

A Correlational Study of Growth Mindset and Fixed Mindset with Creative Writing Performance among EFL Secondary School Learners

Mohsen Ali Muheisen

Corresponding author: mahsenco95@gmail.com

College of Basic Education, University of Diyala

Nada Mohammed Hindi

Corresponding author: Nada_muhamed@uodiyala.edu.iq

<https://orcid.org/0009-0004-4989-2617>

College of Basic Education, University of Diyala

Date of research submission :17/6/2026

Date of publication acceptance : 14/7/2026

Date of publication :29/8/2026



[Creative Commons Attribution 4.0 International License](https://alfatehjournal.uodiyala.edu.iq/index.php/jfath/index)

<https://alfatehjournal.uodiyala.edu.iq/index.php/jfath/index>

<https://alfatehjournal.uodiyala.edu.iq/index.php/jfath/copyright>

Abstract

Creative writing is a crucial skill for English as a Foreign Language (EFL) learners, yet its development is often influenced by various psychological and cognitive factors, such as learners' mindsets. Understanding how beliefs about intelligence shape writing outcomes is essential for improving instructional practices in language classrooms. The present study aims at examining the relationship between growth mindset, fixed mindset, and creative writing performance among EFL secondary school learners in addition to identifying the participants' levels in growth mindset and creative writing performance.

To achieve these objectives, a correlational research design has been conducted. The main sample of the study consists of 250 fifth-grade male students selected from four schools in Baqubah city, (Diyala preparatory school, Al-Markaziya preparatory school, Al-Sharif Al-Radhi preparatory school, and Tooba preparatory

school). In addition, a pilot sample of 100 students from various schools within the same area has been utilized to establish the psychometric properties of the research instruments.

Two instruments are used in the study. The first is a mindset questionnaire while the second instrument is a creative writing test in which students are asked to write in one of the topics selected from their English textbook.

The results revealed a statistically significant correlation between growth mindset and creative writing performance. Moreover, a statistically significant correlation was found between fixed mindset and creative writing performance. The findings also indicated that the participants demonstrated a relatively average level of creative writing performance.

Key words: growth mindset fixed mindset creative writing

دراسة ارتباطية بين عقلية النمو والعقلية الثابتة وأداء الكتابة الإبداعية لدى متعلمي اللغة الإنجليزية كلغة أجنبية في المرحلة الثانوية

محسن علي محيسن

كلية التربية الأساسية، جامعة ديالى

mahsenco95@gmail.com

ندى محمد هندي

كلية التربية الأساسية، جامعة ديالى

Nada_muhammed@uodiyala.edu.iq

<https://orcid.org/0009-0004-4989-2617>

تاريخ استلام البحث : 2026/6/17

تاريخ قبول النشر : 2026/7/14 - تاريخ النشر 2026/8/29



[Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/)

<https://alfatehjournal.uodiyala.edu.iq/index.php/jfath/index>

<https://alfatehjournal.uodiyala.edu.iq/index.php/jfath/copyright>

الملخص

تُعدّ الكتابة الإبداعية مهارة أساسية لمتعلمي اللغة الإنجليزية كلغة أجنبية، إلا أن تطورها يتأثر غالباً بعوامل نفسية ومعرفية متنوعة، مثل عقلية المتعلمين. ويُعدّ فهم كيفية تأثير المعتقدات حول الذكاء على نتائج الكتابة أمراً بالغ الأهمية لتحسين الممارسات التعليمية في فصول اللغة.

هدفت الدراسة الحالية إلى بحث العلاقة بين عقلية النمو والعقلية الثابتة والأداء في الكتابة الإبداعية لدى متعلمي اللغة الإنجليزية لغةً أجنبية في المرحلة الثانوية. وعلى وجه التحديد، سعت الدراسة إلى التعرف على مستوى عقلية النمو والعقلية الثابتة لدى طلبة المرحلة الثانوية، والكشف عن العلاقة الارتباطية بين عقلية النمو والأداء في الكتابة الإبداعية، فضلاً عن الكشف عن العلاقة الارتباطية بين العقلية الثابتة والأداء في الكتابة الإبداعية.

ولتحقيق أهداف الدراسة، تم اعتماد المنهج الارتباطي. وتكونت العينة الأساسية للدراسة من ٢٥٠ طالب من طلبة الصف الخامس الإعدادي تم اختيارهم من أربع مدارس في مدينة بعقوبة، وهي: إعدادية ديالى، والإعدادية المركزية، وإعدادية الشريف الرضي، وإعدادية طوبى. كما تم استخدام عينة استطلاعية مكونة من ١٠٠ طالباً من مدارس مختلفة ضمن المنطقة نفسها للتحقق من الخصائص السيكومترية لأداتي الدراسة.

استُخدمت أداتان في هذه الدراسة. تمثلت الأداة الأولى في استبانة لقياس العقلية، تم تبنيها من مقياس عقلية النمو لـ (Dweck (2006 ومقياس العقلية لتعلم اللغة الإنجليزية لـ (Altigoz (2021. أما الأداة الثانية فكانت اختباراً في الكتابة الإبداعية، حيث طُلب من الطلبة اختيار موضوع واحد من بين عدد من الموضوعات المأخوذة من كتاب اللغة الإنجليزية المقرر ثم الكتابة عنه. وقد تم تقويم الأداء الكتابي للطلبة وفق ستة معايير هي: تطوير الأفكار، والتفكير الإبداعي، والأسلوب، والجوانب الميكانيكية للكتابة واستخدام المفردات، وتكامل الموضوع.

أظهرت نتائج الدراسة وجود علاقة ارتباطية ذات دلالة إحصائية بين عقلية النمو والأداء في الكتابة الإبداعية. كما كشفت النتائج عن وجود علاقة ارتباطية ذات دلالة إحصائية بين العقلية الثابتة والأداء في الكتابة الإبداعية. وبيّنت النتائج أيضاً أن مستوى أداء الطلبة في الكتابة الإبداعية كان منخفضاً نسبياً.

وفي ضوء هذه النتائج، تؤكد الدراسة أهمية تعزيز العقلية الإيجابية لدى متعلمي اللغة الإنجليزية لغةً أجنبية، وتبني ممارسات تعليمية تساهم في تنمية الإبداع وتحسين مهارات الكتابة الفاعلة في صفوف اللغة الإنجليزية.

الكلمات المفتاحية: عقلية النمو، العقلية الثابتة، الكتابة الإبداعية.

1. Introduction

1.1 The Problem of the Study

Writing is considered one of the most essential and complex skills in English as a Foreign Language (EFL) context, as it needs learners to combine linguistic knowledge, organize ideas coherence, and connect meaning effectually (Hyland, 2003). Effective writing goes behind grammatical accuracy to involve creativity, which enables students to produce authentic ideas, show flexibility in thinking, and express themselves in significant ways, creativity in writing is related with higher-order thinking skills such as fluency, originality, and elaboration (Earnshaw, 2014). Hence, creative writing symbolizes an essential component of language learning instead of merely a technical activity (Richards, 2013).

In spite of the recognized importance of writing, Iraqi EFL secondary school learners keep to experience remarkable difficulties in writing performance, research adopted in Iraq has shown that learners often struggle with organizing ideas, maintaining coherence, using appropriate vocabulary, and producing effective written texts and writing direction at the secondary school level often confirms grammatical precision and testing requirements, with little attention given to enhancing creativity and autonomous thinking, consequently, students' compositions mostly lack authenticity and deepness (Nasser, 2019).

It is worth mentioning that writing performance is not affected merely by linguistic competence or instructive methods, but psychological elements, especially learners' beliefs about their abilities, might also play an important role and according to mindset theory, learners who have a growth mindset think that abilities can be evolved through stress and learning, while those with a fixed mindset realize abilities as innate and unchangeable (Dweck, 2006). Research has shown that growth mindset is positively connected with academic achievement, stimulus, and skill evolvment (Burnette et al., 2013). In language learning

contexts, mindset has also been connected to learners' stimulus and performance (Lou & Noels, 2017).

Furthermore, students' mindsets can particularly affect their writing performance as challenging writing tasks are viewed as opportunities for improvement by students with a growth mindset, actively intend feedback, and persevere in effortful functions, which fosters their creative writing abilities (Dweck, 2006; Burnette et al., 2013). On the other hand, learners with a fixed mindset are more likely to avert difficult writing activities, take fewer dangerous, and Formulaic or fewer creative compositions are produced (Lou & Noels, 2017). Therefore, it is reasonable to anticipate that mindset may be a main factor influencing creative writing performance among Iraqi secondary school EFL students (Yeager & Dweck, 2012).

Despite the significance of the impact of factors such as growth mindset on learners' writing performance, no previous studies have investigated the correlation between the two variables particularly in Iraq. Accordingly, the current study is conducted to fill the gap in the field of the study.

1.2 Aims

The study seeks to:

- 1- Identify the level of growth mindset and fixed mindset of EFL secondary school students.
- 2- Investigate the correlation between EFL secondary school learners' growth mindset and their creative writing.
- 3- Investigate the correlation between EFL secondary school learners' fixed mindset and their creative writing.

1.3 Hypotheses

It is hypothesized that:

- 1- There is no statistically significant correlation between EFL secondary school learners' growth mindset and their creative writing performance.
- 2- There is no statistically significant correlation between EFL secondary school learners' fixed mindset and their creative writing performance.

1.4 Limits

This study is limited to:

- 1- Iraqi EFL 5th year preparatory school students in the city of Baqubah, Diyala province, except for the girls' schools.
- 2- The academic year 2025-2026.

1.5 Value of the Study

This study is hoped to be of value to:

- 1- It seeks to the theoretical literature by examining the correlation between growth mindset, fixed mindset, and creative writing performance among secondary school EFL learners.
- 2- EFL teachers to stress the role of students' mindsets in learners' creative writing and adopt strategies that enhance a growth mindset.
- 3- Curriculum designers by highlighting the significance of integrating psychological elements into EFL course contents to promote language skills.
- 4- Educators and researchers who may benefit from study findings.

2. Theoretical Framework

The following sections present the theoretical background and key notions underlying the variables of the present study, growth mindset, fixed mindset, and creative writing performance. They also give an overview of the relevant theories and literature that form the foundation of the study.

2.1 The Conception of Growth Mindset

Growth mindset is a psychological notion evolved by Carol Dweck which refers to the belief that intelligence, capabilities, and talents can be evolved through effort, exercise, and efficient learning strategies. According to Dweck (2006), individuals who embrace a growth mindset view difficulties as opportunities to learn instead obstacles to avert they faith that success is done through persistence, devotion, and continuous improvement.

The notion of growth mindset appeared from research on implied theories of intelligence which clarify to how persons realize the nature of intelligence and personal capabilities which students with a growth mindset believe that intellectual capabilities are scalable

and can be forced through effort and learning experiences therefore, they are more likely to adopt challenges, persevere in the face of difficulties, and learn from critique (Burnette et al., 2013).

In academic settings, growth mindset has acquired large interest because it impacts learners' stimulus, flexibility, and academic accomplishment in addition, students who grasp a growth mindset keep to demonstrate higher levels of participation and perseverance in learning tasks they viewing errors as worthy learning opportunities and are more preparing to take dangers in their learning procedure so this belief system promotes students to evolve adjusted learning attitudes that boost long-term academic success (Claro et al., 2016).

Moreover, growth mindset is closely linked to the evolution of self-learning strategies that is, learners who believe that their capabilities can improve are more likely to get learning aims, observe their advance, and modify their strategies relatedly this proactive approach to learning gives them the green light to overcome academic difficulties and evolve higher grades of efficiency (Yeager & Dweck, 2020).

2.2 Basic Characteristics of Growth Mindset

One of the main characteristics of individuals with a growth mindset is **their readiness to adopt challenges** instead of averting challenge tasks, they see challenges as opportunities for learning and improvement this positive behavior toward hardness promotes them to participate more deeply in academic activities and evolve new skills (Romero et al., 2014).

Another significant characteristic is **perseverance when encounter difficulties** as well as students with a growth mindset usually tend to keep working even when they facing challenges or failure because they believe that effort is a fundamental part of the learning process and that improvement requests time, practice, and dedication (Claro et al., 2016).

In addition, persons with a growth mindset estimate effort as a road to mastery they believe that difficult work guides to success and that capabilities are not fixed as a result, they are more likely

to control and employ time and energy in learning tasks and use effective strategies to face or overcome challenges (Burnette et al., 2013).

Moreover, students with a growth mindset are open to accept feedback and criticism as a valuable source of information that can help them improve their performance rather than feeling disappointed by criticism, they use it constructively to cultivate their skills (Hattie & Timperley, 2007).

Another notable characteristic is **their capability to learn from errors** learners with a growth mindset do not view failure as a reflection of their capabilities but as a normal part of the learning process (Mangels et al., 2006).

Finally, individuals with a growth mindset tend to be **inspired by the success of others** rather than feeling intimidated, they view others' achievements as a motivation for self-improvement and learning (Dweck, 2006).

2.3 The Notion of Fixed Mindset

The notion of fixed mindset is a basic component of mindset theory suggested by Carol Dweck (2006) which proposes that the belief that talents and capabilities are innate traits that cannot be significantly changed and individuals who embrace a fixed mindset tend to perceive their abilities as fixed and predetermined, which affects their attitudes toward learning, effort, and challenges (Elliot & McGregor, 2001).

In educational sets, a fixed mindset can have a negative effect on learners' academic evolution in addition, students who believe that their capabilities are static are more likely to avert challenging tasks, as they fear failure and see it as a reflection of their limited capabilities this avoidance behavior reduces opportunities for learning and skill evolution (Elliot & McGregor, 2001). Moreover, individuals with a fixed mindset frequently connect effort with low ability i.e., they tend to believe that truly talented individuals can succeed without much effort as a result, they are less willing to persist in challenging tasks and are more likely to give up when facing difficulties (Ryan & Mercer, 2012).

Another significant aspect of fixed mindset is the tendency to respond passively to feedback and critique considering them as a personal judgment instead of constructive guidance so this perception can guide to reduced motivation and reluctance to improve their performance (Rattan et al.,2012).

2.4 Creative Writing

Creative writing is overly described as a form of writing that confirms

imagination, authenticity, and personal expression but in contrast conventional academic writing, which focuses on structure and accuracy, creative writing allows students to search ideas freely and express their thoughts in innovative ways (Maley, 2009).

Creative writing, a form of artistic expression, depends on the imagination to move meaning through the use of imagery, narrative and drama and conventionally indicated to as literature, creative writing is an art of sorts -the art of creating things up its writing done in a way that is not academic or technical but still draws an audience while the definition is relatively ambiguous, creative writing can for the most part be examined any writing that is authentic and self-expressive as well as a news article, for instance, cannot be considered creative writing because its main objective is to demonstrate facts and not to express the feelings of the writer while a news article can be entertaining, its main purpose is to exhibit the facts (Sherman,2025).

As stated by Richards (2013), creative writing includes producing texts that reflect authenticity and individuality, enabling students to use language in meaningful and expressive contexts and it promotes learners to go behind memorized patterns and evolve their own voice in writing.

Similarly, creative writing can be characterized as the capability to generate authentic ideas and submit them in written form using suitable language, style, and structure along with it includes basic components such as fluency, elasticity, authenticity,

and description, which are necessary components of creativity in writing (Torrance, 1974).

In the context of EFL learning, creative writing is considered as a significant tool for evolving both linguistic and cognitive skills and it allows students to exercise language in authentic attitudes while simultaneously promoting their imagination and critical thinking capabilities so research has exhibited that engaging learners in creative writing activities can improve their motivation, confidence, and overall writing performance (Hyland, 2003).

Moreover, creative writing is not demonstrated to literary forms like stories and poems, but it also involves any form of writing that includes creativity and self-expression this broader perspective highlights the role of creative writing in helping students evolve their communication competence and express their ideas effectually in a foreign language (Harmer,2007).

2.1.4.2 Creative Writing Versus Writing

Writing, in general, is a complicated language skill that includes the capability to express ideas, organize thoughts, and use suitable linguistic structures to communicate effectually in EFL contexts, writing is often taught with a focus on grammatical accuracy, consistency, and committing to particular formats such as essays, reports, and formal compositions in addition this type of writing is typically indicated to as academic or traditional writing (Hyland, 2003).

In contrast, creative writing focuses greater attention on imagination, authenticity, and personal expression and instead of severely following predefined structures, creative writing allows students to search ideas freely and experiment with language in innovative ways, creative writing enhances students to move behind mechanical use of language and participate in meaningful and expressive communication (Richards,2013).

One of the main differences among creative writing and conventional writing lies in their goals while conventional writing aims to move information clearly and accurately, creative writing seeks to participate the reader, arouse emotions, and present ideas

in unique and imaginative ways and this makes creative writing more elastic and less restricted by strict rules (Morley,2007).

Another significant distinction is related to the role of the student which in traditional writing, students often depend on memorized structures and teacher-guided models, however, in creative writing, students are expected to take a more active role by generating their own ideas, making independent choices, and expressing their personal perspectives, this shift fosters students' autonomy and enhances higher-order thinking skills (Hyland, 2003).

Moreover, creative writing contributes to language evolvement in ways that conventional writing may not fully achieve that it provides opportunities for students to use vocabulary and grammar in original contexts, thereby improving their communicative competence and it also enhances risk-taking, which is needful for language learning and skill evolvement (Maley, 2009).

3. Methodology

3.1 Research Design

The type of study design adopted in the current study is a correlational design which the study is treated as correlational when it aims to determine the extent to which two or more variables are related by obtaining multiple measures from each participant in the sample (Creswell, 2012).

3.2 Population and Sample of the Study

In educational research, the population is often described as the group of participants who share mutual characteristics related to the research problem and selecting a suitable population is essential because it gives the basis for obtaining reliable and meaningful outcomes (Ary et al., 2019).

The population of the present study consists of Iraqi EFL secondary school male students, Diyala province. A population indicates that the whole group of individuals who share common characteristics relevant to the research and from which the sample is drawn.

A sample is a subset of the population selected to represent the entire group (Cohen et al., 2018). The sample of the current study is selected from fifth preparatory school students in four schools in Baqubah city, namely: Diyala Preparatory School, Al-Markaziya Preparatory School, Al-Sharif Al-Radhi Preparatory School, and Tooba Preparatory School. A total of 250 students were chosen as the main sample to engage in the study

3.3 Instruments of the Study

In order to achieve the goals of the present study, two instruments are used to collect the required data. The questionnaire used in the current study is adopted from two scales, Dweck's (2006) growth mindset scale and Altigoz's (2021) mindset scale for learning English. The total number of items is (20), involving both positive and negative statements. This scale allows the researcher to quantify learners' beliefs and analyze their responses statistically.

On the other hand, a writing test is used to measure learners' creative writing performance and it examines an effective tool for evaluating learners' capability to express ideas, organize thoughts, and use language appropriately in written form (Hyland, 2003). In the present study, students are asked to write a composition based on a given topic. Their performance is assessed according to six main criteria: creative thinking, idea development, style, mechanics, vocabulary use, and topic integration.

3.4. Face Validity

Face validity indicates that the extent to which a test appears to measure what it is supposed to measure and whether it is agreeable to experts and test users and it is not only concerned with the appearance of the test, but also to its clarity and appropriateness (Hughes, 2003).

In order to confirm face validity, the instruments of the present study, which are mindset questionnaire and the creative writing test, are presented to a panel of experts in the field of English language teaching and linguistics. The experts are required to assess the items in terms of their clarity, relevance, and suitability

for the research aims and the level of the students. Some adjustments are made to improve the instruments. The experts exhibit their approval on the appropriateness of the instruments after some modifications for the purpose of the study after making the necessary revisions.

3.5 Test Reliability

Reliability is defined as the consistency and stability of the outcomes obtained from a research instrument over time and it refers to the extent to which an instrument produces consistent findings when applied under similar conditions (Cohen et al., 2018). In the present study, the reliability of the instruments is established using a variety of suitable statistical methods.

The reliability of the growth and fixed mindset scales is established using various methods. Cronbach's Alpha coefficient is calculated to measure internal consistency, and the obtained value is 0.72, which refers an acceptable level of reliability. In addition, the split-half method is used to further investigate the reliability of the scale. The Pearson correlation coefficient between the two halves is 0.53, which reflects a moderate level of consistency. When applying the Spearman-Brown formula, the reliability coefficient reveals R-value of 0.70, suggesting an agreement level of reliability. These findings suggest that the scale is reliable and appropriate for use in the current study.

The reliability of the creative writing test is investigated using Pearson correlation coefficient. Two methods are used to ensure the consistency of the test scores. First, test-retest reliability is adopted, and the obtained coefficient is 0.90, which refers a high level of stability over time. Second, inter-rater reliability is calculated by including more than one rater in scoring the students' writing. The second rater is an experienced English teacher at Dhirar bin Al-Azwar preparatory school. The obtained coefficient is 0.89, which reflects a high degree of acceptability among the raters. These outcomes indicate that the creative writing test is highly reliable and appropriate for use in the present study.

4. Results and Discussions

4.1 Results Related to the First Aim

As mentioned in chapter one, the first aim of the study is to identify the level of growth mindset and fixed mindset of EFL secondary school students and the results are presented as follows:

4.1.1 Students' Level of Growth Mindset

As far as the level of growth mindset is concerned, the statistical analysis has demonstrated that the mean score is 21.26 with a standard deviation of 3.81, while the theoretical mean is 15. Moreover, when adopting t-test for one independent sample, results have revealed that the calculated t-value 25.98 is greater than the critical one 1.96 at 0.05 level of significance and 249 degree of freedom. Consequently, the finding is statistically significant, which indicates that the learners have an acceptable level of growth mindset as illustrated in Table 4.1.

Table 4.1
The Mean Score, Standard Deviation and t-Value of the Growth Mindset Scale

Variable	Sample size	Mean	S. D	Theoretical mean	t-Value (Computed)	t-Value (Critical)	Significance (0.05)
Growth mindset	250	21.26	3.81	15	25.98	1.96	Significant

4.1.2 Students' Level of Fixed Mindset

In order to find out students' level of fixed mindset, t-test for on independent sample has been employed. The results have shown that the mean score is 16.41 with a standard deviation of 4.03, while the theoretical mean is 15. Also, the computed t-value 5.64 is greater than the critical value 1.96, suggesting that the outcome is statistically significant, as clarified in the next table.

Table 4.2
The Mean Score, Standard Deviation and t-Value of the Fixed Mindset Scale

Variab le	Sampl e Size	Mea n	S. D	Theoreti cal mean	t-Value (Comput ed)	t- Value (Critic)	Significa nce (0.05)
-----------	--------------	-------	------	-------------------	---------------------	-------------------	----------------------

						al)	
Fixed mindse t	250	16.4 1	4.0 3	15	5.64	1.96	Significa nt

4.1.3 Students' Creative Writing Performance

Students' level of creative writing is also examined through adopting t-test formula for one independent sample. The results have revealed that the mean score of learners' performance test is 17.63 with a standard deviation of 9.11, while the theoretical mean is 18. The calculated t-value 0.64 is lower than the critical one 1.96, which that learners' level of creative writing is average, as illustrated in the table below.

Table 4.3
The Mean Score, Standard Deviation and t-Value of the Creative Writing test

Variable	Sample Size	Mean	S. D	Theoretical mean	t-Value (Computed)	t-Value (Critical)	Significance
Creative Writing	250	17.63	9.11	18	0.64	1.96	Not Significant

4.1.2 Results Related to the Second Aim

In order to Address the second aim of the study" investigating the correlation between EFL secondary school learners' growth mindset and their creative writing", and to verify its hypothesis which states" there is no statistically significant correlation between EFL secondary school learners' growth mindset and their creative writing", Pearson correlation coefficient is employed. The results demonstrate that the calculated correlation value $r = 0.137$ is greater than the critical one 0.12, suggesting that the correlation is statistically significant. See table 4.4

Table 4.4
The Correlation Between Growth Mindset and Creative Writing

Sample Size	Computed r- Value	Critical r- Value	Freedom Degree	Significance
-------------	-------------------	-------------------	----------------	--------------

250	0.137	0.12	248	Significant

4.1.4 Results Related to the Third Aim

In order to investigate the correlation between EFL secondary school learners' fixed mindset and their creative writing, a null hypothesis is formed, i.e., "there is no statistically significant correlation between EFL secondary school learners' fixed mindset and their creative writing". To verify the hypothesis, Pearson correlation coefficient is calculated and results have revealed that the absolute computed value of $r = (|-0.311|)$ is greater than the critical value 0.12, indicating that there is a negative significant correlation between the variables, that is, when the fixed mindset increases, learners' creative writing decreases, as demonstrated in Table 4.5.

Table 4.5

The Correlation Between Fixed Mindset and Creative Writing

Sample Size	Computed r- Value	Critical r- Value	Freedom Degree	Significance
250	-0.311	0.12	248	Significant

4.2 Discussion of Results

The first aim of the current study is to determine the levels of growth mindset, fixed mindset, and creative writing among EFL secondary school learners. The outcomes have revealed that students have a statistically significant level of growth mindset. This denotes that learners tend to believe that their abilities can be evolved through effort and practice.

On the other hand, the findings also revealed that learners pose a statistically significant level of fixed mindset. This indicates that although students show a tendency toward growth mindset, some fixed beliefs about capability still exist within learners. This can be explained by the coexistence of both mindsets in learners, as individuals may display various beliefs relying on the context.

These outcomes may be attributed to multiple factors. Students at the secondary school level are still evolving their cognitive and academic beliefs, and their learning environment may play a role in shaping both growth and fixed mindsets. Moreover, it indicates that students are likely to regard learning tasks and challenges as opportunities for learning and development and not as obstacles.

Concerning creative writing, the results demonstrated that learners' performance is weak to some extent. This indicates that students' level in creative writing is relatively average and needs more evolvement. In spite of learners' exposure to a variety of vocabularies and literary texts in their textbook, the conventional teaching methods that focus more on memorization than creativity may explain the moderate level of creative writing performance

The results related to the second aim revealed a statistically significant positive correlation between the two variables suggesting that students with higher levels of growth mindset tend to achieve better performance in creative writing.

This finding refers to the learners who believe in their capability to improve through effort are more likely to participate in writing tasks, persist in overcoming difficulties, and evolve their writing skills over time. This result is, to some extent, in agreement with Mercer and Ryan (2010), who highlighted the role of mindset in fostering learners' language performance. It is also in consistence with results of Limpo and Alves (2014) who show that mindset, in relation to writing, contributes to writing performance.

The third aim of the study is to explore the relationship between fixed mindset and creative writing. The results demonstrated a statistically significant correlation between the two variables which suggests that fixed mindset also plays a role in learners' writing performance; however, this correlation may reflect a complex influence. Learners with a fixed mindset may face limitations in their learning due to fear of failure or lack of confidence, which can influence their motivation and involvement in tasks and achieving academic outcomes.

This interpretation supports studies by Lou and Noels (2017), who found that students with a fixed mindset tend to exhibit lower motivation and involvement. Similarly, the results mirror those of Graham et al. (2020) who emphasized that students' beliefs about their abilities significantly affect their writing performance and perseverance.

References

1. Ary, D., Jacobs, L. C., Irvine, C. K. S., & Walker, D. A. (2019). *Introduction to research in education* (10th ed.). Cengage Learning.
2. Burnette, J. L., O'Boyle, E. H., VanEpps, E. M., Pollack, J. M., & Finkel, E. J. (2013). Mind-sets matter: A meta-analytic review. *Psychological Bulletin*, 139(3), 655–701.
3. Claro, S., Paunesku, D., & Dweck, C. S. (2016). Growth mindset tempers the effects of poverty on academic achievement. *Psychological Science*, 27(6), 784–793.
4. Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education* (8th ed.). Routledge.
5. Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Pearson Education.
6. Dweck, C. S. (2006). *Mindset: The new psychology of success*. Random House.
7. Earnshaw, S. (Ed.). (2014). *The handbook of creative writing*. Edinburgh University Press.
8. Elliot, A. J., & McGregor, H. A. (2001). A 2 × 2 achievement goal framework. *Journal of Personality and Social Psychology*, 80(3), 501–519.
9. Graham, S., Kiuvara, S., & MacKay, M. (2020). Writing and motivation: A meta-analysis. *Educational Psychology Review*, 32(4), 1033–1059.
10. Harmer, J. (2007). *The practice of English language teaching* (4th ed.). Pearson Longman.

11. Hattie, J., & Timperley, H. (2007). *The power of feedback. Review of Educational Research*, 77(1), 81–112.
12. Hughes, A. (2003). *Testing for language teachers* (2nd ed.). Cambridge University Press.
13. Hyland, K. (2003). *Second language writing*. Cambridge University Press.
14. Limpo, T., & Alves, R. A. (2014). Implicit theories of writing and their impact on students' writing performance. *Journal of Writing Research*, 6(1), 35–55.
15. Lou, N. M., & Noels, K. A. (2017). Measuring language mindsets: Validating the Language Mindsets Inventory (LMI). *Modern Language Journal*, 101(1), 214–231.
16. Maley, A. (2009). *Creative writing for language learners (and teachers)*. In A. Maley & N. Peachey (Eds.), *Creativity in the English language classroom* (pp. 73–84). British Council.
17. Mangels, J. A., Butterfield, B., Lamb, J., Good, C., & Dweck, C. S. (2006). Why do beliefs about intelligence influence learning success? A social cognitive neuroscience model. *Social Cognitive and Affective Neuroscience*, 1(2), 75–86.
18. Mercer, S., & Ryan, S. (2010). A mindset for EFL: Learners' beliefs about the role of natural talent. *ELT Journal*, 64(4), 436–444.
19. Morley, D. (2007). *The Cambridge introduction to creative writing*. Cambridge University Press.
20. Nasser, S. M. (2019). Iraqi EFL students' difficulties in writing composition: An experimental study. *International Journal of English Linguistics*, 9(1), 178–188.
21. Rattan, A., Good, C., & Dweck, C. S. (2012). "It's ok — not everyone can be good at math": Instructors with an entity theory comfort (and demotivate) student. *Journal of Experimental Social Psychology*, 48(3), 731–737.
22. Richards, J. C. (2013). Creativity in language teaching. *Iranian Journal of Language Teaching Research*, 1(3), 19–43.

23. Romero, C., Master, A., Paunesku, D., Dweck, C. S., & Gross, J. J. (2014). Academic and emotional functioning in middle school: The role of implicit theories. *Emotion*, 14(2), 227–234.
24. Ryan, S., & Mercer, S. (2012). Implicit theories: Language learning mindsets. In S. Mercer, S. Ryan, & M. Williams (Eds.), *Psychology for language learning: Insights from research, theory and practice* (pp. 74–89). Palgrave Macmillan.
25. Sherman, E. (2025). What is Creative Writing? Definition, Types, and Essential Skills. *Asia Internship Program*.
<https://share.google/UeiIh51w2oytNNfrl>
26. Torrance, E. P. (1974). *The Torrance Tests of Creative Thinking: Technical-Norms Manual*. Personnel Press.
27. Yeager, D. S., & Dweck, C. S. (2012). Mindsets that promote resilience: When students believe that personal characteristics can be developed. *Educational Psychologist*, 47(4), 302–314.
28. Yeager, D. S., & Dweck, C. S. (2020). What can be learned from growth mindset controversies? *American Psychologist*, 75(9), 1269–1284.