

Reflective Journals As A Catalyst For Fostering Autonomy In Pre-Service EFL Teachers: The Case Of ENS Constantine

دفاتر التفكير الذاتي كأداة لتعزيز الاستقلالية لدى أساتذة اللغة الإنجليزية كلغة أجنبية
أثناء التكوين بالمدرسة العليا للأساتذة بقسنطينة

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ملخص:

في سياق تعلم اللغات، يُعد تعزيز استقلالية المتعلمين أمراً أساسياً لتشجيعهم على الانخراط الفعّال، والتقليل من السلبية، والحد من اعتمادهم على المعلم. في هذه الدراسة، تم تحديد كتابة دفاتر التفكير الذاتي كأداة عملية لدعم هذا المسار. وتهدف الدراسة إلى التحقيق في أثر استخدام دفاتر التفكير الذاتي على تعزيز استقلالية المتعلمين، وتحديد مدى جاهزيتهم للتعلم الذاتي، بالإضافة إلى فحص الجوانب التي يتم تمثيلها من الاستقلالية نتيجة لاستخدام هذه الدفاتر. ولتحقيق هذه الأهداف، تم إجراء تجربة باستخدام تصميم اختبار قبلي وبعدي على مجموعتين من المعلمين المتدربين في المدرسة العليا للأساتذة بقسنطينة (ENSC)، الجزائر. وقد تم تحليل نتائج التجربة باستخدام برنامج SPSS، حيث أُجريت اختبارات (t-tests) متعددة لتحليل البيانات. أظهرت نتائج هذه الاختبارات تحسناً ملحوظاً في مستوى الاستقلالية لدى المتعلمين الذين شاركوا في كتابة دفاتر التفكير الذاتي. كما تؤكد أن كتابة هذه الدفاتر تُحفز المتعلمين على تبني سلوكيات تعلم أكثر استقلالية، وتبرز من مهاراتهم في المناقشة الذاتية والتقييم الذاتي، كما تمنحهم القدرة على اعتماد أساليب تعلم أكثر دافعية واستراتيجية.

الكلمات المفتاحية: استقلالية المتعلم، التعبير الشفوي، المعلمون المتدربون، دفاتر التفكير الذاتي.

Abstract:

In context of language learning, fostering learners' autonomy is deemed essential for encouraging their active involvement, reducing passivity and limiting teacher dependence. In this study, reflective journal writing has been identified as a practical tool to support this process. It aims to investigate the effect of using reflective journals on fostering learners' autonomy, identify their readiness for autonomous learning and examine which autonomous learning aspects are fostered due to the use of reflective journaling. To reach these aims, an experiment was conducted using a two-group pre-test post-test design with pre-service teachers at École Normale Supérieure of Constantine (ENSC), Algeria. Using the SPSS software, multiple t-tests were performed to analyze the findings of the experiment. The results of the t-tests revealed a remarkable improvement in learners' autonomy level, those writing reflective journals. In addition, it was confirmed that writing reflective journals inspires learners to embrace more independent learning behaviors, it sharpens their self-monitoring and assessment skills and empowers them to adopt more motivational and strategic approaches in their learning.

Keywords: Learner autonomy; oral expression; pre-service teachers; reflective journals.

1. INTRODUCTION

Over the span of educational history, traditional teaching has proven to be ineffective in addressing learners' deficiencies, leaving them as passive and dependent recipients of teacher knowledge with limited abilities to achieve proficiency and success. Teacher-centered authoritative classrooms and limited class-time have long restricted learners from assuming responsibility over their learning, fostering their productivity, and acquiring abilities necessary to manage and control their learning. However, contemporary educational realities have evolved and a radical transition has shaped the modern educational landscape. To innovate beyond the constraints of traditional teaching, modern education hinges on learner autonomy. The latter is the core of innovative learning, empowering learners to harness their potential to manage their learning journey and assume responsibility for their progress. As a notion, learner autonomy has gained recognition for its significant impact on learning effectiveness and sustainable development. Consequently, since the late twentieth and the beginning of the twenty-first century, numerous researchers and educators have been calling to cultivate this ability in learners, considering it as a major step toward creating a learner-centered classroom and replacing the traditional teacher-centered one.

Educational research is abundant with studies examining and exploring various techniques to promote the ability of autonomy within the classroom, with the ultimate goal of extending its application to out-of-class contexts. In the same vein, this research contributes to the existing body of research on ways to foster learner autonomy. We hypothesize that using reflective journals in the oral expression (OE) sessions will improve learners' autonomy. Thus for the current study, learners' reflective journals are perceived as an effective pedagogical instrument to trigger their autonomy in the classroom. This research aims to investigate the effect of using reflective journals on fostering learners' autonomy in the English as a foreign language (EFL) context. Additionally, it seeks to identify participants' readiness for autonomous learning. Finally, it attempts to examine which autonomous learning aspects are fostered due to the use of reflective journaling. To realize these aims, our research questions are:

- What is the level of readiness of the pre-service teachers for autonomous learning?
- What is the effect of using reflective journals on learners' autonomy in the EFL context?
- Which aspects or features of autonomous learning does reflective journaling cultivate?

2. Literature review

2.1- Rational for the development of learner autonomy

Holec (1981) was the first to introduce the notion of learner autonomy in the field of language learning. According to him, learner autonomy refers to the ability to take charge of one's own learning. Thus, he emphasized the importance of learners' initiative and active role in learning. In his work, he advocated setting learners' own learning agenda with specific learning objectives, carefully selected resources, and effective approaches to track and assess progress. Benson (2006) confirmed that the bulk of research on autonomy published in the 21st century surpassed the works published over the previous century. The initial efforts were to operationalize the definition of the concept; thus, many definitions from different perspectives were advanced (Benson, 2001; Cotterall 1995; Little, 1991). This reflected the complex and multidimensional nature of the concept that cannot be simplified and reduced to a single definition.

Soon learner autonomy became a desirable goal in language learning. Advocates of autonomy laid out arguments for why learner autonomy is a crucial aspect for language learning. They proved that autonomy taps on learners' psychology, abilities, mindsets, personal and academic growth. Knowles (1975) confirmed that autonomous learners are by definition better learners. Supporting this claim, Chan (2001), affirmed that autonomous learners feature high motivation and enthusiasm, more focus and organization, sustainability, tolerance and initiative. Candy (1991) stated that when learners are involved in learning-related decision; the latter is more meaningful and effective. Similarly, Dam (1995) and Little (2016) asserted that learners' active and direct involvement in the teaching and learning process results in favorable learning outcomes and accomplishments. Moreover, Dickinson (1987) and Little (2000) illustrated that the long standing problem of lack of motivation within language learning contexts finally came to a resolution as autonomous learners are more motivated than their less autonomous peers. Deci and Flaste (1996) discussed the impact of autonomy on learners' psychology; they confirmed that learners experience self-fulfillment once they are autonomous and responsible for their actions. Little (2000) argued that autonomous learners have the necessary abilities that support the absorption and mastery of the key components of effective communication. Learner autonomy can compensate for classroom deficiencies, especially those overcrowded classrooms where teachers may not have enough time to assist all learners; thus learners can make the most of available resources, especially outside the context of the classroom. Benson and Voller (1997)

asserted that autonomous learning is a natural, goal-oriented, and highly productive process, thus learner autonomy gets the place of uniqueness. Allowing learners to take ownership of their learning empowers with them “a voice, an identity, an authority” (Sliogeriene 2005, p. 43). Ultimately, they develop into productive and self-reliant individuals.

2.2- Learner autonomy and reflection

Reflection is a renewed idea brought to the field of education with the works of John Dewey (1933) and Donald Schön (1983). Similar to autonomy, reflection does not permit a single and plain definition, but Dewey's definition received significant recognition. He defined reflection as an “active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends” (Dewey, 1933, p. 6). In essence, Dewey's definition frames reflection as a critical and analytical process to examine one's own beliefs and actions, their validity, and consider their outcomes. Schön (1983) referred to reflection as a process that requires critical articulations and evaluation of thoughts and practices, to achieve efficiency and effectiveness. Reflective thinking in general is a deliberative initiative to clarify mindsets, evaluate experiences, and comprehend one's own weaknesses and strengths to determine the course of action. For its significance, Roberts (1998, p. 48) asserted that reflection contributes “to the intellectual and moral development of the person”. In the context of education, reflective thinking proved to be invaluable for teachers and learners alike. Reflection is one of the tenets of teacher education and pillars of professionalism. For learners, extensive studies on students' reflective practices proved that they will “become accomplished at recognizing that they are learning and building skills continuously” (Helyer, 2015. p. 23). Through reflection, learners gain a deeper ownership of the knowledge that nurtures their metacognition, awareness, adaptability, high-order skills of problem solving, creativity and critical thinking.

Reflection and autonomy are two intertwined entities. Reflection is one of autonomy's main pillars. Little (1991) defined autonomy as “a capacity for detachment, critical reflection, decision-making, and independent action” (p. 4). Learner autonomy centers on learner's agency to decision on all aspects of learning, including set learning goals, choosing suitable learning activities, opting for effective teaching methods, monitoring and assessing learning. However, learners need to be conscious and aware of their learning needs, too. For that, they need to develop their reflection skills. Learner autonomy also invariably embraces concepts such as

learning to learn, reflection or awareness raising, and metacognition. Reflection precedes decision-making and action. For this matter, Ellis (2001) confirmed lack of opportunities to reflect which is one of the major causes of school failure to produce independent learners. Despite the agreement on the interplay between reflection and autonomy, only few studies chronicled the effect of incorporating reflective practices and tools in the classroom to promote learners' autonomy. Henriksen, Cain and Mishra (2018) investigated the development of learners' autonomy through adopting a pedagogical approach rooted in creativity and reflection. They concluded that the approach is a "viable and productive path toward building autonomous and creative habits of mind" (p. 81). In the EFL context, Gholami and Biria (2014) conducted a study investigating the impact of reflective journal writing on autonomy. They found that reflective journal writing can foster aspects of learner autonomy. Similarly, Chinpakdee (2022) examined how the use of reflective journal would affect learners' autonomy. She reported that journal writing is effective in developing learners' metacognitive awareness and their ability to independently direct their learning activities. Şener and Mede (2022) probed the role of reflective practices and collaborative learning in promoting reflective thinking and autonomy. The results of the experiment and tests suggest that reflective and collaborative practice helps prompting learner autonomy and reflective thinking.

3. METHODS AND MATERIALS

3.1- Research Design

Since the main research aim is to test a hypothesis and establish causation between reflective journals writing (the independent variable) and learner autonomy (dependent variable), an experimental design is the appropriate approach. This design "is concerned with studying the effects of specified and controlled treatments given to the subjects usually found into groups" (Seliger & Shohamy, 1989, p. 136). This type of research allows the manipulation of the independent variable while recording any resulting changes in the dependent variable, thereby providing clear evidence of cause and effect. Following this design, the study underwent three phases: pre-test, treatment, post-test.

3.2- Research sample and setting

In order to verify our hypothesis, we conducted a study at the department of English, Ecole Normale Supérieure of Constantine (ENSC). The participants consist of forty students (n=40), thirty-nine female and only one male student, who would become primary school English teachers. All participants are second year students during the academic year 2024- 2025. We chose this population purposefully, as they

are at a stage where learner autonomy is developing. Additionally, they are acquainted with different learning strategies and classroom routines, making it easier to apply reflective journal activities. However, we assigned the study groups randomly to reduce subjectivity and biased representation, and to enhance the generalizability of the findings. Adhering to research ethics with regard to protecting participants' identity and maintaining confidentiality, codes (PST1-PST40) are used instead of learners' names to refer to the participants.

3.3- Research Tools

This study relied exclusively on two main instruments; the first instrument consists of a test that was used in the pre-treatment and post-treatment phases "Learner Autonomy Questionnaire" (LAQ). The second instrument in this study is reflective journal samples, which we prepared because participants were unable to write their own personalized journals. These samples are presented only to the experimental group as a part of the treatment. For the LAQ, we developed one based on Zhang and Li (2004), and Gholami (2016) to measure the participants' autonomy. This tool is a Likert scale questionnaire that includes thirty-two statements divided into five categories: (1) teacher dependency learning (8 statements), (2) learner independence (5 statements), (3) motivation and strategy use (8 statements), (4) self-monitoring and self-assessment (9 statements), (5) attribution of success and failure (2 statements). All questionnaire statements were measured through a five-point Likert scale that represents the degree of agreement or disagreement. The nature of the scale permits the quantification of the participants' results. We can measure the participants' attitudes or perceptions through five autonomy levels ranging from the highest to the lowest. These levels are: highly autonomous (32 -63), autonomous (64 -95), moderately (96-127), lowly autonomous (128-159) and passive (160).

As the questionnaire was designed exclusively for this study, measures were taken to check its reliability and validity. Prior to the study, the researcher piloted the tools for clarity, relevance, reliability and validity. It was administered to a small group of participants, and feedback was collected to refine its content for clarity, relevance and improvement of its overall effectiveness in measuring autonomy levels. Simultaneously, three TEFL teachers peer-reviewed it. Lastly, the questionnaire was evaluated for reliability using SPSS software, yielding Cronbach's Alpha reliability coefficient of 0.943. This value indicates that the test has a high level of internal consistency.

3.4 - Procedure

The study underwent four phases. In the first phase, the pre-test was administered to two groups: the experimental group and the control one. All participants in the experimental group, counting for twenty-two (22) pre-service teachers, responded to the questionnaire. However, due to unforeseen circumstances, only eighteen (18) pre-service teachers in the control group responded to the questionnaire, while seven (7) participants were absent on the day of the pretest and thus were unable to complete it. The pre-test is intended to assess participants' baseline level of autonomy in their learning process. The second phase is the intervention phase. Only the experimental group took part in it. This phase was carried out over seven weeks. In the first week, participants were inquired to write their own reflection on their performance in the OE module throughout the previous academic year. In this step, the researcher attempts to assess participants' reflective skills and check their understanding of reflective practices. In the second and third weeks, following their speaking activities the pre-service teachers were asked to fill in pre-designed reflective journals presented on a Google Form we created. These journals include specific items to help participants promptly reflect on their performance. The fourth, fifth, sixth and seventh weeks, again after their speaking practices, participants were requested to write their own personalized reflective journals on a Google Form. The gradual progression from guided to independent reflection is intended to assist the development of learner autonomy over the course of the intervention. The third phase consisted in administering a post-test to both the experimental and control groups to examine whether the use of reflective journals has contributed to a change in their learning autonomy. The same participants took the post-test. Forty (40) pre-service teachers divided into twenty-two (22) in the experimental group, and eighteen (18) in the control group. These methods and tools must be presented precisely and clearly without exaggeration so that other researchers can re-examine or verify them. The author can describe the tools and methods used in the form of a scheme, table or diagram to explain methods used.

4. **RESULTS:**

4.1- LAQ Pre-test Control and Experimental Group

The first step in statistical analysis is to analyze the obtained data of the pre-test of both groups, the experimental and the control group. These statistics were performed with the Statistical Package for Social Science (SPSS version 26). The statistics include:

- Descriptive statistics of pre-tests of the experimental and control group.
- Independent Samples t-Test for pre-test and Autonomy level before the treatment

The descriptive statistics of pre-tests of the experimental and control groups are presented in table 1. To describe the performance of both groups in the pre-test, values including the range, mean, standard deviation, variance and skewness were used. Starting with the range that represents the difference between the highest and lowest scores in the group, the experimental group's range is 57 while the control group's range is 62. The mean represents the central tendency that is the average of a set of scores. The mean of the experimental group is 100.0455 and the control group is 94.1667. As we can notice, there is a difference in the two groups' means. The one of the experimental group is higher than that of the control group, which means that the scores of the experimental group are higher than the scores of the control group. However, these results do not indicate that the experimental group is more autonomous than the control group, as according to LAQ grading, the higher the scores, less autonomous are the learners. The standard deviation (SD), variance and skewness are crucial for understanding the distribution and the variability and normality of the pre-test scores. The results of the SD and variance indicate that both groups have similar levels of variability. However, the slight difference in scores suggests that the scores of the experimental group are slightly more distributed whilst the scores of the control group are marginally more consistent. Finally, for the experimental group, the negative skewness (-0.711) suggests that the distribution is slightly left-skewed but have a roughly normal distribution. The control group's skewness (0.014) indicates that the distribution is nearly normal.

Descriptive Statistics								
Group		N	Range	Mean	Std. Deviation	Variance	Skewness	
		Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Experimental	Pre_test	22	57.00	100.0455	16.78570	281.760	.491	.250
	Valid N (listwise)	22						
control	Pre_test	18	62.00	94.1667	16.46118	270.971	.536	.250
	Valid N (listwise)	18						

Table 1: Descriptive statistics of the experimental and Control Groups' LAQ (pre-test)

An independent samples t-test was conducted to assess the homogeneity of the pre-test (LAQ) results and to set a comparative baseline for both groups for autonomy level prior to the treatment. The results of the t-test are displayed in table (2). The table includes results of an Independent Samples Test for two key metrics. The first metric, pre-test scores, represents raw numerical scores of both groups from pre-test. The Levene's test, which checks the equality of variances between both groups, confirms equal variances, since the significance level (Sig.) of for Equality of Variances is .991 that is greater than .05. Similarly, the t-test for Equality of Means (assuming equal variances assumed) shows the p-value (Sig. 2-tailed) of .273. As the p-value is greater than the level of significance .05, it can be concluded that there is not any significant difference in the mean scores of the two groups with respect to their pre-test. This metric exhibits that the experimental and control groups have homogenous pre-test results. The second metric, autonomy levels, helps contextualizing numerical scores and provides deeper understanding of participants' autonomy level before the treatment. The Levene's test of this metric shows that the groups variances are equal, with a significant level (.102) greater than .05. The p-value of the t-test is .096 again greater than the level of significance. It can be inferred that there is not any significant difference in mean scores with respect to their autonomy level. This metric validates the results of the previous one; that the experimental and the control group are homogenous with regard to their autonomy level. The purpose behind the inclusion of both metrics is to translate the quantitative data (numerical scores) into qualitative data (autonomy level).

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2- taile d)	Mean Differ ence	Std. Error Differ ence	95% Confidence Interval of the Difference	
									Lower	Upper
Pre_Test	Equal variances assumed	.000	.991	1.1 12	38	.273	5.878	5.28895	-4.828	16.585 71
	Equal variances not assumed			1.1 14	36. 71 7	.273	5.878	5.27837	-4.818	16.576 56
Autonomy- level Pre	Equal variances assumed	2.81 5	.102	- 1.7 09	38	.096	-.2929	.17139	-.6398	.05403
	Equal variances not assumed			- 1.6 68	31 .8 86	.105	-.2929	.17563	-.6507	.06487

Table 2: Independent Samples t-Test for pre-test and autonomy level before the treatment**4.2- LAQ Post-test Control and Experimental Group**

After the treatment, a post-test was administered and the data gathered were analyzed using the SPSS software. The statistical analysis implemented in this phase are as follows:

- Descriptive statistics of the post-test
- Paired Samples Test for post-test and autonomy level
- Independent Samples t-Test for post-test and Autonomy level.
- Comparing means of dimensions

Beginning with descriptive statistics of the experimental and the control group, Table 3 sums up the descriptive data of the sample's groups. The same values of the descriptive statistics of the pre-test are replicated. The sample includes 40 participants, 22 pre-service teachers in the experimental group and 18 pre-service teachers in the control group. The range is 29 for the experimental group and 44 for the control group. Finally, the standard deviation, variance and skewness, based on

the recorded values, one can interpret the following: the experimental group has scores that are more consistent, whilst the control group has a wider spread of scores. Moreover, the experimental group is moderately right-skewed (1.104); whereas the control group is normally distributed (-.019).

Descriptive Statistics								
Group		N	Range	Mean	Std. Deviation	Variance	Skewness	
		Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Experimental	Post_test	22	29.00	77.8636	7.64881	58.504	1.104	.491
	Valid N (listwise)	22						
control	Post_test	18	44.00	88.9444	10.65210	113.467	-.019	.536
	Valid N (listwise)	18						

Table 3: Descriptive statistics of the control and experimental groups' LAQ (post-test)

As the aim of the current study is to examine the influence of using reflective journals on learners' autonomy. A paired sample t-test was conducted to compare the results of the pre-test and post-test within the experimental group after training and reflective journals use (treatment). The test aimed to confirm whether the treatment had a positive effect on participants' autonomy or not and to test the hypothesis set. The results of the t-test are displayed in table (4). The estimated p-value (sig 2-tailed) .000 is less than the cut off .05, which indicates that there is a significant difference in the results of the compared pairs that is not due to a random factor i.e. the treatment had a positive effect on the experimental group. Furthermore, the numerical data obtained from the post-test were converted into autonomy levels, and compared with those of the pre-test to demonstrate that the changes in the results also reflected a shift in autonomy levels. Looking at the output box giving the results of the t-test (table 4), the p-value is once again .000 less than the alpha level ".05". This means that participants' autonomy levels varied significantly after the intervention. These values prove that pre-service teachers, after receiving training and using reflective journals, significantly improved their autonomy level.

Paired Samples Test										
group			Paired Differences					T	df	Sig. (2-tailed)
			Mean	Std. Devia tion	Std. Error Mean	95% Confidence Interval of the Difference				
						Lower	Upper			
Exp	Pair 1	Pre-test - post-test	22.18 182	15.56 442	3.31834	15.2809 4	29.08 269	6.68 5	21	.000
	Pair 2	Autonomy_ level pre - Autonomy_ level- post	- .6363 6	.4923 7	.10497	-.85467	-.4180	- 6.0 62	21	.000

Table 4: Paired sample t- test for the experimental group before and after the treatment

As a final step to draw a more comprehensive conclusion and to evaluate the overall effectiveness of the use of reflective journals on learners' autonomy, another independent t-test for post-test results and autonomy level is performed. Table 5 below displays the obtained statistics. As far as the post-test results are concerned, the significant level of Levene's t-test is .308 greater than the .05, meaning there is an equal variance between the groups compared. The t-test for equality of means yielded a p-value (.000). Because it is less than the cut off (.05), there is a significant difference in the post-test results of the compared groups. In addition, the mean difference value (-11.08) that represents the average difference between the post-test scores of the two groups is negative. This indicates that the experimental group scored 11.08 points lower on the post-test compared to the control group. As explained previously, the lower scores reflect higher levels of autonomy. Therefore, the low scores of the experimental group imply that its participants are more autonomous than those of the other group. Additionally, the post-test results of both groups are altered into equivalent autonomy levels and compared. Equal variances are not assumed since the significant level is less than .05. The p-value is .016 (equal variances not assumed) is less than the cut off .05 suggesting that there is a statistically significant difference between group's autonomy levels. The results of the independent t-test complement the ones produced in the paired sample t-test.

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Post-test	Equal variances assumed	1.069	.308	-3.82	38	.000	-11.08081	2.89711	-16.94570	-5.21592
	Equal variances not assumed			-3.701	30.041	.001	-11.08081	2.99383	-17.19468	-4.96694
Autonomy level	Equal variances assumed	19.200	.000	2.649	38	.012	.36364	.13729	.08571	.64157
	Equal variances not assumed			2.551	29.021	.016	.36364	.14253	.07215	.65513

Table 5: Independent Samples t-Test for post-test and Autonomy level after the treatment

For more well-rounded results in this study, there is a need to account for which autonomy dimension has developed the most. In order to identify the aspect that showed the most significant improvement in response to the use of reflective journals, the post-test means of the five dimensions—Teacher Dependency, Learner Independence, Motivation and Strategy Use, Self-Monitoring and Assessment, and Attribution of Success/Failure—are compared with the means of the pre-test. Table 6 summarizes the obtained results.

<i>Category</i>	<i>Number of items</i>	<i>Sum of items means pre test</i>	<i>Sum of items means post test</i>	<i>pre-test Mean of category</i>	<i>post-test mean of category</i>	<i>difference</i>
<i>Teacher dependency</i>	8	25.72	30.82	3.215	3.853	+0.638
<i>Learner independence</i>	5	15.13	8.59	3.026	1.718	-1.306
<i>Motivation and strategy use</i>	8	23.82	16.95	2.978	2.119	-0.859
<i>Self-monitoring and self-assessment</i>	9	28.79	17.6	3.199	1.956	-1.243
<i>Attribution of success and failure</i>	2	4.86	4.59	2.43	2.295	-0.135

Table 6: Comparison of Pre-Test and Post-Test Means Across Autonomy Dimensions

Considering the table above, the mean of Teacher Dependency dimension increased slightly indicating that the participants relied heavily on the teacher's support and guidance. The mean of the Learner Independence decreased notably, reflecting an inclination toward stronger agreement with independent learning, as the scale ranges from strongly agree to strongly disagree. These results reflect participants' desire to approach their learning autonomously. The third dimension representing motivation and strategy use, also, showed noticeable improvement suggesting development of motivational and strategic learning behaviors, which are essential to sustain enduring autonomy. Additionally, self-monitoring and assessment as a fourth dimension experienced a remarkable increase, implying cultivated enhanced self-regulation abilities. Finally, the dimension of attribution of success and failure scored the least difference of all, indicating that there was a slightly minor improvement related to participants' perception regarding the role of effort and strategy in their learning outcomes. To conclude, the findings reflected that the use of reflective journals positively nurtured dimension of learners' autonomy particularly independence, self-monitoring and self-assessment, however it failed to reduce participants' dependency and reliance on teacher support.

5. DISCUSSION OF THE RESULTS

In the light of the collected data, it is clear that the current study aims are achieved and all research questions are effectively addressed. The examination of the results of the first set of statistics comprising descriptive statistics and independent sample t-test for the pre-test helped to set the baseline for study, to measure the dependent variable (learner autonomy) and to identify any existing differences between the sample groups. The data obtained from this analysis successfully targeted and answered the first research question related to participants' readiness for autonomous learning. Beginning with descriptive statistics, the findings demonstrate a general level of autonomy among sample's participants as none of their scores mirrored passive level. Additionally, the variations in scores also portray the varying levels of autonomy participants possess. Collectively, these findings exhibit participants' readiness for autonomous learning, which answer the first question aiming to identity pre-service teachers' readiness. The independent sample t-test for pretest served another essential role in identifying the characteristics of participants and eliminating the existence of any difference between study-groups, thereby confirming and establishing their homogeneity that allows for a fair comparison of the autonomy levels before the introduction of the treatment.

The second set of statistical analysis including paired sample t-test for experimental group pre and post-treatment, independent sample t-test for post-test proved valuable in testing research hypothesis and addressing the second question. On the one hand, the findings of the paired sample t-test recorded a significant improvement in pre-service autonomy level, proving that the treatment, training and using reflective journals, positively fostered autonomy level of participants within the experimental group. On the other hand, the results of the independent sample t-test for the post-test prove the effectiveness of the treatment as it creates disparities regarding the autonomy levels among sample groups. These tests confirmed the hypothesis, hereby establishing a relationship between the use of reflective journals and learner autonomy and rejected the null hypothesis). This section clearly answers the second question tackled in this study on the effect of reflective journals on learners' autonomy. The findings imply that reflective journals as classwork are effective in promoting autonomy.

Lastly, to answer the third and final question and to finalize an inclusive conclusion on the effect of reflective journals, the means of all dimensions of the experimental group were compared prior and post the treatment. This step is crucial to identify which autonomy dimensions are effectively promoted. The results revealed that all dimensions are developed, but more precisely the treatment helped the pre-service teachers to adopt more independent learning behaviors, sharpen their self-monitoring and assessment skills and adopt more motivational and strategic approach in their learning. On another scale, the treatment also fostered teacher dependence attitudes. This may not be an absolute barrier for the development of their autonomy, but rather a positive way out to promote autonomy thorough teacher-student's negotiations, collaboration and scaffolding.

6. Conclusion

Learner autonomy nurtures within learners the sense of responsibility and accountability for their learning; therefore, it prompts language learners' awareness, thinking skills to make sound decisions in language learning. It also motivates them to exploit their potential to achieve success and overall proficiency. Recognizing the benefits of autonomy inside and outside the classroom, this small-scale study has been undertaken in an attempt to bring to the fore the value of reflective journals in enhancing learners' autonomy. The study findings proved insightful, shedding light on the significant benefits of adopting reflective journals as a pedagogical medium for enhancing learners' autonomy. Henceforth, it is advisable to incorporate reflective practices as a resourceful pedagogical tool.

In conclusion, material developers, curriculum designers and teachers should consider the findings of this research paper, and integrate reflective journals as teaching practice in all higher education context including universities and teacher training schools to address learners' autonomy deficiencies. Reflective practices should be incorporated as an essential teaching tool within language curricula. Additionally, classroom practices should prioritize training learners and pre-service teachers on the effective techniques to reflect on their learning and overall performance, to improve their learning, autonomy and their future teaching abilities and transferable skills.

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