

Can language learning strategy instruction lead to improved language development in second language acquisition?

An evaluation

言語学習ストラテジーの指導は、第二言語習得における
言語発達の改善につながることができるか
一つの評価

Lee H. Alexander

アレクサンダー リーハービー

Greater language learning strategy use has been linked with higher second language proficiency, improved academic performance in both mathematics and language arts, and higher motivation. Yet, language learning strategy research has received notable criticism. This article reviews some themes in language learning strategy critiques and draws on studies by Ardasheva and Tretter (2013) and Teng and Zhang (2016) to illustrate a comparison between post-2002 research and the study by Hassan and colleagues (2005). I conclude that while inconsistencies in the evidence body prevent a clear evaluation of the claim that language learning strategy instruction leads to improved language development, related research appears supportive and post-2002 developments offer potential for a clearer understanding of language learning strategy instruction's effects on language development.

Key Words: language learning strategy instruction, language development, second language acquisition, SLA

より多くの言語学習ストラテジーの使用は、より高い第二言語能力と関連し、数学と国語の両科目の学業成績を向上させ、動機付けをより高めるとされてきた。しかしながら、言語学習ストラテジーの研究は注目すべき批判を受けてきた。本稿では、言語学習ストラテジー批判のいくつかのテーマを紹介し、Ardasheva & Tretter (2013) およびTeng & Zhang (2016) による研究を用い、2002年以降の研究とHassan et al. (2005) による研究の比較を行う。研究結果の不一致は言語学習ストラテジーの指導が言語発達の改善につながるという主張の明確な評価を妨げるが、関連する研究は支持的であるように思われ、2002年以降の発展は言語学習ストラテジーの指導が言語発達に及ぼす影響をより明確に理解する可能性を提供すると結論付ける。

キーワード：言語学習ストラテジーの指導, 言語開発, 第二言語習得, SLA

1. Introduction

Greater language learning strategy use has been linked with higher second language proficiency (Ardasheva, 2011; Dreyer & Oxford, 1996; Habók & Magyar, 2018; Hu, Gu, Zhang, & Bai, 2009; Lan & Oxford, 2003). It has been associated with improved academic performance in both mathematics and language arts (Ardasheva & Tretter, 2013a; Chamot, Dale, O'Malley, & Spanos, 1992; Montes, 2002). And it has been linked to higher motivation (MacIntyre & Noels, 1996; Nunan, 1997; Schmidt & Watanabe, 2001). Yet, while language learning strategy research has made a considerable contribution to the field of second language acquisition, it has received notable criticism. Some of the themes in language learning strategy critiques are reviewed in the first part of this essay. The second part introduces the systematic review by Hassan and colleagues (2005), which serves as an overview of the research prior to what Rose and colleagues (2018) described as a watershed for language learning strategy research, namely Dörnyei's (2005) influential critique. The following section draws on studies by Ardasheva and Tretter (2013) and Teng and Zhang (2016) to illustrate a comparison between post-2002 research and the study by Hassan and colleagues. I conclude that while inconsistencies in the evidence prevent a clear evaluation of the claim that language learning strategy instruction leads to improved language development, related research appears supportive and post-2002 developments offer potential for a clearer understanding of language learning strategy instruction's effects on language development.

2. Critiques

The term language learning strategies can be broken into its constituent parts. In psychology, learning is a process of information storing and retrieval (Dörnyei, 2005; Rubin, 1981). A strategy can be understood as a technique for acquiring knowledge (Rubin, 1975) or as an action for realizing an objective (Oxford, 1990). But this explanation leaves us with too broad an understanding of language learning strategies. Cohen (1996) distinguished language learning strategies from second language use strategies, considering both to be types of second language learner strategies. He categorized retrieval, rehearsal, communication,

and cover strategies as second language use strategies, i.e., not examples of a language learning strategy. Despite this narrow understanding, and despite debate (Ellis, 2008; Wenden & Rubin, 1987), agreement on how to understand language learning strategies themselves has remained elusive (Rose et al., 2018). This lack of consensus keeps the definition of language learning strategies open to criticism.

2.1. Definitions

Cohen (1996) deemed a language learning strategy to be distinguished by “an explicit goal of assisting learners in improving their knowledge in a target language” (p. 2-3). But while this understanding helps differentiate a language learning strategy from a second language use strategy, it provokes questions about what counts for explicitness, goals, or assistance. Griffiths defined a language learning strategy as an activity that is “consciously chosen by learners for the purpose of regulating their own language learning” (2008, p. 87). Yet this definition is also unsatisfactory. It would be illogical if, observing the same action in two learners, we were to categorize one instance of that action as a language learning strategy because the learner reported that they consciously and purposively chose that action, and categorize the other instance as not being a language learning strategy because the learner did not report making that conscious choice. Also, questions surround the term ‘conscious.’ Claims about consciousness, which are often found in second language acquisition research, are open to the criticism that they lack falsifiability (McLaughlin, 1990).

Dörnyei and Skehan (2003) criticized language learning strategy research in part because it lacks well-defined constructs. Macaro (2006) did not take a position on how to define language learning strategies, instead categorizing types of language learning strategies in relation to each other. Yet, without a clear definition, we lack a means to judge claims about what counts as a language learning strategy. We are left having to accept language learning strategy research at face value, unable to confirm that reported examples of language learning strategies should be understood as such.

2.2. Theory

The theoretical foundations of language learning strategy research have been described as eclectic (Griffiths & Oxford, 2014), which is perhaps why they have been the subject of criticism. Griffiths’ (2013) theoretical analysis judged strategies to be essentially a cognitive phenomenon. Equipped with the ability to learn from mistakes (Corder, 1967), develop an interlanguage (Selinker, 1972), build schemata (R. Anderson, 1977), and manage learning by metacognition (N. Anderson, 2008), it has been argued that the learner has the required tools for strategy use (Griffiths & Oxford, 2014). Yet aside from cognitivism, the field has drawn on behaviourism, chaos theory and complex systems, sociocultural theory, and activity theory (Griffiths & Oxford, 2014). Dörnyei and Skehan’s (2003) call for a clarification of language learning strategy theory, then, seems quite logical. But we can note that Griffiths and Oxford (2014) have argued against attempting to fit language learning strategies into a single theoretical pigeonhole. They argue that strategies should be understood as theoretically multifaceted.

2.3. Categorization

Categorization has been another contentious aspect of language learning strategy research. Rubin (1981) divided learning strategies into two groups: direct and indirect. O'Malley, Chamot, Stewner-Manzanares, Kupper, and Russo (1985) had three categories: cognitive, metacognitive, and social. The widely used strategy inventory for language learning (SILL; Oxford, 1990) originally had six, but was later revised to four: cognitive, affective, sociocultural-interactive, and meta-strategic. Despite its popularity, SILL did not put an end to attempts at categorizing language learning strategies. Both Pintrich and Garcia (1991) and Purpura (1999) used three categories, none of which were shared across both studies. Of Schmidt and Watanabe's (2001) four factors, two (study, and coping) bore no resemblance to Oxford's classification. In short, consensus has remained elusive, perhaps because contradictions abound in the various language learning strategy taxonomies (Woodrow, 2005). Of course, we might adopt Griffiths and Oxford's (2014) position that language learning strategies are theoretically multifaceted, and argue that they are therefore unamenable to straightforward categorization. Or, given the complexity of second language acquisition research, we could argue that the way in which language learning strategies group will be context-dependent. Griffiths (2008, 2013) has certainly argued for grouping based on post hoc analyses. Yet despite these considerations, we cannot ignore criticisms of language learning strategy taxonomies (Cohen & Dörnyei, 2002; Ellis, 2008; LoCastro, 1994).

2.4. Methodology

Language learning strategy research has been criticized not only for problems with definitions and classification, but also for reliance on invalid research instruments. Questionnaires have dominated language learning strategy research, among which SILL has played an outsized role. Criticism of SILL lay at the heart of Dörnyei's (2005) influential critique of language learning strategy research. Items on SILL use a 5-point Likert scale, but crucially the scales measure how often a participant uses a specific language learning strategy. The items measure the frequency of various behaviours that cannot be assumed to interact in a linear way. The scales are noncumulative, therefore SILL's expression of scale scores as means "is psychometrically not justifiable" (Dörnyei, 2005, p. 182). Even though SILL has "tended to produce interesting results" (p. 169), it is perhaps surprising that so many researchers used this questionable measure, sometimes without any adaptation to fit the context of their research.

In the same year that Dörnyei (2005), echoing Skehan (1989), called for retheorizing language learning strategies, Woodrow (2005) advocated the adoption of new and more qualitative methods. Here, some older and newer language learning strategy research is reviewed in turn, as a means to evaluate the claim that language learning strategy instruction can lead to improved language development.

3. Overview 1981-2002

In the period 1981-2002, a great deal of research looked at the relationship between use or choice of language learning strategy and factors such as language proficiency, motivation, gender, culture, nationality, and learning styles (Cohen, 1998; Ehrman & Oxford, 1989; Oxford & Nyikos, 1989; Wharton, 2000). An overview of research in that period follows.

The systematic review by Hassan and colleagues (2005) covered language learning strategy training research from 1981 to 2002. Their research question was (p. 17) “What is the effectiveness of strategy training?” The team applied 5 inclusion criteria to select 38 comparative intervention studies from an identified pool of 567 potentially relevant studies. Of the 38 studies, 24 investigated strategy training in English language teaching settings, with the remainder in teaching of other European languages, except one study of Japanese language teaching. Sixteen of the studies were carried out in the USA, with the other 22 from 13 other countries or regions on 5 continents. Randomized controlled trials accounted for 28 of the 38 studies, with the other studies employing a variety of designs. Outcome measures “included accuracy of language output, asking and answering higher order questions, attitude, awareness, comprehension, strategy use, writing ability, and vocabulary recall” (Hassan et al., 2005, p. 3) among others. The team selected only 25 of the 38 studies for review, covering “speaking, reading, writing, overall language ability, vocabulary and listening” (p. 4). Out of the 25 studies, 17 reported positive results. Only two reported negative results, with the remainder reporting mixed results. The team reported finding evidence for the effectiveness of strategy training in terms of improved outcomes, but that causality remained unclear. They reported that the evidence could not tell them whether the improved outcomes should be attributed to the specific strategy interventions themselves, or simply to improved awareness arising from any form of training that involves reflection on the process of language learning.

There is room to argue against the positive findings of the review by Hassan and colleagues. The researchers reported that while the evidence for language learning strategy training in reading comprehension and writing skills was strong, it was weak in not only speaking and listening, but also in overall proficiency. There is nothing in the theory that could explain this difference. Additionally, Hassan and colleagues (2005) did not report the measures employed in the studies that they reviewed. Of the 38 studies that the team initially selected, 32 were conducted in or after 1991; meaning that they formed a part of the boom in language learning strategy research that followed Oxford’s (1990) publication of SILL. Since a substantial portion of the language learning strategy research between 1990 and 2002 utilized SILL (Ardasheva & Tretter, 2013b; Rose et al., 2018), it is not unreasonable to assume that a large proportion of the studies that Hassan and colleagues included in their review also used this measure. If that is the case, the team’s findings are undermined by criticisms of SILL. Yet, if we set these criticisms aside, the findings support the claim that language learning strategy instruction can lead to improved language development.

4. Comparison post-2002

Post-2002 research on language learning strategies can be grouped into studies that a) rely on the same theory and measures as the bulk of 1981-2002 research, b) attempt to accommodate criticisms by adapting measures or theory, and c) attempt to develop new measures or use new methods (Rose et al., 2018). Two examples are described below; one which adapts SILL, and one which develops a new measure.

4.1. Ardasheva & Tretter (2013)

In light of Dörnyei's (2005) criticism of the psychometric validity of SILL, Ardasheva and Tretter (2013) sought to adapt and improve on the measure. The researchers changed the items of SILL to address criticism of the measure's categorization of language learning strategies. They adapted the measure to suit young learners of English as a second language, resulting in the shorter SILL-ELL. The researchers tested SILL-ELL on 1057 elementary, middle, and high school students from over 40 first language backgrounds at 38 urban schools in the American Midwest. Most of the students (93%) were in receipt of subsidized school meals. The average time the participants had attended US schools was 3.6 years. Teachers administered the SILL-ELL to students during ordinary class time. Confirmatory factor analysis showed that the SILL-ELL's six factors fit well with the validated and combined sample data. Whereas doubt surrounds the structural validity of SILL, we can be more confident about SILL-ELL. Ardasheva and Tretter (2013) did not set out to find improvements in language development, so their findings are not directly relevant to assessing the relationship between language development and language learning strategy instruction. Their study is, however, illustrative of a degree of continuity in language learning strategy research. Not only have the researchers based their work solidly on pre-2002 research but also their validation of a moderately adapted version of SILL suggests that criticisms of that measure may have been overstated.

4.2. Teng & Zhang (2016)

Teng and Zhang (2016) sought to design a new measure, like Ardasheva and Tretter (2013). They also sought to build a description of the components of writing language learning strategies and examined the effect of reported strategy use on learners' writing performance. In a process of item generation, piloting, and psychometric testing, the researchers developed a 7-point Likert scale questionnaire of 40 items termed the Writing strategies for self-regulated learning questionnaire (WSSRLQ). Instead of the frequency-based scale employed in SILL, the WSSRLQ has the participant rate how much the statement represents them. The WSSRLQ and Task 2 of IELTS (a writing test) were administered to 790 students (with Chinese as a first language and English as a second language) from six Chinese universities. Three models of writing strategies were subjected to confirmatory factor analysis using structural equation modelling, including a 9-factor model that was found to be the best fit for the data. The researchers related these nine factors to four theoretical constructs: cognitive, metacognitive, social-behavioural, and motivational language learning strategies. With a strong reported effect size, the nine factors were found to predict writing performance, accounting for 37% of the IELTS test score variance. Teng and

Zhang's (2016) study is a good example of a new direction in language learning strategy research post-2002 that incorporates self-regulation. Their finding that language learning strategy use predicted writing performance appears to support teaching language learning strategies to improve language development.

Compared to the period covered in the review by Hassan and colleagues, the post-2002 research is characterized by more variety. More qualitative methods have gained in popularity (Griffiths & Oxford, 2014), but quantitative methods still dominate (Rose et al., 2018). Whereas the term self-regulation was largely absent in the period 1981-2002, it has a notable place post-2002. Yet, the impact of self-regulation should not be exaggerated. Much language learning strategy research does not include the concept of self-regulation, and where it is employed, it is often just one piece in a wider language learning strategy jigsaw. Pre-2002 language learning strategy research paradigms have certainly not been abandoned.

5. Conclusion

The question posed in this article is whether or not language learning strategy instruction can lead to improved language development. It is hard to answer that question with certainty, because the evidence for improved language development with language learning strategy instruction is inconsistent (Gardner, Tremblay, & Masgoret, 1997; Nisbet, Tindall, & Arroyo, 2005).

This essay has discussed problems with definitions, theory, categorization, and methodology in language learning strategy research. However, these should not be overstated. Rose (2012a) showed that language learning strategy research is best-suited to context-specific research frameworks. Further, validated measures of language learning strategies have emerged. Despite the criticisms of language learning strategy research, the relationship between proficient language learners and language learning strategy use seems clear (Green & Oxford, 1995; Griffiths, 2008; Lan & Oxford, 2003; Mizumoto & Takeuchi, 2009; Oxford, 1996; Takeuchi, 2003). While this says nothing about whether language learning strategy instruction leads to improved language development, it is suggestive. Continued use of validated measures and more mixed methods studies, as recommended by Rose and colleagues (2018), can build on the study by Hassan and colleagues (2005) to give a clearer understanding of language learning strategy instruction's effects on language development.

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