Analysis of Learners' Perception of Learning Diaries in Hybrid EFL Instruction: Do Individual Learner Variables Make a Difference?

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Abstract

In the domain of computer-assisted language learning (CALL), motivation has been established as an important factor in e-learning success [1]. Moreover, language learning motivation can itself be related to other psychological variables as well as to the acceptance of reflection tasks (such as learning diaries) that can be implemented in EFL instruction as a means of promoting self-regulated behaviour [2], [3]. It can therefore be assumed that learners' experience with writing learning diary entries in hybrid EFL will be associated with their perception of the online activities and various psychological variables including metacognitive strategies as a determinant of self-regulation.

The emphasis of the paper is on (a) learners' perception of keeping a learning diary as a component of the pedagogical design in an EFL hybrid setting and its respective correlation with (b) learners' perception of other online learning activities and (c) psychological variables that can account for learners' engagement in performing reflection tasks.

The paper examines several individual characteristics of learners in a hybrid undergraduate EFL course. Respondents in the reported study performed two collaborative grammar e-tivities – creation of a textual grammar report on a given topic. The collaborative e-tivities were accompanied by individual reflection tasks (pre- and post-activity learning diary entries).

The survey data revealed a fairly positive average assessment of the learning diaries. Also, a positive correlation between the respondents' evaluation of learning diaries and grammar e-tivites was established. The correlation analysis also confirmed the hypothesized interrelationship between the respondents' learning diaries perception and all individual learner characteristics. Such findings indicate the importance of considering various factors that may have an impact on learners' readiness to engage in reflection tasks in hybrid grammar instruction. They also highlight the potential of learning diaries as a reflection task format in enhancing the metacognitive and motivational aspects of EFL grammar instruction in a constructivist hybrid setting.

Keywords: *CALL, individual differences, reflection, learning diaries, grammar, e-tivities.*

1. Rationale of the research

In CALL research there is awareness of multiple criteria needed for evaluation of the effectiveness of online instruction in a given context. Some of the factors that determine the success of pedagogical approaches in online L2 instruction are also related to learner variables (see the model of CALL in [4]). In online learning settings learners need to make decisions about how to plan their learning, how to practice what they have learned and how to reflect on the learning process. Reflective activities (such as learning diaries or self-reports) can be used by learners to synthesize their learning experience [2]. In collaborative writing tasks, for example, which themselves foster reflection among participants [5], individual reflective tasks can be used for capturing learners' individual feedback [2]. In addition to raising the students' awareness of their own learning (i.e. metacognitive awareness), reflective techniques in the L2 classroom also have a motivational potential [3]. An important criterion in evaluating the effectiveness of using technology to support instruction in a hybrid setting are learner perceptions of different aspects and components of the hybrid L2 setting (learner satisfaction, improvement of learner experience, etc.) [6].

The research presented in this paper is at the intersection of the following domains of research on both conventional and hybrid ESL/EFL instruction and CALL: (a) learner autonomy; (b) role of reflection tasks in hybrid EFL/CALL; (c) Individual differences (psychological learner variables); (d) learner assessment of online pedagogical tasks.

2. Aim

The research in this paper was aimed at the use of quantitative survey data to establish the students' perception of the reflective task, as well as its possible relationship with their perception of the performed e-tivities (grammar reports) and several individual characteristics.

The following research questions were therefore defined for our study:

- **RQ1:** What are the average ratings for the students' assessment of individual learning diaries that accompanied their performance of out-of-class e-tivities?
- **RQ2:** Is there a relationship between (1) the students' assessment of individual learning diaries and (2) their overall perception of three aspects of conducted grammar e-tivities and each grammar e-tivity in particular?
- **RQ3:** Is there a relationship between (1) the students' assessment of individual learning diaries and (2) the selected psychological variables?

3. Method

3.1 Sample and procedure

The respondents in this study are first-year students (N=97; 89% male and 11% female; aged 18-23, mainly aged 19) enrolled in an English for Information Technology undergraduate course at a Croatian university. During one semester students worked in small teams outside class to create **two written grammar reports** on two different advanced grammar topics that were otherwise not covered in the course (Conditionals: Unreal conditions; Causative *have*; Subjunctive and unreal past; Reported questions and commands; Participle phrases).

The grammar reports were integrated with reflective tasks – **learning diary entries (logs)** aimed at raising students' awareness of: the language task (structuring, drafting and writing up a report), their knowledge and complexity of the grammar topic, collaboration with teammates, importance of time management and other constraints inherent in the performance of the out-of-class task. By writing semi-structured diary entries (*two* for each e-tivity – one before the creation of the grammar report on a selected topic and the other after submitting the grammar report) students engaged in individual reflection on the aforementioned issues before and after each e-tivity. At the end of the course, respondents were asked to fill out a survey questionnaire.

The prompts for the semi-structured diary entries that were submitted as Word documents via LMS Moodle included a *pre-activity* and *post-activity* log. The **pre-activity log** included the following prompts: (a) What I think I know about the topic; (b) Things I am good at concerning the task / grammar topic; (c) My goal (What I want to learn about the grammar topic); (d) What I could do and why it may help me; (e) Things I may find difficult while doing the task. The **post-activity log** included the following prompts: (a) How well I achieved the goal; (b) What I learnt about the grammar topic; (c) What I learnt about learning; (d) How I dealt with the difficulties with doing the task.

3.2 Instruments

The survey conducted at the end of the semester, after the performance of the e-tivities included the following 8 scales (answers were provided on a Likert scale ranging from 1 – "I totally disagree" to 5 – "I totally agree"):

(1) **Students' self-assessment of learning diaries after the performance of e-tivities**; self-created scale (9 items); example of an item: "Keeping a language log on the written grammar e-tivity made me think about how to perform the given e-tivity as best as I can";

(2) **Students' evaluation of three aspects of e-tivities**: mainly adapted from [7], [8], [9]; (a) *E-tivity content* (6 items); example of an item: "The e-tivity content was well-adjusted to the needs of the students in the course"; (b) *E-tivity methodology* (7 items); example of an item: "Explanations were clear (including appropriate examples) and concise"; (c) *Interaction among participants during e-tivities* (7 items); example of an item: "Activities required a variety of interactional patterns: teacher-student, student-teacher, student-student";

(3) **Students' evaluation of each of the two e-tivities**: self-created scale (7 items); example of an item: "The performance of the written e-tivity (grammar report) was motivating for my learning of English";

(4) Individual characteristics: (a) **Motivation for learning L2** (as an affective learner variable including both intrinsic and extrinsic motivation); (12 items) adapted from [9], [10], [11]; example of an item: "I participated in the e-tivities in the English course for the pleasure I experience in knowing more about

the English language"; (b) ***Metacognitive strategies in online language learning*** (9 items); adapted from the survey for assessment of learner strategies in using internet resources [12]; example of an item: "When I finish learning on the computer I check if my work is correct/how well I have done"; (c) ***social strategies in online language learning*** (7 items) adapted from [12]; example of an item: "When I don't know the answer while doing an exercise on the computer I ask someone else for help"; (5) Learner variables related to self-regulated behaviour: (a) ***Effort invested in using online resources in the EFL course*** (14 items); mainly adapted from [8], [13]; example of an item: "Considering the amount of time I have studied English, I am satisfied with my progress"; (b) ***Personal goal-setting*** (6 items) – mainly adapted from [8], example of an item: "I like to embrace challenging educational goals, such as learning by means of new internet technologies".

4. Results and discussion
The statistical methods used for the analysis of quantitative data in accordance with the research questions included: (a) descriptive analysis (Research question 1) and (b) correlation analysis (Pearson correlation) (Research questions 2 and 3).

4.1 Students' assessment of the learning diary tasks
Average ratings regarding the students' assessment of an exercise consisting of two individual learning diary entries submitted before and after the completion of each grammar e-tivity are presented in Table 1. As can be concluded from the data presented in Table 1, the highest average ratings (in the range from 3.34 to 3.57) of written diary entries were given by the students in relation to task accomplishment elements (practical: performance of e-tivity and use of previous experience; reflectional: assessment of success in e-tivity and assessment of procedure needed to complete an e-tivity) of written grammar e-tivities. Also, all of the rated elements received at least an average rating of 3.00, which could be interpreted in the following way: writing diary entries was considered useful by some of the students who performed them in the "English language I" course.

Table 1. Results of descriptive analysis of data related to the assessment of learning diary tasks (responses on the Likert scale ranging from 1 – "I totally disagree" to 5 – "I totally agree"; the order of evaluation elements in *Table 1* is from highest to lowest average rating by the students; N=97)

Evaluation element	Evaluation area	M	SD
Writing diary entries on the written grammar e-tivity enabled me to perform the given e-tivity as best as I can.	Performance - task accomplishment	3.57	.92
Writing diary entries on the written grammar e-tivity motivated me to apply my previously acquired experience in completing the given task.	Performance - task accomplishment	3.47	.98
Writing diary entries on the written grammar e-tivity enabled me to assess how successfully I completed the given task.	Reflection - task accomplishment	3.38	1.09
Writing diary entries on the written grammar e-tivity made me think about how to perform the given e-tivity as best as I can.	Reflection - task accomplishment	3.34	1.15
I believe that writing diary entries on the written grammar e-tivity generally contributed to the success of the "English language I" course.	Relation to course success	3.33	1.11
Writing diary entries on the written grammar e-tivity helped me to understand a specific English grammar topic.	Theoretical content - reflection	3.23	1.04
I believe that writing diary entries on the written grammar e-tivity generally contributed to motivating other students.	Student motivation	3.11	1.01
I believe that writing diary entries on the written grammar e-tivity generally contributed to the acquisition of content for other students in the "English language I" course.	Student content acquisition	3.05	1.08
Writing diary entries on the written grammar e-tivity was motivating for my English language learning.	Self-motivation for language learning	3.00	1.00

4.2 Correlation between students' assessment of individual learning diary tasks and collaborative grammar e-tivities

The results of correlation analysis that are presented in Table 2 reveal a rather high correlation of the students' evaluation (assessment) of learning diary tasks with their perception of two grammar e-tivities (r=.649 and r=.685), as well as a moderate correlation (in the range from r=.306 to r=.446) with their perception of the overall aspects of grammar e-tivities (e-tivity content, methodology and interaction among participants in e-tivity performance).

Table 2. Correlation (*Pearson correlation coefficient)* between students' evaluation of learning diary tasks (logs), and aspects of e-tivities (for both e-tivities together) and each particular e-tivity

	E-tivity content (both e-tivities)	E-tivity methodology (both e-tivities)	E-tivity interaction (both e-tivities)	Grammar e-tivity 1	Grammar e-tivity 2
Assessment of the learning diary tasks	.402**	.446**	.306**	.649**	.685**

*p<.05; ** p<.01

4.3 Correlation between students' assessment of individual learning diary tasks and individual learner variables

Correlation coefficients between the assessment of the learning diary tasks, on the one side, and individual learner differences (L2 Motivation, Effort in using online resources, Personal goal-setting, Metacognitive strategies in online language learning, Social strategies in online language learning), on the other side, are presented in Table 3. The highest correlation was found between *Assessment of the learning diary tasks* and individual learner variable *Effort in using online resources* (r=.476). Also, a moderate correlation was found between *Assessment of the learning diary tasks* and *Social strategies in online language learning* (r=.465), as well as with *Metacognitive strategies in online language learning* (r=.460). Somewhat lower but statistically significant correlation was found between *Assessment of the learning diary tasks* and *L2 motivation* (r=.392) and a low correlation was found with *Personal goal-setting* (r=.244). The aforementioned results of the correlation analysis clearly indicate the interconnection of the evaluation (assessment) of the learning diary tasks with individual learner variables that were included in research that is presented in our paper.

Table 3. Correlation (*Pearson correlation *coefficient)* between students' evaluation of learning diary tasks (logs) and five self-assessed psychological individual learner variables

	L2 motivation	Effort in using online resources	Personal goal-setting	Metacognitive strategies in online language learning	Social strategies in online language learning
Assessment of the learning diary tasks	.392**	.476**	.244**	.460**	.465**

*p<.05; ** p<.01

5. Conclusion

The aims of this paper were: (1) to use the quantitative data collected in a survey to empirically explore various factors related to students' perception of written reflective tasks (learning diary entries) that accompanied out-of-class collaborative online activities (e-tivities) in hybrid EFL grammar instruction; (2) based on the results of the quantitative data analysis (survey questionnaire), to discuss the role of reflective tasks integrated in EFL hybrid grammar instruction.

We therefore hypothesized that students' individual perception of learning logs would be interrelated with their perception of aspects of grammar e-tivities, on the one side, and several individual factors (motivation and several variables related to respondents' self-regulated and strategic behaviour), on the other. In the correlation analysis of the survey data significant positive interrelationships were confirmed between the assessment of learning diary entries and the perception of grammar e-tivities, as well as between the assessment of learning diaries and motivation, effort, goal-setting,

metacognitive strategies and social strategies of the subjects in our study. Such findings indicate that students' readiness to engage in reflection on computer-supported grammar activities may also depend on their individual psychological factors, as well as their perception of the online (grammar) task itself. When the learner evaluation of their experience of submitting diary entries as part of creating grammar reports is concerned, favourable average ratings were also obtained. It needs to be noted that the established correlations do not reveal any causal relationships (for example, it cannot be claimed that writing diary entries made students more motivated or made them perceive the grammar e-tivities more favourably). However, on the basis of the results of our study it can be concluded that learner diaries may represent a worthwhile contribution to student engagement and promoting their self-directed learning skills, as well as to their metacognitive and metalinguistic development. Integrating diary entries (logs) as a technique for scaffolding learner autonomy in language instruction may be of particular importance for students' involvement in out-of-class online activities, such as the writing of grammar reports as an activity within the constructivist approach to grammar instruction in our research.

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