STORY MAPS ON STORY WRITING SKILLS

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Abstract

The aim of the study is to investigate the effect of story writing on the story writing skills of primary school students with the collaborative story map method. This quantitative study has a quasi-experimental design with a pretest-posttest comparison group. The study group consists of 131 primary school 2nd-grade students, 60 boys and 71 girls. There are two experimental groups and one control group in the study. The study lasted 12 weeks and 2 class hours per week. In the collaborative story map writing group, story writing was practiced with a collaborative story map. In the individual story map writing group, story writing work according to the individual story map. In the control group, a free story writing activity was conducted. The data were collected through the Story Grammar Elements Rating Scale. T-Test and ANOVA were used to analyze the data. In conclusion, writing stories with primary school students in the method of collaborative mapping and individual story mapping improves students' story writing skills. However, there is no difference between preparing a story map collaboratively or individually in terms of story writing skills.

Keywords: Collaborative writing, story map, primary school.

INTRODUCTION

Writing is defined as the expression of knowledge, feelings, opinions, wishes, dreams and events in the mind by using certain symbols and signs (Akyol, 2018; Coşkun, 2014; Güneş, 2019). It is also one of the most powerful tools used in communication (Akyol, 2018). In addition to communicating, individuals write to record, share and preserve knowledge and experiences, convey their feelings and thoughts, create imaginary stories, learn, think, entertain, inform or persuade others, make discoveries about themselves and the meaning of events, meet their daily needs, and to achieve success (Arıcı & Urgan, 2013; Graham, 2019; Graham, Gillespie, & McKeown 2013; Karadağ Yılmaz & Erdoğan, 2019). In this respect, writing is a skill that an individual may need at every stage of life, making various contributions to it.

Graham & Alves (2021) describe writing as a fundamental skill that students must master in order to fully enjoy their educational, professional and civic responsibilities. However, writing skills develop later than other skills and is more difficult to learn since its development depends on many other skills (Dunsmuir & Clifford, 2003; Graham & Harris, 2009). It is a complex process that requires coordination of many high-level cognitive and metacognitive skills rather than knowledge (Anılan, 2005; Graham & Alves, 2021; Nguyen & Nguyen, 2022; Olinghouse & Wilson, 2013). The complex and multifaceted structure of writing makes writing education important. As such, the aim of writing education is to improve the linguistic and communicative skills of the individual, to develop skills such as thinking, understanding, questioning, classification, analysis-synthesis, and to foster the ability to express feelings and thoughts (Coşkun, 2005; Güneş, 2019).



In line with the purpose of writing education, raising talented writers may take more time than other skills. Therefore, devoting a significant amount of time to the development of writing skills, offering individuals experiences, and giving instructor assistance is crucial (Applebee et al., 2017). Many methods and techniques are used in fostering writing skills, which are implemented before, during or after writing. Especially the methods and techniques used before writing are important as they affect the way the writing process unfolds. This is because most of the writing methods are used in the pre-writing stage and by revealing the individuals' prior knowledge, students are motivated towards writing (Uysal & Sidekli, 2020).

The related research has shown that the activities used before writing improve students' writing skills in a positive way (Doğan & Müldür, 2014; Sidekli & Uysal, 2017; Susar Kırmızı & Beydemir, 2012). With pre-writing activities, the individual determines the subject and purpose of the text to be written, makes a plan about the text, organizes his/her information and creates a road map, which prevents the emergence of problems in the writing process, and facilitates it.

One of the methods widely used before writing is the story map, which includes the elements of scene and time, main and auxiliary characters, starter event, problem, problem solutions, conclusion, main idea, and reaction (Akyol, 1999). At the preparation stage, the individual is expected to identify and organize these elements. Determining the story elements helps draw the frame of the story and to make a visual description. While students plan their stories with the use of a story map, it helps students distinguish between important and unimportant information, focus on important details, comprehend story elements and visualize the story (Akyol, 2019). The application of the story map method facilitates students' generate ideas in the process of writing a narrative text. The story map helps students develop their critical thinking (Yunda, Komariah, & Burhansyah, 2017), imagination, thoughts and feelings by actively participating in the learning processes (Latifah & Rahmawati, 2019). It also provides students with the opportunity to plan, control and evaluate (Sidekli, 2013).

The related research findings confirm the positive effects of using story maps on students' writing skills, and concluded that the story map is effective in teaching story writing, and it is effective in determining the focus theme, creating a story frame, developing ideas consistently and developing content (Adesty, 2016; Allo, Wahibah, & Thayyib, 2020; Chairunisa, Nurchurifiani, & Marcella, 2022; Al-Shiblaway, 2020; Ibnian, 2010; Sivrikaya & Eldeniz Çetin, 2018; Usman, Safitri, & Marhum, 2019; Yuliana, 2017; Yunda, Komariah, & Burhansyah, 2017; Zikri, Taufina, & Marlin, 2020).

While writing is traditionally viewed as an individual activity, the importance of collaborative writing has become clear in recent years. As education shifted towards learner-centered collaborative learning, collaborative writing also attracted attention (Mohamadi Zenouzagh, 2020). Collaborative writing is defined as the co-production of a text by more than one writer and an activity that requires each writer to participate in all stages of the writing process, taking responsibility and ownership of the entire text (Storch, 2011; Storch, 2019). Collaborative writing is based on Vygotsky's social constructivist learning theory and has an important role in language learning (Shehadeh, 2011; Le, 2022). Collaborative writing is an effective method to improve the writing process and social relations. Collaborative writing increases social interactions among students, enables them to take responsibility, helps them determine their learning styles, encourages critical thinking and develops social skills (Deveci, 2018; Fung, 2010).

Studies on collaborative writing have concluded that it is an effective way to improve students' writing skills and social skills (Mazdayasna & Zaini, 2015; Pham, 2023; Pratiwi, 2020; Rezeki & Rahmani, 2021; Shehadeh, 2011; Storch, 2011; Villarreal & Gil-Sarratea, 2019) and students find this type of work enjoyable (Shehadeh, 2011).

Many previous studies have shown that story map and collaborative writing, which are pre-writing methods, are effective on improving writing skills. The current study, unlike other studies, focuses on preparing for writing with the collaborative story map method. In previous studies on collaborative writing, the samples consisted of secondary school, high school and university students, and focused



on the purpose of producing shared texts. This study was conducted with primary school 2nd-grade students. Since students at this grade level in Turkey are 7-8 years old on average, their writing skills are just developing, and they do not have enough experience to write collaboratively. This led to making the study in the form of collaborative story map preparation rather than collaborative writing, because it is convenient for students in the planning stage of preparing the collaborative story map before writing.

When students create a story map with their classmates, they benefit from the advantages of collaborative learning to prepare a more detailed story map, define the story elements better, and thus create a wider-framed picture by making a better description for their stories. Thus, this process enables students to write better stories. As such, the aim of the study is to investigate the effect of story writing on the story writing skills of primary school students with the collaborative story map method. Therefore, the research questions were formed as follows:

1. Is writing with a collaborative story map effective in improving students' story writing skills?
2. Is there a difference between preparing a collaborative story map and an individual story map in terms of their effect on story writing skills?
3. Is there a difference between the story writing skills of the experimental groups and the control group?

METHOD

Model of research

This quantitative study has a quasi-experimental design with a pretest-posttest comparison group (McMillan & Schumacher, 2006). This design is preferred because of the difficulty of forming groups in which the participants are randomly assigned in the classroom environment in schools (Baştürk, 2009). The interventions were carried out in three classrooms (groups), which were determined to be suitable for the purpose of the study, without disturbing the existing classroom settings. Of these three groups, two were experimental and one was the control group, and the effect of the interventions was examined by comparing their pretest and posttest scores. The activities performed with the groups are presented in Table 1.

Table 1. Activities carried out with the groups.

Groups	Activity	Pre test - Post test
Experimental 1	Writing with a Collaborative Story Map	Narrative texts written by students without any intervention
Experimental 2	Writing with an Individual Story Map	
Control Group	Story writing	Story Elements Rating Scale

Study group

The study was conducted with 131 2nd grade students, 60 boys and 71 girls, in a socioeconomically middle school in one of the eastern provinces of Turkey. Sample size was calculated by G-power analysis. In the calculation, with an effect size of .4, a bias of .05, a confidence interval of .95, and a population representativeness of .95; the sample was calculated as 102 people. The sample of this study consisted of 131 students. The students learned to read and write first, sometimes face-to-face and sometimes through distance education, due to the restrictions during the pandemic period. Although the special situation of the students participating in the study, such as learning disability, was not the same, all of them could read and write. We first administered a pre-test to the participants. We determined that the pre-test scores of the groups were close and then the groups were randomly assigned to the conditions. Because it was not possible to disrupt the structure of the classes for a long time. Therefore, we assigned the groups to the conditions without disturbing the structure of the classrooms. We determined the groups as collaborative story map, individual story map and control



group. Since the gender distribution in the groups was close to each other, we did not intervene in the numbers. The numbers of the participants are as in Table 2.

Table 2. Number of participants.

Participants	Boy	Girl	Total
Experimental 1 (Writing with a collaborative story map)	17	26	43
Experimental 2 (Writing with an individual story map)	22	22	44
Control group	21	23	44
Total	60	71	131

Looking at the Table, it is clear that the number of students in the groups is very close, but overall, the number of girls is higher than that of the boys.

Data collection tool

The data were collected through the *Story Grammar Elements Rating Scale*. The scale was adapted from Harris and Graham's (1996) Scale for Scoring the Inclusion and Quality of the Parts of a Story by Coşkun (2005). There are 8 items in the scale: main character, locale, time, initiating event, goals, attempt, direct consequence, reactions. A story map was prepared for the students according to the *Story Grammar Elements Rating Scale*. This tool was given to the students during the story writing phase. The story map is presented in Table 3 below.

Table 3. Story map.

Story map	
Main character	: Write down the characteristics of the character
Locale	
Time	
Initiating event	: What event does the story start with?
Goals	: What is the goal of the character of the story?
Attempt	: What does the character do to achieve his/her goal?
Direct consequence	: What happens in the end, how do the events end?
Reactions	: What are the reactions of the character?

Intervention and data collection

We did not make any changes for the teachers of the groups. Because we thought that the teacher of the group would carry out this process best. Therefore, each teacher conducted the study in his/her own class during the implementation process. Before starting the implementation, we held a meeting with the teachers of the groups. In the meeting, we informed them about the purpose of the study and the process. In this meeting, we focused on cooperation, individual work, creating story maps, writing texts, evaluating texts and giving feedback to students. Then we made a sample application for teachers.

Before the intervention started, the elements of the story map were explained to three groups and a demonstration was made. Then, the students of all three groups were asked to write a narrative text. The texts written in this process were collected and scored according to the *Story Grammar Elements Rating Scale* and used as a pretest score. Then the intervention process started. During the intervention process,

Collaborative story map writing group: In this group, we practiced collaborative story mapping and story writing for 12 weeks. First, we gave the group an example of writing with a story map. We explained how a story map is prepared and how it is transformed into a text. We prepared a story map together with the students and then asked them to write a text according to this map. Students first prepared a collaborative story map for 2 weeks under the guidance of the teacher. In this process, the teacher wrote a map template on the board and created a map with the help of the students. After the map was prepared, students wrote individual stories according to the map. The teacher checked all the



stories for conformity with the story map and gave feedback to the students about the text. In the next 10 weeks, students chose a partner to collaborate with. Together, students first prepared a story map. Then they presented the story map to the teacher. After the teacher checked the story map, students wrote texts individually. The teacher then checked the text's conformity to the story map and gave feedback to the students about the text. Thus, both the process was monitored and the students were motivated and focused on the work.

Individual story map writing group: In this group, we practiced writing stories with individual story maps for 12 weeks. First, we gave the group an example of writing with a story map. We explained how a story map is prepared and how it is transformed into a text. We prepared a story map together with the students and then asked them to write a text according to this map. During the implementation process, students prepared individual story maps every week. Then they presented the story map to the teacher. After the teacher checked the story map, students wrote texts individually. The teacher then checked the text's conformity to the story map and gave feedback to the students about the text. Thus, both the process was monitored and the students were motivated and focused on the work.

Control Group: In this group, we did a 12-week story-writing exercise. We first informed the group about the story elements. We did a case study showing elements in a story. Then we did a story writing exercise with the students. We did not use a story map in the control group. Each week, students first identified a topic and then wrote a story based on it. Then the teacher presented their stories. The teacher checked the stories and gave feedback to the students.

In addition to the feedback in the texts, an award was given for the teachers in all three groups to collaborate. We used stickers made of emojis. Considering the ages of the students who made up the study group, this award was important. Thus, we aimed to increase the motivation to write in long-term writing work.

In all groups, we gave students 80 minutes to write stories. This process was not in one piece and the students took a break. We did not interfere with the subject in the stories of the students. Students were completely free in this regard. In this process, students wrote stories about real events, memoirs, fiction and creative genres. But mostly the stories were creative and based on real life. Students read their stories to their friends. The stories were displayed on the classroom board. Students in the collaborative story writing group also provided the opportunity to compare stories with their groupmates.

For all three groups, apart from these practices, no extra activity was performed for story writing. At the end of the 12 week implementation period, the students of the three groups were asked to write a story as in the pre-test. The stories were then collected and scored according to the *Story Grammar Elements Rating Scale* and used as the final test score.

Data Analysis

The scores obtained from the texts were scored according to the scale meanings. To test the reliability of the scoring, 50 % of the texts were scored by another rater. The Cronbach's Alpha value between the scores of the two raters was calculated as .981. This result means that the reliability between the raters was high. The internal consistency score was calculated as .703 in the pre-test and .711 in the post-test. These results mean that internal consistency is at a high level.

The analysis revealed that the data obtained showed a normal distribution. Accordingly, t-test and one-way analysis of variance (ANOVA) were applied. The eta-square correlation coefficient was used to calculate the effect size.

RESULTS

In this section, the results of the study are presented. First, the mean, standard deviation and correlation scores of the pretest and posttest scores of the experimental and control groups were shown. Then, the comparison of the pretest scores of the three groups before the intervention, then the



comparison of the pre-test and posttest scores of each group within themselves, and finally the comparison of the post-test scores of the three groups, the findings obtained in the analysis of the data are shown and interpreted with tables and figures.

Table 4 shows the mean, standard deviation and correlation values of the pre-test and post-test scores of the groups.

Table 4. Mean, Std. Deviation, and correlation values of the groups.

Groups	n	Tests	Mean	Std.Dev.	Correlation	Sig. (2-tailed)
Experimental Group 1	43	Pre-test	7.6279	2.1605	.380	.012*
		Post-test	12.4651	2.3639		
Experimental Group 2	44	Pre-test	7.25	1.93048	.263	.084
		Post-test	11.6591	2.32222		
Control Group	44	Pre-test	7.5	1.84895	-.068	.660
		Post-test	8.8409	1.56923		

*p<.05

Before the intervention, an ANOVA test was conducted to determine whether there was a statistical difference between the scores of the groups according to the level of writing narrative texts of the students. The results of the analysis are presented in Table 5 below.

Table 5. Comparison of pre-test results of all groups.

Source of Variance	Sum of Squares	Df	Mean Squares	F	sig.
Between-group	3.223	2	1.611	.41	.665
Within-group	503.297	128	3.932		
Total	506.519	130			

*p<.05

When Table 5 is examined, at the end of the test, the average of the students in the Experimental Group 1 (Mean_{Experimental 1} = 7.6279), the average of the students in the Experimental Group 2 (Mean_{Experimental 2} = 7.2500), the average of the students in the control group (Mean_{Control} = 7.5000) and Dunnett C multiple comparison test, no statistically significant difference was found [$F_{(2,128)} = .41$, $p > .05$], which means that the scores of the three groups were equal at the beginning.

Dependent group t-test analysis was performed to determine whether there was a significant difference between the pre-test and post-test scores of the students in Experiment 1 (writing with collaborative story map) group. The result of the analysis is given in Table 6.

Table 6. Comparison of pretest and posttest scores of experimental group 1.

	Mean	n	Std.Dev.	t	p
Pretest	7.6279	43	2.16050	-12.560	.000*
Posttest	12.4651	43	2.36390		

*p<.05

Looking at the table, a significant difference is observed between the average of the students' story scores before the intervention (Mean_{Pretest} = 7.6279) and the average of the story points after the intervention (Mean_{Posttest} = 12.4651) ($t = -12.560$, $p < .05$). Accordingly, it can be said that collaborative story map and story writing practice affect story writing skills positively.

Dependent group t-test analysis was performed to determine whether there was a significant difference between the pre-test and post-test scores of the students in Experiment 2 (Writing with individual story map) group. The result of the analysis is given in Table 7.

**Table 7.** Comparison of pretest and posttest scores of experimental group 2.

	Mean	n	Std.Dev.	t	p
Pretest	7.2500	44	1.93048	-11.250	.000*
Posttest	11.6591	44	2.32222		

*p<.05

Looking at the Table, a significant difference is observed between the average of the students' story scores before the intervention (Mean_{Pretest} = 7.2500) and the average of the story points after the intervention (Mean_{Posttest} = 11.6591) (t= -11.250, p<.05). Thus, the practice of writing stories with individual story map can be said to affect students' story writing skills positively.

Dependent group t-test analysis was performed to determine whether there was a significant difference between the pre-test and post-test scores of the students in control group. The result of the analysis is given in Table 8.

Table 8. Comparison of pretest and posttest scores of the control group.

	Mean	n	Std.Dev.	t	p
Pretest	7.5000	44	1.84895	-3.550	.001*
Posttest	8.8409	44	1.56923		

*p<.05

Looking at the Table above, a significant difference was found between the mean score of the story written before the intervention (Mean_{Pretest} = 7.5000) and the mean score of the story written after the intervention (Mean_{Posttest} = 8.8409) (t= -3.550, p<.05). As such, it can be safely concluded that the practice of writing stories every week in the control group affects the story writing skills of the students positively. The mean pre-test and post-test scores of all groups are presented in Figure 1 below.

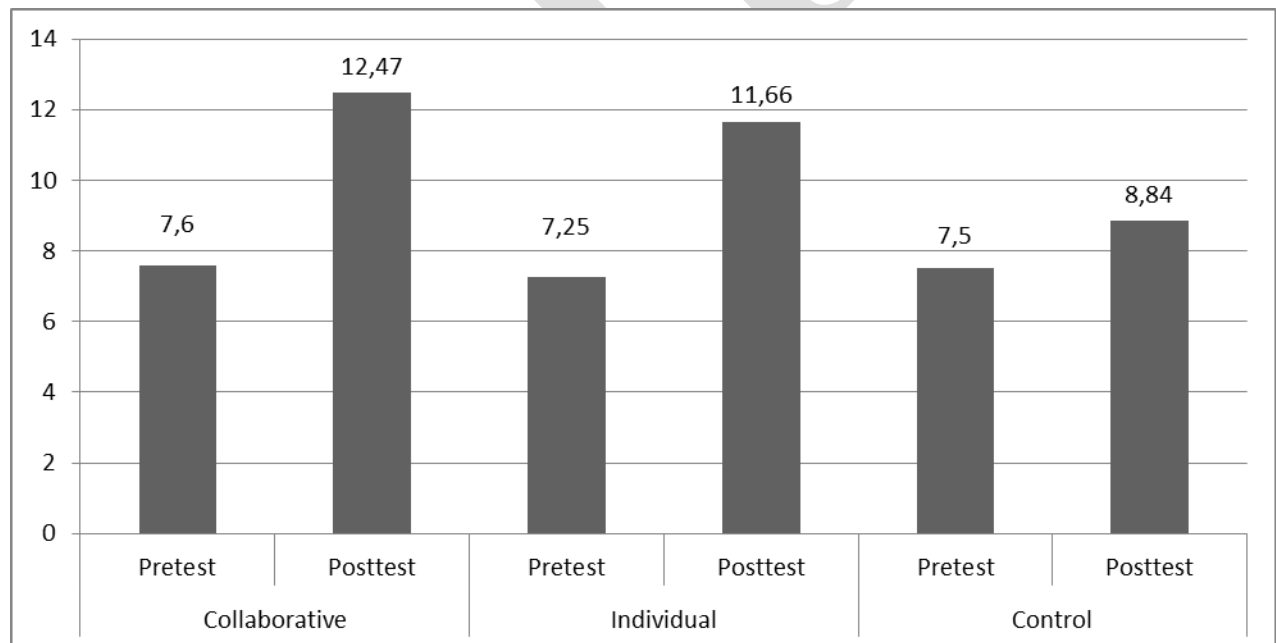
**Figure 1.** Comparison of the pretest and posttest mean scores of the groups.

Figure 1 shows that the scores of the groups were close to each other in the pre-test, while the scores of the groups increased in the post-test. ANOVA analysis was performed to compare the post-test scores of the groups. The results of the analysis are given in Table 9.

**Table 9.** Comparison of posttest results of all groups.

Source of Variance	Sum of Squares	Df	Mean Squares	F	sig.
Between-group	316.461	2	158.230	35.379	.000*
Within-group	572.470	128	4.472		
Total	888.931	130			

*p<.05

The Table above shows the score averages of the students in the Experimental Group 1 (Mean_{Experimental 1} = 12.4651), Experimental Group 2 (Mean_{Experimental 2} = 11.6591), and the Control Group (Mean_{Control} = 8.8409), revealing a statistically significant difference [$F_{(2,128)} = 35.379, p < .05$]. According to the eta-square ($\eta^2 = .356$) value in the effect size calculation, 35.6% of the variance is explained by the independent variable. The Dunnett C multiple comparison test revealed a significant difference between the Experimental Group 1 and the Control Group in favor of the Experimental group, and between the Experimental Group 2 and the Control Group in favor of Experimental Group 2, while there was no significant difference between the Experimental 1 and Experimental 2 groups. Accordingly, writing a story with a collaborative story map and an individual story map gives better results than writing a story without using a story map. However, there is no significant difference between writing with a collaborative story map and writing with an individual story map.

DISCUSSION, CONCLUSION, AND SUGGESTIONS

In this section, the conclusions reached in light of the findings are discussed and suggestions are presented. The study aimed to investigate the effect of using the collaborative writing and story mapping method on primary school students' story writing skills. For this purpose, a 12-week study was conducted with three groups: collaborative story map writing, individual story map writing and control group. Thus, it provided the opportunity to see both the difference of using a collaborative story map compared to the control group and the difference between using the individual story map and the collaborative story map in writing.

It was concluded that writing with a collaborative story map or an individual story map improves the story writing skills of primary school students, which is consistent with the results of previous studies. Previous research has concluded that the story map, which is one of the pre-writing methods, is effective in fostering the story writing skill (Adesty, 2016; Allo, Wahibah, & Thayyib, 2020; Chairunisa, Nurchurifiani, & Marcella, 2022; Al-Shiblaway, 2020; Ibnian, 2010; Sivrikaya & Eldeniz Çetin, 2018; Usman, Safitri, & Marhum, 2019; Yuliana, 2017; Yunda, Komariah, & Burhansyah, 2017; Zikri, Taufina, & Marlina, 2020).

Story maps allow students to make a good plan as they give the opportunity to take a mental snapshot of the text that the student will write before starting to write and make a visual description of it. In addition, the story map helps students enhance their imagination, thoughts, and feelings (Latifah & Rahmawati, 2019), provides the opportunity for planning, control and evaluation in pre-writing, writing and post-writing processes (Sidekli, 2013), and helps distinguish important and unimportant information while planning their stories. Writing with a story map positively affects the ability to write a story, as it helps to focus on important details (Akyol, 2011). Some other studies conclude that collaborative writing makes a strong positive contribution to writing skills (Pratiwi 2020, Rezeki & Rahmani, 2021; Shehadeh 2011; Storch, 2011). This is because collaborative writing is related to social interaction, taking responsibility and sharing, identifying learning styles, and critical thinking. It is useful in many subjects (Deveci, 2018; Fung, 2010; Storch, 2011; Storch, 2019) and fosters language learning (Shehadeh 2011; Le, 2022). Thus, students are expected to write better texts through collaborative writing and improve their writing skills by using it.

In previous studies, the collaborative writing process was in the form of the authors co-producing a text because collaborative writing is expressed as the co-production of a text by two or more authors



(Storch, 2011; Storch, 2019). However, in the current study, students were not asked to produce a single shared text together. Rather than producing a joint text, the students prepared the story map collaboratively and wrote their stories individually. Thus, it was ensured that the students prepared a better story map by collaborating while preparing the story they were going to write and creating the general setting of the story because it was thought that if several students prepared a story map together, they would describe the story elements better, distinguish important and unimportant details better, and thus would write higher-quality texts. Indeed, writing a story with a collaborative story map was found out to have a positive effect on their story writing skills.

The fact that the individual or collaborative preparation of the story map positively affects the story-writing skills of the students is actually an expected result, considering the previous studies. In this study, it was in the form of collaboratively preparing the story map rather than collaborative writing. A significant part of the previous studies was conducted with older students and was carried out in the form of producing a joint text. Since the group in which this study was conducted was primary school students (which corresponds to the age of 7-8 years) and they were still at the beginning of the process of developing their writing skills, they were expected to have difficulties in collaborative writing. Therefore, preparing the story map cooperatively was thought to be more useful for them.

Preparing a collaborative story map was useful in improving story writing skills, but there was no significant difference between preparing an individual story map and a collaborative story map. There could be several reasons for this. The first may be that the process of collaboration was limited to the process of preparing a story map and they wrote their stories individually. Although there was cooperation, the individual writing of the text may not have provided enough interaction and sharing opportunities.

Secondly, due to the young age of the students, when they began the story writing process, they could act individually and wrote their text only on the items on the map. In other words, while writing the story elements with a classmate, the student may have ignored his/her classmate's suggestions and wrote the story only according to the map in his/her mind. This is because stories are a good space for young children to develop their emotions by establishing a relationship between themselves and the hero of the story (Akyol, 2019), to create their own hero and to reveal their imagination. Thus, students may have had difficulty in complying with the cooperative working principles at this point. For example, if this study had been in the form of writing informative texts, it might have had a different outcome. Because informative texts are mostly non-fictional and highlight objectivity, the structure of informative texts may be more suitable for collaboration than narrative texts (Marinak & Gambrell, 2009; Sidekli, 2014). For this reason, it may be more suitable for children at primary school level to cooperate.

In conclusion, writing stories with primary school students in the method of collaborative mapping and individual story mapping improves students' story writing skills. However, there is no difference between preparing a story map collaboratively or individually in terms of story writing skills.

Suggestions

This study shows that the story map method improves the story writing skills of primary school students, and thus using a story map at an early age at the beginning of the writing skill development process will be useful. A second issue is related to how the story map is prepared. In this study, no difference was found between individual and collaborative story map preparation. As such, both methods can be recommended. However, teachers should especially take advantage of collaborative learning and writing. This study did not have any data on how the students cooperated in the process of preparing the story map, the dialogue between the students, and teacher observations. Therefore, further research may collect more data to better explain the difference between collaborative and individual writing.



Ethics and Conflict of Interest

The rules of research and publication ethics were followed at every stage of this study. The ethical approval for this research was obtained from the Ethics Committee of the Harran University Rectorate on 15.02.2024 with the decision number 2024/5. The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Contribution Rate of Authors

The authors contributed equally to the paper. The authors have also read and accepted the final version of the manuscript.

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