

Linguistic-Communicative Strategies in the CEFR Companion Volume and Italian L2 Proficiency A Correlational Analysis with Adolescents

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Abstract The present study intends to investigate the use of linguistic-communicative strategies specified in the CEFR Companion Volume among 132 immigrant adolescent learners of Italian as a second language (L2) in upper and lower secondary schools. The research question addressed is whether elementary language proficiency (LP) in Italian L2 and the use of language learning strategies (LLSs) correlate. The results prove a moderate positive correlation between LLS use and learners' LP. Findings will inform best practices for teaching Italian L2 in educational contexts to ensure better understanding and communication skills for immigrant learners.

Keywords Italian as a Second Language. Multilingual Learners. Companion Volume. Spearman Correlation Coefficient. Pearson Correlation Coefficient. Language Learning Strategies. Language Proficiency.

Sommario 1 Introduction. – 2 Correlating Language Learning Strategies Use with Proficiency. – 3 Research Design. – 4 Data Collection and Testing Procedures. – 5 Results and Discussion. – 6 Conclusion and Future Directions.



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1 Introduction

The Early Leavers from Education and Training (ELET) indicator ranked Italy fifth among European countries for school dropout rates. Namely, in 2023, the early school leaving rate among young foreigners was three times higher (26.9%) than that of Italians (9.0%).¹ Additionally, the overall percentage of ELET from upper secondary school is 24.3%, with significant differences between female and male pupils, favouring the former.

Table 1 [tab. 1] presents the average non-Italian secondary school population in the Veneto region (northeastern Italy), comprising 22.083 (23.8%) foreign students in middle schools and 23.338 (25.2%) in high schools.²

Table 1 Students with Non-Italian Citizenship in Secondary Schools of Veneto, Padova, Treviso, and Italy – School Year 2023/2024

Location	Enrolled %	Middle Schools	High Schools
Padova ages 11-18	11.5		8.227
Treviso ages 11-18	10.8		7.729
Veneto Secondary Education	10.6	22.083	23.338
Italy Secondary Education	10.2	195.455	228.124

The Veneto region ranks third in Italy for the highest regional presence of foreign students, after Lombardy and Emilia-Romagna.³ A resulting problem arising from these data is the marked divide between the degrees of linguistic-communicative competence required by the Italian school and the language proficiency (LP) of alloglot students.

Another issue, central to this study, is the significant gap in the availability of formal tests designed to assess how many and which Language Learning Strategies (LLSs) immigrant teenage learners employ. LLSs are strategies, or steps, learners take in the language learning and use process to facilitate language acquisition (Cf. Cohen 2000). For instance, students may rely on their first language (L1) to process new vocabulary or ask for clarification when the meaning is

1 Further details on the ELET indicator and school dropout rates in Italy are available in the official report published by ISTAT, accessible at: <https://www.istat.it/comunicato-stampa/livelli-di-istruzione-e-ritorni-occupazionali-anno-2023/>.

2 <https://www.tuttitalia.it/veneto/statistiche/cittadini-stranieri-2023/>.

3 <https://www.miur.gov.it/documents/20182/0/Principali+dati+della+scuola+-+Focus+avvio+anno+scolastico+2023-2024.pdf/8ba0c506-a14f-9071-fbb7-e0aede0a5ebb?t=1695388882235>.

unclear. Purpura (1999) argued that existing tools primarily consist of questionnaires that measure the types and frequencies of strategies, rather than their effectiveness or understanding of promotion and learning. Therefore, the need for more robust assessment methods in Italian secondary schools to better understand and improve LLSs is clear-cut.

In this respect, the recent publication of the Common European Framework of Reference for Languages (Council of Europe 2020), i.e., the Companion Volume (henceforth CEFR/CV), has provided international guidelines to support plurilingual competence in educational settings. Organized into 6 Chapters, the CEFR/CV outlines in Chapter 3 a series of linguistic-communicative activities and strategies using descriptor scales, along with corresponding strategies for reception (59), production (68), interaction (87), and mediation (117).

While existing literature has predominantly concentrated on English as a Foreign Language (EFL) in examining the relationship between LLS usage and proficiency (Stander 2020), the present study seeks to shed light on the correlation between CEFR/CV-based strategies and activities and proficiency in Italian as a second language (L2). To this end, it develops a test of linguistic-communicative strategies designed for non-native learners of Italian pursuing educational purposes.

2 Correlating Language Learning Strategies Use with Proficiency

Since the latter half of the 20th century, numerous scholars have attempted to define the notion of strategy within the LLS domain.⁴ Strategies are cognitive and behavioural processes that aid students in performing tasks effectively, serving as tools, actions, or techniques to enhance learning outcomes (Rubin 1975). Oxford (1990) proposed a classification system for LLSs based on classroom observation and data collection, including strategies that directly impact learning (memory, cognitive, and compensation strategies) and those that indirectly affect learning (metacognitive, affective, and social strategies). In keeping with Rubin's (1975, 43) view, the so-called good language learner may be a good guesser, willing to appear foolish to communicate, and inclined to test their knowledge by producing new sentences, thereby putting newly acquired competence into use.

⁴ The taxonomy of LLSs is open to several debates; however, issues in strategy classifications will not be addressed in this paper. See Oxford 1990 for discussions.

O'Malley et al. (1985) stressed that LLSs' use and tasks are inextricably related, implying that the choice of a strategy is largely dependent on the demands of the language task. Additionally, in her Model of Second Language Learning, Bialystok (1978, 71) defined LLS as a set of *optional* methods that language learners can employ in various learning situations. These strategies are considered optional means for exploiting available information to enhance competence in an L2 (1978, 76).

Between the learning process itself and LLS use, strategic competence is involved in accomplishing the tasks. Bachman (1990), in defining what constitutes learning competence, proposed a distinction of two components:

1. language components, which comprise grammatical, textual, illocutionary, and sociolinguistic competence;
2. strategic competence, which includes assessment, planning, and execution functions in relation to the communicative goal of the language learner.

Similarly, in the CEFR/CV, strategic competence is described by descriptors influenced by the model: plan, execute, monitor, and repair.⁵ From this perspective, strategic competence development is a primary objective for language learning. Furthermore, strategic competence is not directly related to LP; on the contrary, it is an ability that could enable immigrant learners to overcome breakdowns during L2 communication due to performance variables or insufficient competence (Dörnyei, Thurrell 1991). It follows that the degree of awareness involved in LLS use is critical, as it implies that learners are not merely passive recipients of information but active participants in their educational journey. Consciousness plays a central role in distinguishing strategic from non-strategic processes. According to Cohen (2000), unlike subconscious processes, strategies involve a degree of awareness, or total awareness that allows learners to apply them purposefully and in alignment with their learning objectives. The author also notes that students will use language strategies to varying degrees depending on their awareness of possible LLSs and their ability to mobilize them. This conscious application of LLSs is particularly pertinent in scenarios where immigrant students are learning an L2 for academic purposes but lack high LP in the target language, jeopardizing the effectiveness of language instruction.

Politzer and McGroarty (1985) and Bialystok (1983) sought to examine the statistical relationship between LP and LLSs using questionnaires. However, both studies found minimal statistically

⁵ <https://rm.coe.int/cefr-companion-volume-with-new-descriptors-2018/1680787989>.

significant correlations between the questionnaire's responses and the performance measures. These findings suggest that the strategies students reported implementing did not strongly align with their actual LP.

More recent studies employing quantitative statistical methods and correlation coefficients (Habók, Magyar 2018) have corroborated these earlier results, showing a modest to positive correlation between LLSs and LP, although in some cases the correlation proved to be statistically insignificant (Kiram et al. 2014). In contrast, Green and Oxford (1995) and Zhao (2015) observed a greater use of LLSs among more successful learners.

Building on this body of literature, which has mainly focused on EFL and self-report questionnaires, the current study aims to improve understanding of the relationship between LLS use and L2 proficiency in Italian language education among newly arrived foreign adolescents.

According to the Ministero dell'Istruzione e del Merito,⁶ newly arrived immigrant students are defined as those enrolled in the Italian school system for the first time in either the current or the previous school year, typically characterized by a non-native linguistic background and limited LP in the language of instruction.

Against this backdrop, the present study examines selected CEFR/CV linguistic-communicative strategies through a tailored placement test.

3 Research Design

This study investigated a specific research question to address the lack of correlational research between LLS usage and Italian language learning in secondary educational settings:

Is there a significant correlation (> 0.7) between immigrant teenagers' use of linguistic-communicative strategies and the related CEFR/CV (2020) activities (i.e., reading for information and argument, reading for information, creative writing, and note-taking) in relation to their elementary Italian language proficiency?

The present study adopts a quantitative correlational research design. In this research, LP is restricted to the pre-A1, A1, A1+, and A2 levels. It is important to emphasize that the CEFR/CV framework describes competences through descriptors ("can-do" statements). There is no objective justification for assuming that the difference between A1 and A1+ is numerically equivalent to that between A1+ and A2. Consequently, assigning values such as 1 to A1, 2 to

⁶ <https://www.mim.gov.it/principi>.

A1+, and 3 to A2 merely signals the order relation ($A1+ < A2$), but it does not imply that the numerical distance between 2 and 3 is meaningful or comparable to the distance between 1 and 2. In such cases, non-parametric approaches are preferable. Spearman's rank correlation coefficient (ρ), ranging from -1 to +1, measures monotonic relationships between ordinal-level variables and is thus well-suited for grouped LP data; conversely, the Pearson correlation coefficient (r) is typically applied when data are jointly normally distributed (Schober, Boer, Schwarte 2018, 1765). Accordingly, both Spearman's ρ and Pearson's r were computed in this study to determine whether the relationship between the two variables, the CEFR/CV LLSs, treated here as the dependent variable, and LP, the independent variable, of immigrant secondary-school learners, was strong ($|\rho| > 0.7$), moderate ($0.5 \leq |\rho| < 0.7$), fair ($0.3 \leq |\rho| < 0.5$), or poor ($|\rho| < 0.3$). Thus, Spearman's ρ was used alongside Pearson's r whenever the assumptions of the latter were violated. The statistical analysis was performed using the Python programming language with the `scipy.stats` library (Virtanen et al. 2020) to calculate Pearson's r and Spearman's ρ .

3.1 Participants

The study initially involved a pool of 213 students. The sample was drawn from one upper secondary school in Padova, six lower secondary schools in Padova, and one lower secondary school in Asolo (Treviso). To ensure participant anonymity, each participant was assigned a unique identifier, randomly generated, from S001 to S213.

During the testing period from November 2023 to January 2024, the following 132 students were present: S001, S002, S009-S029, S034-S104, S106-S108, S111-S121, S123-S128, S132-S140, S144-S149, S190, S191, and S193.

Of the 132 students included in the experiment, 80 (60.6%) were male, and 52 (39.4%) were female, aged 11-22 years, with a mean age of 181.25 months and an average length of residence in Italy of 34.58 months. It should be noted that male participant S002 (19 years old) significantly affected the average length of residence. Although the student reported having resided in Tyrol since birth, active use of Italian began only one year before test administration, and no prior exposure to the language at home or school was reported. Nonetheless, the median length of residence in Italy among the sample is 12 months ($n = 17$), corresponding to one year of stay, followed by 6 months ($n = 15$) and 5 months ($n = 12$). According to the definition discussed, these participants can be classified as newly arrived learners.

Based on teachers' assessments and evaluations, participants' Italian proficiency at the time of the study ranged from A1 to low A2 on the CEFR/CV scale, a level further investigated in the present research. Of these, 54 participants (S055-S104, S106-S108, S193), enrolled in Provincial Centers for Adult Education, or Centri Provinciali per l'Istruzione degli Adulti (CPIA), in Padova and Asolo, where they follow educational pathways leading to a lower secondary school diploma, exhibit low LP levels (Pre-A1, A1). This may be attributable to their prior educational experiences in Qur'anic schools, which are predominantly grounded in rote memorization practices of the Qur'an rather than in the development of broader literacy skills. Out of 54, 32 participants reported living in residential care facilities for unaccompanied minors while attending the Italian CPIAs. For the remaining participants, schooling occurred in their countries of origin; however, precise educational attainment levels are unavailable, likely due to limited LP.

28 Countries of origin were identified in the sample, as shown in Chart 1.

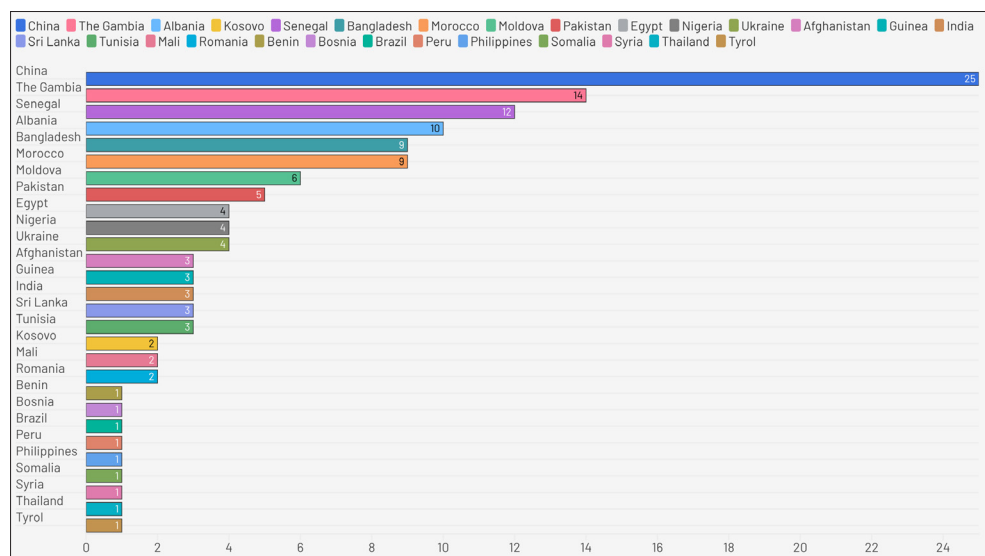


Chart 1 Sample Distribution by Country of Origin

The sample [chart 1] is characterized by a substantial representation of students from Asia (China, Bangladesh, Pakistan, Sri Lanka) and Africa (The Gambia, Senegal, Morocco, Egypt). This is complemented by a significant presence of students from Eastern Europe and the Balkans (Albania, Moldova, Ukraine, Romania, Kosovo). A smaller

proportion of participants is from South America (Brazil and Peru), further enhancing the sample’s geographical diversity.

3.2 Participants’ L1

The variety of home countries is associated with 31 first languages, as detailed in Chart 2.

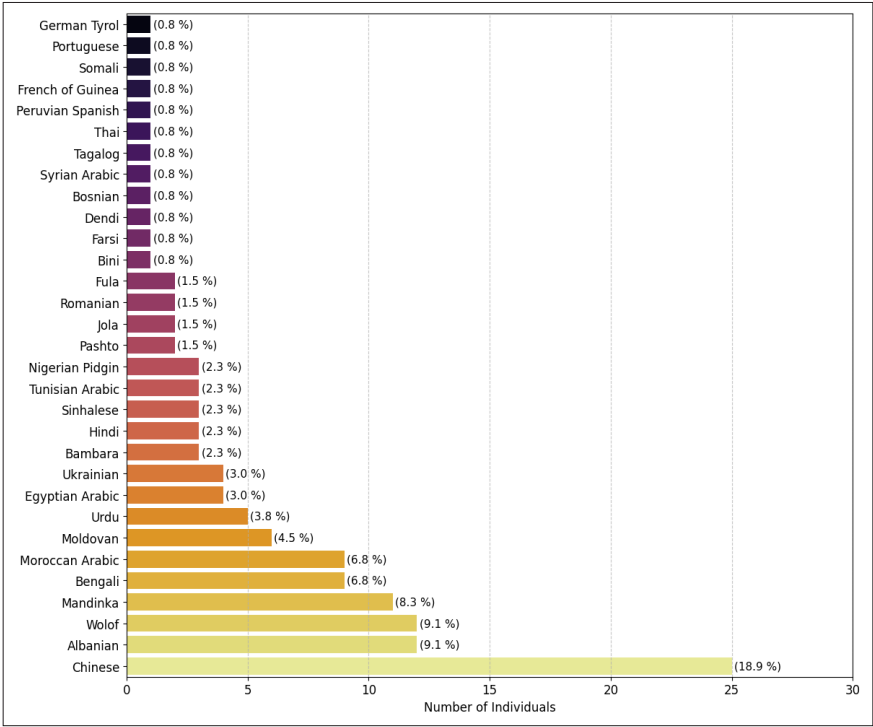


Chart 2 L1s Distribution and Frequencies

As illustrated in [chart 2], the sample under investigation presents a remarkable degree of linguistic diversity. For instance, S084, a Farsi speaker from Afghanistan, also reported speaking Pashto. In other contexts, the same language is shared across different nation-states. As an example, participants S023 and S102 came from Kosovo, and eleven pupils came from Albania (S015, S041, S048, S053, S074, S078, S079, S088, S103, and S104), where Albanian is spoken as a shared L1. Similarly, six Moldovan (S024, S045, S046, S047, S148, and

S191) and two Romanian students (S014 and S144) share Romanian as an official L1.⁷

As attested by previous sociolinguistic research (Mantovani 2024), several learners in the sample can be classified as multilingual. Four Ukrainian students (S035, S038, S044, and S137) in the sample additionally reported proficiency in Russian, Moldovan, and Romanian. S149 and S145, from Pakistan, declared Urdu as their L1, alongside Punjabi.

A region of vast linguistic diversity is the Niger-Congo. In West Africa, English is the *de facto* language in The Gambia and Nigeria, while in Senegal, Guinea, Mali, and Benin, it is French. Notably, no participant reported a *de facto* language as their L1, except S065 from Guinea, who reported French as his L1. In Senegal, twelve participants (S055-S059, S062, S063, S064, S066-S069) reported speaking their L1, Wolof, alongside the official language, French. The Gambia, Guinea, and Mali countries exhibit significant multilingualism, with students reporting knowledge of three to five languages each. Mandinka is the main language of The Gambia, spoken by ten students (S039, S060, S070, S077, S089, S090, S093, S094, S098, and S101); notwithstanding, alongside it, Fula, spoken as L1 by students S092 and S108, Jola, spoken as L1 by S095 and S096, and Wolof are also used. West African English Creole includes the Nigerian Pidgin, spoken by S028, S035, and S136, the most widely spoken pidgin-creole language in the world. Mandinka, reported as the L1 of S076, functions as the principal *lingua franca* of Guinea, Senegal, Mauritania, and western Mali. Dendi, reported by S080, is a Songhay dialect spoken in Benin. Bambara, reported by S075 and S091, is the most widely spoken language in Mali and is also present in Guinea (S097).

The Arabic-speaking countries represented in the sample are characterized by a high degree of dialectal variation employed in daily communication. Within the sample, Moroccan Arabic (or Darija) was the most widely attested, spoken by nine students (S026, S029, S043, S051, S052, S061, S106, S107, S128); this was followed by Egyptian Arabic (S071-S073, S193), Tunisian Arabic (S049, S050, S125), and Syrian Arabic (S139), which together reflect the Maghrebi and Levantine *continua*.

Given this linguistic diversity, multilingualism was carefully accounted for in both the analysis and the design of the experimental proposals.

7 This study maintains the distinction between Moldovan and Romanian as a matter of national and linguistic identity, based on the students' self-declared L1 in their language biographies. See Mantovani 2024.

4 Data Collection and Testing Procedures

A placement test designed to address strategies and Italian language competence was administered between November 2023 and January 2024.

The test was administered to a total of 122 students from the 8 lower secondary schools and 10 students from the upper secondary schools in Padova and Treviso. The administration time was 75 minutes.

In line with Cecilio-Fernandes et al. (2019), it is essential to identify items with bias for quality control and the fair calculation of administration times for exercises administered. To make inferences about the outcomes of the administered test, the execution of LLSs should be defined in measurable criteria to distinguish strategies from other individual characteristics that can affect test performance.

4.1 CEFR/CV Descriptors and Score Allocation

Given the above, the specifications, visible in Table 2, were constructed considering the CEFR/CV evaluation grids and the Self-Assessment Grid of the Council of Europe.⁸ The scales for levels pre-A1 (when available), A1, A1+, and A2 were considered for the administered test. Thus, a score was set for each presented activity, proportional to the degree of success in implementing LLS.

The scores reported in [tab. 2] should be interpreted both quantitatively and qualitatively. The quantitative dimension is reflected in the numerical values (Score). In contrast, the qualitative dimension must be assessed against the CEFR/CV descriptors and the corresponding LPs presented alongside the table (Descriptors & Levels). The final score scale for levels A1–A1+ spans a broader range than the other levels, from a lower score (16) to a considerably higher one (29). In this case, it is up to the researcher-teacher to assess the learners' most appropriate LP level within this interval.

⁸ <https://www.coe.int/en/web/portfolio/self-assessment-grid>.

Table 2 Activities, Criteria, Descriptors, and Score Specification

Administered Activities	Assessment Criteria	Descriptors & Levels		Score
1a. Open-ended completion task comprising 4 items on familiar and concrete vocabulary	Identification of everyday objects: - can recognize and describe only the words that are strictly familiar to him/her using high-frequency vocabulary - can provide a simple description of the images he/she sees with high-frequency or appropriate vocabulary	CEFR/CV, 60	Pre-A1	0-1
			A1	2
			A1+	3
			A2	4
1b. Global comprehension with an open-ended question	Capacity for content anticipation: - can infer the literal meaning of the text with at least a single word from the title - can infer the general meaning of the text by analyzing multiple keywords or phrases		Pre-A1	0-1
			A1	2
			A1+	3
			A2	4
2. A binary (true or false) reading comprehension	Understanding specific information: - capable of grasping the content of informational material if it is straightforward and contains brief, simple descriptions - can locate specific information in simple, everyday written material	CEFR/CV, 55-6	Pre-A1	0-2
			A1	3-4
			A1+	5-6
			A2	7-8
3. Creative writing on a given topic (home country)	Complete responses to specific questions: - can write simple expressions and paratactic sentences about themselves, their place of origin, and their activities - can write sentences connected to everyday aspects of their country (people, places, food)	CEFR /CV, 67; 69	Pre-A1	0-3
			A1	4-6
			A1+	7-9
			A2	10-12
4. Open-ended completion through lexical and grammatical competence	Ability to simplify complex information: - can partially simplify the comprehension of images using a limited vocabulary - can simplify the understanding of images a few words at a time, employing both verbal and non-verbal means to facilitate comprehension	CEFR /CV, 105	Pre-A1	0-2
			A1	3-4
			A1+	5-6
			A2	7-8
Final Scores			A0	0-15
			A1-A1+	16-29
			A2	30-36

4.2 LLSs Investigated

LLSs are not always observable to the human eye, particularly when they involve cognitive or metacognitive processes, as Martínez (1996) noted. In the present study, however, the strategies under investigation manifest in ways that can be identified through written performance: note-taking (Activities 1a and 4), underlining and highlighting keywords (Activity 2), and exploiting co-text and paratextual cues (Activities 1b and 3). Although internally conceived,

these strategies become externally visible, allowing for systematic empirical observation.

For this reason, the level of use of a given LLS was operationalized as a dependent variable (outcome) and coded on a three-point scale (Cf. Torregrossa, Carbonara 2025). Specifically:

1. 0 out of 2 corresponds to 'not attempted'. The learner does not yet demonstrate awareness of the need to activate an LLS in response to a task demand.
2. 1 out of 2 corresponds to 'attempted'. At this level, strategic behaviour is present but not yet fully controlled.
3. 2 out of 2 corresponds to 'successfully executed/attempted'. Learners demonstrate both awareness and effective control over the strategy.

This systematic procedure facilitates quantification of LLS use while accommodating variability in learners' ability to implement LLSs successfully.

4.2.1 Reception

The first set of reading for information and argument activities functions as a pre-reading activity, introducing learners to the written input through visual support.

Specifically, in Activity 1a, students are asked to observe an image and list four objects they recognize:⁹ *Cosa vedi nell'immagine? Scrivi quattro oggetti che conosci* (What do you see in the image? Write down four objects you recognize).¹⁰ In Activity 1b, they are prompted to go one step further and formulate a hypothesis about the content of the upcoming text: *Dopo aver osservato questa immagine, secondo te, di cosa parlerà il prossimo testo?* (After observing this image, in your opinion, what will the next text be about?).

The LLSs tested are identifying cues and inferring (CEFR/CV 2020, 60). Learners are encouraged to attend to visual and paratextual information, using these cues as scaffolding to anticipate the meaning of the written text.

The primary objective is to foster learners' ability to exploit illustrations, headings, and contextual elements to build hypotheses about the text's content. More specifically, the tasks are designed to

9 The elements included in the image were: the map of Italy, a shoe, a gondola, a fork, a knife, the Vatican, a pizza, a church, a coffee cup, a Roman column, a wine glass, a wine bottle, carnival masks, sunglasses, olives, tomatoes, a plate of pasta, a plate of spaghetti, a chili pepper, the Colosseum, and the Leaning Tower of Pisa.

10 While the instructions are presented here in both Italian and English, learners were only provided with the Italian version.

assess whether learners can infer meaning from the co-text, paratext, and linguistic environment.

4.2.2 Reception and Mediation

In this reading-for-orientation activity, learners are then instructed to read a short informative text and subsequently mark a set of statements as either true or false (Cf. Appendix): *Leggi il testo. Poi, indica con una crocetta <X> se la frase è vera o falsa* (Read the text. Then, mark with a cross <X> whether the statement is true or false).

The mediation strategy tested is streamlining a text (CEFR/CV 2020, 121). Learners are expected to highlight or extract the key information from the input to respond accurately to the comprehension items. Although the instructions do not explicitly require underlining or note-taking, the main objective is to assess learners' ability to identify and retain essential information from a short-written input. A further aim is to monitor whether the use of textual engagement strategies (e.g., underlining or annotating) correlates with higher performance. More specifically, the task examines whether students who underline or mark relevant segments of the text obtain higher scores, or whether learners with greater proficiency can achieve high results without relying on these strategies.

The written text was assessed using Gulpease's readability formula¹¹ to determine its accessibility for the target audience of immigrants. The index produced a score of 62.6 on a 0-100 scale. This range corresponds to a text suitable for readers with a middle school education, specifically a score between 60 and 80. Consequently, the text is considered suitable for enabling learners to infer meaning from a short and relatively simple context.

Items 1-4 focus on the learners' vocabulary range (CEFR/CV 2020, 131), requiring them to infer the meanings of familiar and unfamiliar words and phrases from co-textual and contextual cues. Items 5-8, by contrast, target the ability to exploit linguistic cues more directly, including basic vocabulary, geographical terminology, place names, and quantitative data. This requires both lexical and syntactic analysis, as learners must recognize and interpret specific linguistic markers to identify correct answers.

11 Index = $89 - (Lp / 10) + (3 \times Fr)$, where Lp is the total number of letters in the text divided by the number of words, and Fr is the number of sentences divided by the number of words.

4.2.3 Production

In this creative writing task (CEFR/CV 2020, 67), learners are required to complete a description sheet about their country of origin. The prompt explicitly asks them to “Complete the description sheet of your country of origin. Use complete responses” (*Completa la scheda di descrizione del tuo Paese d’origine. Usa risposte complete*).

The production strategy elicited is compensating (CEFR/CV 2020, 69). Learners are expected to draw on available linguistic resources to fill potential gaps in their knowledge, for example, by using paraphrasing or circumlocution.

The objective is to assess learners’ overall ability to produce coherent written language. The activity is also designed to observe how learners manage lexical or grammatical gaps, and whether they can reformulate ideas or paraphrase creatively to convey meaning effectively.

The description sheet includes the following items:

- a. Where are you from?
- b. What is the capital of your country?
- c. What is the official language?
- d. What is the most important national holiday? When is it celebrated?
- e. What is a typical food or dish?
- f. What is your favourite city? Why?

These questions aim to elicit both factual information and personal perspectives.

4.3 Mediation

In this note-taking activity (CEFR/CV 2020, 105), learners are asked to observe two images and produce a short list of keywords:

1. The illustration depicts a cartoon-style Earth with a smiling face in the background. In the foreground, three characters are engaged in environmentally friendly activities: a boy is disposing of bottles into the appropriate recycling bin, one girl is watering the Earth from above, and another girl is offering flowers to the boy. The overall style is playful and colourful, emphasizing ecological awareness and positive interactions with the planet.
2. This cartoon-style image shows two archaeologists working in a desert setting. They are bent over examining a broken piece of an ancient vase, with a cactus visible in the background. One of the archaeologists, a man, holds a magnifying glass to inspect the artifact more closely. Both archaeologists wear typical field attire, including hats, beige pants, and utility

belts. The illustration conveys a sense of careful observation and fieldwork in an archaeological context.

The task is introduced with a simple prompt: *Cosa vedi? Scrivi una lista di parole-chiave per le due immagini (4 circa)* (What do you see in the two images? Write a list of keywords [approximately 4 for each image]). The activity is designed to elicit two specific mediation strategies: linking to previous knowledge and breaking down complex information (CEFR/CV 2020, 118). Although the CEFR/CV does not provide explicit descriptors for note-taking at the pre-A1 and A1 levels, the descriptors still outline a developmental progression in this area; at lower proficiency levels, note-taking is mainly seen as writing down a series of points.

The main objective is to activate and recall learners’ prior knowledge while simultaneously assessing their ability to simplify relatively complex input.

5 Results and Discussion

The results of the correlations (ρ , r) between tested strategies and LP, including information on the mode of each strategy (LLS Mode), and the average language proficiency score (Mean LP), are summarized in Table 3.

Table 3 Correlation (ρ , r) Results between Tested LLSs and LP

Activity	Tested Strategies	Mean LP	LLS Mode	ρ	r
1a.	Identifying cues and inferring	0.657	1	0.447	0.479
1b.	Identifying cues and inferring	0.848	2	0.649	0.604
2.	Streamlining a text	1.583	0	0.083	0.067
3.	Compensating	0.564	1	0.827	0.739
4.	Linking to previous knowledge; breaking down complicated information	1.092	2	0.578	0.521

As demonstrated in [tab. 3], the Pearson and Spearman correlations between LLSs and LP vary across activities.

Strategies that focus on identifying cues and inferring show a mean LP of 0.657 (Standard Deviation, SD = 0.642) in Activity 1a, which indicates that participants in this task had an average LP between pre-A1 and A1, and 0.848 (SD = 0.805) in Activity 1b, slightly higher than Activity 1a, corresponding to an average LP still between pre-A1 and A1 but closer to A1.

The scores demonstrated a moderate positive correlation in Activity 1a ($\rho = 0.447$; $r = 0.479$), with an LLS score’s SD of 0.388, and in Activity

1b ($p = 0.649$; $r = 0.604$; $SD = 0.717$), reflecting moderate dispersion in results. In these activities, learners often make educated guesses based on non-verbal visual cues,¹² which allows them to communicate more efficiently even when their L2 vocabulary is momentarily limited and elementary. The LLSs' score reached its highest mode (2), that is, the most frequently occurring score, in Activity 1b, indicating that many students successfully engaged strategies such as relying on the title of the following text or the input image provided in the pre-reading phase to answer questions correctly. By leveraging these strategies, low-level students can more effectively enhance their language skills. Strategic competence (CEFR/CV 2020, 35) can indeed help speakers overcome communicative problems, enabling learners to make use of linguistic tools and mnemonic, repetitive, cognitive, and metacognitive cues, thereby enhancing linguistic performance.

The average LP in Activity 2 is the highest among all tasks (1.583), corresponding to a proficiency level between A1 and A1+. This implies that, on average, learners in this task had a slightly higher LP compared to the other activities. Unsurprisingly, this task focused on written text comprehension, which is generally easier to perform and to acquire than written production for elementary-level learners; however, the SD of 0.900 indicates substantial variation among participants. The correlations were poor for both indices ($p = 0.083$; $r = 0.067$), with an $SD = 0.597$ for the LLS score, yielding non-significant results. 22 participants out of 132 (16.6%) employed underlining or highlighting as a strategy to identify key words in the text, with an LLS mode of 0. Although these students correctly identified key words, they did not always manage to answer the questions. For example, S039, a male Mandinka speaker, achieved only 37.5% correct answers despite underlining the appropriate keywords, while S065, a male French speaker from Guinea, scored just 25%. Thus, underlining and highlighting text to streamline comprehension do not always correlate with LP success, indicating that additional strategies need to be made explicit to learners to support successful task performance.

Activity 3 exhibits the strongest positive correlation ($p = 0.827$, $r = 0.739$), with a mode LLS score of 1, a modest result, and an SD of 0.548.¹³ Respondents did not capitalize on the linguistic cues in the questions themselves, nor did they make intelligent use of test-wiseness strategies to draw on the previous text (Activity 2), which contained numerous ready-made sentences. The mean LP is the lowest across tasks

12 S061 (female Moroccan speaker) noted: *il prossimo testo parla di esploriamo l'italia* (The next text talks about exploring Italy).

13 S036 (female Urdu speaker): **il capitale di Pakistan e islamabad* ("La capitale del Pakistan è Islamabad" / The capital of Pakistan is Islamabad), against S107 (female Moroccan speaker): *Sono venuta dal marocco, precisamente da Casablanca* (I came from Morocco, specifically Casablanca).

(0.564, SD = 0.743), suggesting that participants in this activity had, on average, the weakest LP, closer to pre-A1.¹⁴ This outcome underscores a deficiency in employing strategies to circumvent the lack of LP (Cohen 1998). Learners in this activity often relied on their L1, English, or hybrid forms,¹⁵ disregarding the contextual cues available in the task.

In Activity 4, the mean LP is slightly above 1 (1.092; SD = 0.870), corresponding to an average LP around A1. The LLSs show the highest mode (2), together with Activity 1b, with an SD of 0.484. The moderate positive correlations observed ($\rho = 0.578$; $r = 0.521$) highlight the learners' ability, despite limited LPs, to infer crucial elements from the linguistic paratext to comprehend the text. Consequently, even students who have not yet achieved full mastery of Italian LP can effectively rely on contextual clues to enhance their understanding of the target language.¹⁶ Such ability is critical for language acquisition, as it demonstrates the learners' will to interpret complex information through contextual cues (Zhou, Wu 2024). Notably, even though the assignment instructions did not explicitly require this, a female Chinese student (S054) used a compensation strategy to address the lexical gap related to the noun *vaso* (vase): she used a drawing to represent the missing concept. This strategy is explicitly promoted by the CEFR/CV (2020, 89) for Interaction Activities. Although this approach may appear avoidant, the data indicate that low-proficiency foreign adolescents remain motivated to learn the L2 and are not discouraged by language-related challenges.

All in all, the Spearman coefficients are consistently slightly higher than the Pearson values, suggesting that the association between LLS use and LP is better captured as a monotonic trend rather than a perfectly linear one. This pattern indicates that higher reliance on strategies tends to be associated with greater proficiency, although the increase may not be proportional across all levels of LP.

The correlations between strategies and students' LP in Italian L2 can be better understood by examining Figure 1. For each task, a scatterplot was generated showing the relationship between LPs' scores (on the x-axis) and LLSs' scores (on the y-axis) using aggregate data per student.

14 S102 (male Albanian speaker): *mia cita preferonto Prizeren ("La mia città preferita è Prizeren" / My favourite city is Prizeren).

15 S060 and S090 (male Mandinka speakers): English.

16 S147 (female Bengali speaker): *Riciclare [...] piantare nuove piante prendere cura della pianeta terra* (Recycle [...] plant new plants take care of planet earth).

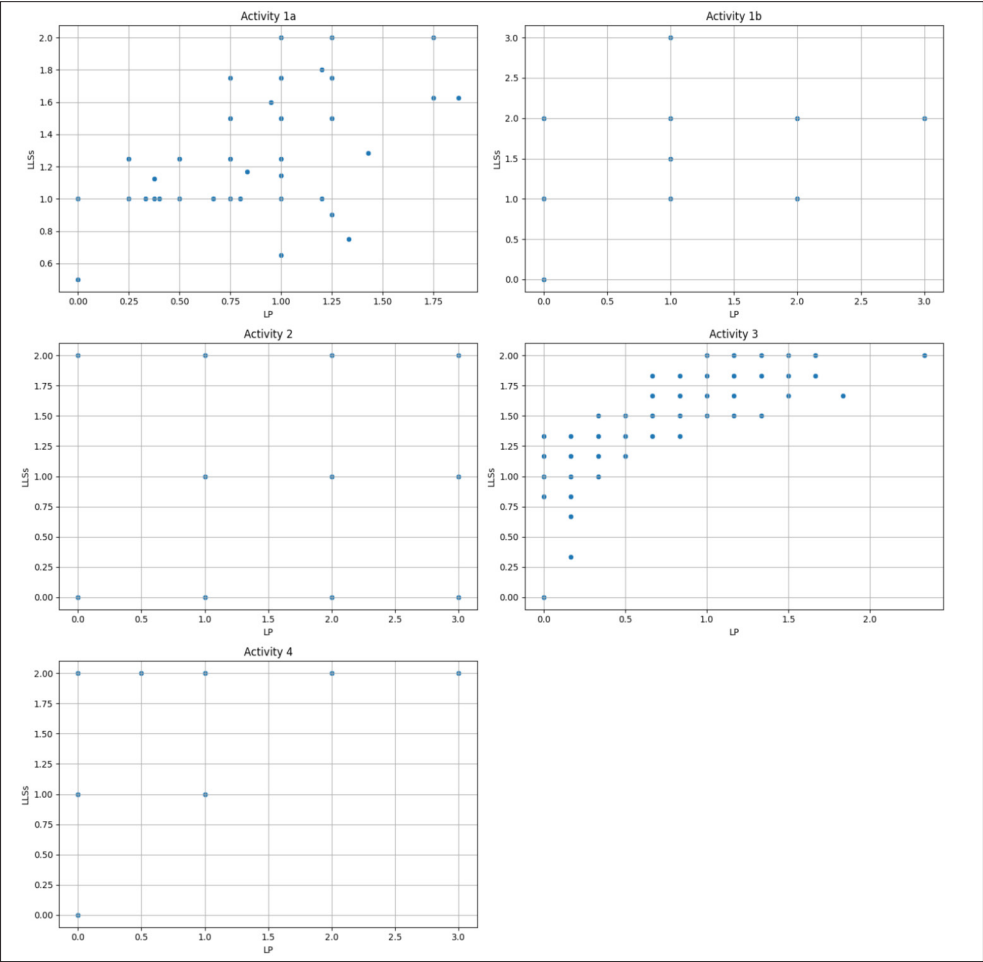


Figure 1 Results of the Correlation (ρ , r) between Strategies and Proficiency

As shown in [fig. 1], the scatterplots visually confirm the results of the correlation analyses presented: Activities 1b, 3, and 4 display stronger positive relationships, with task 3 presenting the clearest and strongest positive relationship, whereas Activities 1a and 2 exhibit weaker ones, with Activity 2 also showing issues of data variability. This is consistent with the poor correlation, close to 0, computed for this task, suggesting limited variation in the data. Low LP can hinder the proper use of strategies, and, more problematically, make LLS unrecognizable when observing the learner's progress. In accord with Green and Oxford (1995), learners might lack the knowledge to select appropriate LLSs

or to enlist them effectively. This complicates the researchers' ability to accurately predict which LLS are most successful in fostering L2 acquisition.¹⁷ It cannot be excluded that certain factors, already studied by other authors (e.g., Doró, Habók 2013), such as L1, age, or motivation, may influence the strategies learners can implement in L2 communication. Hence, it is not possible to assert that low LPs *alone* inevitably impact LLS use for L2 teenage students.

In addressing the research question, at low levels of Italian LP (pre-A1, A1), there is a moderately positive correlation with teenage learners' low use of strategies. This finding is also supported by Rao (2016) and Stander (2020) for the EFL students.

This study also confirms this with a series of data emphasizing the tendency to resort to compensation strategies, including drawing, recalling the L1, using English as a *lingua franca*, or attempting to execute the output in L2 regardless of accuracy.¹⁸

6 Conclusion and Future Directions

The primary objective of this study was to investigate whether there is a correlation between LLSs and low LP in Italian L2 among adolescent learners.

Results advised that the strength and significance of the correlation between LLSs and LP vary across tasks. Activities 1a, 1b, 3, and 4 show moderate-to-strong positive correlation between LLSs and LP. Activity 3 exhibits the strongest correlation ($\rho = 0.827$; $r = 0.739$), followed by Activity 1b ($\rho = 0.649$; $r = 0.604$), and then Activity 4 ($\rho = 0.578$; $r = 0.521$). Moderate positive correlation between LP and linguistic-communicative strategies applied by non-native Italian students and key strategies that learners use to cope with unfamiliar content, including a tendency to be involved in trial-and-error processes, language mix, non-verbal strategies (drawing), approximation, periphrases, and avoidance of topics. Identifying cues, inferring, and compensating strategies are widely exploited by low-level learners. Conversely, strategies oriented toward streamlining written texts (e.g., underlining or highlighting) appeared less effective and may require additional pedagogical support to become truly beneficial for learners with limited LP.

It is important to note that detailed information on literacy levels in the learners' countries of origin is not available for all participants

17 S075 (male Bambara speaker): **artiteci omo e dona nivola capelo, Scarpe*. "Architetti uomo e donna nuvola cappello, scarpe" (Architects man and woman cloud hat, shoes).

18 S087 (female Bini speaker): **Pounded yam, è Egusy soup fried rice è pollo (chicken) Black soup Pouno* (Pounded yam, is Egusy soup with fried rice is chicken [chicken] black soup).

due to their low LP, which may have limited their ability to provide it. This variable may play a critical role in shaping both the use and effectiveness of LLSs and thus warrants further investigation.

Findings recommend aligning pedagogical strategies with the skills and competencies of immigrant adolescents, conforming to the EU's plan to encourage new techniques and initiatives in language learning and teaching.¹⁹ The implications for classroom practice include incorporating explicit and implicit LLS training (Cohen 2000), peer support, and peer instruction to help adolescents unlock previous knowledge and expand thinking in L2. In this context, mediation work by educators for low LP consists of making learners aware of the different types of LLS, facilitating the development of a strategic chain for foreign students through mediation activities and strategies to be tested (CEFR/CV 2020, 'section' 3.4). These comprise creating expectations, embedding new linguistic elements within meaningful contexts to enhance understanding and retention through real-world scenarios, and interpreting and simplifying L2 tasks.

By implementing LLS, instructors can encourage a more effective multilingual repertoire and promote vocabulary acquisition and retention in Italian secondary education systems. Moreover, embracing combined instructional programs, such as Content and Language Integrated Learning, enables L2 learners to rely on LLS to accomplish their tasks and overcome barriers in L2. In this vein, robust and high-quality assessment methods are essential for addressing the specific needs of teenage immigrant populations.

From a methodological perspective, this study contributes to a refined coding system for strategic use based on a triadic score (0-1-2) derived from task performance. This paradigm could be validated in future research using qualitative approaches such as think-aloud protocols (Cohen, Wang 2024), which would allow learners to articulate their (meta)cognitive and strategic processes.

Future research should also explore how strategies are enacted and negotiated within group dynamics and classroom interactions, and extend the investigation to receptive listening skills, which remain an underexplored area in relation to LLS use in Italian L2 contexts.

19 <https://education.ec.europa.eu/focus-topics/improving-quality/multilingualism/european-language-initiatives>.

Appendix

Esploriamo l'Italia!

L'Italia si trova nel sud dell'Europa, al centro del Mar Mediterraneo. L'Italia è lunga e stretta e ha la forma di uno stivale. L'Italia è una “penisola” perché ha il mare a ovest, a sud e a est; a nord, invece, gli Stati vicini all'Italia sono la Francia, la Svizzera, l'Austria e la Slovenia.

In Italia ci sono due grandi isole, la Sicilia e la Sardegna, e tante isole piccole. Ci sono anche molti laghi e fiumi: il lago più grande è il lago di Garda e il fiume più lungo si chiama Po. A nord ci sono delle montagne molto alte, che si chiamano Alpi. Ci sono anche i vulcani: i due vulcani più importanti sono il Vesuvio, vicino a Napoli, e l'Etna, vicino a Catania, il vulcano più alto in Europa.

Il clima in Italia varia da regione a regione. A nord le estati possono essere calde e gli inverni freddi, mentre a sud il clima è mediterraneo, con estati calde e inverni miti, né caldi né freddi.

La capitale è Roma, una città molto antica che si trova nella regione Lazio e che è stata il centro dell'Impero romano. Altre città famose includono Milano, famosa per essere la capitale della moda e del design, e Firenze, famosa per i suoi capolavori artistici.

In Italia ci sono circa 60 milioni di abitanti e la lingua ufficiale è l'italiano, ma ci sono anche molti dialetti. L'Italia è uno dei 27 Stati che fanno parte dell'Unione Europea (UE).

Vero o falso?

1. La geografia dell'Italia ricorda quella di uno stivale	V	F
2. La capitale della moda in Italia è la città di Roma	V	F
3. L'Etna è un vulcano ed è il più alto in Europa	V	F
4. La lingua ufficiale in Italia è il dialetto di Roma	V	F
5. L'Italia è un'isola che si trova nell'Europa settentrionale	V	F
6. L'inverno al Sud può essere mite, cioè molto freddo	V	F
7. La parola “Alpi” è un nome proprio di luogo	V	F
8. Il testo parla di quattro Paesi vicini all'Italia	V	F

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