

Attitudes to Learner Autonomy and Learning Strategies in Algerian EFL Context

Abstract:

Our research explored attitudes to learner autonomy, learning strategies, and language achievement among 82 Algerian EFL learners. Descriptive findings demonstrated learners' positive attitudes to learner autonomy and substantial use of strategies, with most preference for cognitive and metacognitive strategies and least preference for social strategies. Correlational analysis of attitudinal data showed significant relationships among perceptions of self-efficacy, self-initiated learning efforts, and learner's agency with language achievement. Equally, metacognitive strategies and strategies for perseverant learning correlated significantly with learners' achievement. One-way ANOVA showed significant differences in learners' attitudes and strategies across achievement, with high achievers showing significantly stronger positive perceptions of self-efficacy, attitudes to learner's role, perceptions of self-initiated learning, higher use of metacognitive strategies, and strategies for perseverant learning. Collectively, attitudes and strategies explained 39% of the variation in learners' achievement, with strategies for perseverant learning and social strategies as significant predictors. The research discusses the relevance of attitudes and learning strategies in language education research and the probable jeopardising effects of exam-orientated pedagogy within the educational system.

Keywords: attitudes, learning strategies, autonomy, achievement

ملخص:

إن تطور مفهوم التعلم من اكتساب الفرد لسلوك نتيجة لتدريب معين إلى سيرورة اكتساب معارف مختلفة يكون فيها الفرد المتعلم هو العامل الرئيسي في ذلك قد غير مجموعة من المفاهيم والتطبيقات المعمول بهما في مجال التعليم. فاعتبار الفرد المتعلم المسؤول الرئيسي عن سيرورة التعلم زادت في انتشار مفهوم التعلم الذاتي واستراتيجيات هذا الأخير التي تسهم كثيرا في قدر كبير من التحصيل العلمي والأكاديمي. لكن اختلاف المواقف والتوجهات نحو التعلم الذاتي قد ينتج عنه تباين في استراتيجيات الفرد المتعلم قد يؤثر فيه إلى حد كبير على مستوى تحصيله العلمي والأكاديمي.

Ramzi NOUIOUA

Faculty of Letters and Languages
Department of Foreign Languages
University of Mentouri
Constantine

Introduction:

Since early works on the promotion of learner autonomy in higher education, researchers have always stressed the importance of the learning context, sociocultural context, and motivation in constraining learners' perceptions of autonomy (Holec, 1981; Riley, 1988), with dominating studies in the Western and Asian contexts..

لكن اختلاف المواقف والتوجهات نحو التعلم الذاتي قد ينتج عنه تباين في استراتيجيات الفرد المتعلم قد يؤثر فيه إلى حد كبير على مستوى تحصيله العلمي والأكاديمي. إن دراستنا هذه، باعتبارها إحدى التطبيقات لهذين المفهومين (التوجه و السلوك) في مجال التحصيل اللغوي لطلبة السنة الثانية لغة إنجليزية (نظام LMD) بجامعة منتوري، قسنطينة، بينت لنا مدى الارتباط المعنوي الموجب بين توجه الطالب (الذي يتجسد في ثقته في قدراته الفردية في تعلم اللغة الإنجليزية، قابليته لتحمل مسؤوليته كأهم طرف في سيرورة تعلم اللغة الإنجليزية، وإقرار أهمية المبادرة الفردية في تعلم الإنجليزية كلغة) نحو التعلم الذاتي و مستوى تحصيله اللغوي من جهة، و من جهة أخرى بينت لنا مدى الارتباط المعنوي الموجب بين استراتيجيات الطالب و مستوى تحصيله اللغوي. كما بينت دراستنا مجال ارتباط معنوي موجب بين توجهات الطالب واستراتيجياته المستعملة لتحصيل أكبر قدر من التعلم وانطلاقاً من نتائج دراستنا الكمية لهذين المفهومين وأثرهما على مدى التحصيل اللغوي لطلبة اللغة الإنجليزية، فنحن ندعو الأساتذة إلى تشجيع طلابهم على أن تكون لهم اتجاهات ايجابية نحو التعلم الذاتي، أن يكون الطلاب على قدر كاف من الثقة في قدراتهم الفردية على تعلم اللغة، وأن يكونوا على قدر كبير من الوعي بدورهم كمتعلمين. إضافة إلى هذا، فنحن ندعو الأساتذة إلى حث الطلبة على اكتساب استراتيجيات (على اعتبار أنها سلوك خاص) تساهم في تحصيلهم اللغوي والعلمي.

One significant avenue of research on learner autonomy has investigated learners' attitudes to self-regulation causing learners to take responsibility for their own learning.

The other avenue of research has examined the effect of learning strategies, as behavioural patterns associated with learner autonomy, on learning achievement (Cohen, 1998; Gan, 2004; O'Malley & Chamot, 1990; Oxford, 1990). Our study follows the call of Gan (2004) to research the potential relationship between perceptions of autonomy, learning strategies, and development of language proficiency and achievement for better understanding of effective language learning.

2- Literature Review

2.1- Attitudes and to learner autonomy

Within a psychological perspective, language education researchers have associated learner's attitudes and beliefs about language learning with learning strategies as significant factors accounting for language proficiency and achievement (Green & Oxford, 1995; Horwitz, 1987, 1988, 1999; Mantle-Bromley, 1995; Oxford, 2003). Following this line of reasoning, researchers have investigated the directive role of attitudes in prompting motivational and behavioural patterns required for successful language learning (Benson & Lor, 1999; Benson, 1997; Gan, 2004; Gan, Humphreys, & Hamp-Lyons, 2004; Gardner, 1985, 2000; Masgoret & Gardner, 2003; McCombs & Marzano, 1990; Noels, 2001; Noels, Clément, & Pelletier, 1999; Savignon, 1997). Associating

several attributes to successful learning, Wenden (1991) placed learner autonomy in the heart of successful learning:

In effect, 'successful' or 'expert' or 'intelligent' learners have learned how to learn. They have acquired the learning strategies, and the attitudes that enable them to use these skills and knowledge confidently, flexibly, appropriately, and independently of a teacher. Therefore, they are autonomous. (p. 15)

The composite nature of the attitude construct as an individual's predisposition to act, has helped the formulation of several interpretations about how language learners form their attitudes to autonomy and the way they exercise it in their learning environment. In social psychological literature, an attitude is an underlying process arising within an individual, accounting for the occurrence of affective, cognitive, and behavioural responses (Eagly & Chaiken, 1993). While the affective response manifests itself in a favourable or unfavourable affective state; the cognitive response manifests itself in beliefs, reporting some attributes of the attitude object; and the behavioural response manifests itself in overt behaviours performed by an individual to attain intended goals. For example, a learner with a favourable attitude to learner autonomy may: (a) report feeling of comfort and confidence in her abilities to undertake successful learning tasks independently of a teacher; (b) affirm the importance and decisive nature of her efforts in pursuing successful learning; and (c) make persistent efforts to improve her own learning. However, a learner with an unfavourable attitude to learner autonomy may: (a) report feeling of uneasiness, uncertainty, and anxiety regarding achievement of learning goals independently of a teacher; (b) attribute significant responsibility to the teacher in successful learning; and (c) give up efforts on learning tasks in face of failure or difficulty.

Researchers have examined underlying factors for learners' attitude to autonomy, namely the learner's agency and its potential influence upon expending learning efforts (Benson, 1997; Horwitz, 1988; Mantle-Bromley, 1995; McCombs & Marzano, 1990; Murase, 2015; Wenden & Rubin, 1987; Wright, 1987). Cotteral (1995) identified six underlying relevant constructs underlying learner autonomy: (a) role of the teacher, (b) role of feedback; (c) learner independence; (d) learner confidence in ability to study; e) language learning experience; and f) approach to studying (p. 196). Broady (1996) tentatively identified 4 elements: (a) learners' attitudes to language learning in the teacher's absence; (b) attitudes to the teacher's role; (c) beliefs about cooperative language learning; and (d) freedom of choice of language content. Similarly, Gan (2004) could identify four attitudinal factors characteristic of Chinese context: (a) perceptions of confidence and abilities; (b) attitudes to the

teacher's role; (c) attitudes to the learner's role; and (d) initiative in learning (p. 395).

2.2- *Language learning strategies*

Considerable research has explored the role of learning strategies, theoretically associated with learner autonomy and effective learning (Naiman, Fröhlich, Stern, & Todesco, 1996; Rubin 1975; Rubin & Thompson, 1982; Stern, 1975; Wenden, 1986). Empirical research on learning strategies has identified several psychological attributes characteristic of successful learners, extending beyond cognitive and information processing systems. It has equally helped identification of behavioural patterns of language learning responsible for successful learning, embracing several devices as exertion of agency control, self-management of learning tasks, self-monitoring of performance, emotional self-regulation, and self-evaluation of learning outcomes (Cohen, 1998; Cotterall, 1995; Littlewood, 1996; O'Malley & Chamot, 1990; Oxford, 1990). Hsiao and Oxford (2002) defined these devices as a "tool kit for active, conscious, purposeful, and attentive learning" that paves "the way toward greater proficiency, learner autonomy, and self-regulation" (p. 372).

O'Malley and Chamot (1990) provided one of the widely cited works on language learning strategies and categorised them in three main categories: (a) *metacognitive strategies*, (b) *cognitive strategies*, and (c) *affective/social strategies*. Metacognitive strategies form a set of commonly applicable and instrumental behaviours defined as the "higher order executive skills that may entail planning for, monitoring, or evaluating the success of a learning activity" (p. 44). These metacognitive strategies encompass selective attention, planning, and evaluation, with which self-managed and self-planned learning tasks are accompanied by a self-directed attention to specific aspects of learning tasks, followed by systematic self-monitoring and evaluation of the learning outcomes. Cognitive strategies include processing of language input in several forms, following individuals' learning styles, to enhance the memory representation of linguistic information and linking it to previous knowledge. They involve information rehearsal, organisation and categorisation, guessing, summarising, transfer of information, and elaboration by integrating new information into existing one. Social/affective strategies comprise behavioural patterns aimed at both social (cooperative) learning and control or regulation of learning anxiety. They include cooperating with others, including the language instructor, to check information, seek feedback, and reduce anxiety (O'Malley & Chamot, 1990, pp. 44-45).

Equally, Oxford's (1990) research on learning strategies is one of the most cited works in the field of language education. The author developed

a *Strategy Inventory for Language Learning* (SILL) to found a robust taxonomy for language learning strategies and established a 6-factor strategy taxonomy of current widespread use in language research. Conceived of as essential steps to develop communicative competence, improve language proficiency, and boost self-confidence, Oxford (1990) categorised learning strategies into two large categories: (a) *direct strategies*, and (b) *indirect strategies*. First, relative to processing language input, its comprehension, and mental representation, direct strategies include *memory*, *cognitive*, and *compensation* techniques. While cognitive strategies involve deep processing of language input aimed at understanding by using a chain of reasoning steps, note taking, translating, practicing, and synthesising, memory strategies involve rote learning aimed at enhancing memory through repeated practice of information. However, compensation strategies involve transient use of linguistic and paralinguistic information to overcome experienced limitations and learning task difficulties. Second, relative to mobilisation of learning efforts at different learning dimensions, indirect strategies include *metacognitive*, *affective*, and *social* strategies. Metacognitive strategies involve identification of one's learning style and needs, planning learning tasks, seeking language learning opportunities, monitoring one's progress, and evaluation of learning outcomes. Social strategies include actions orientated towards cooperating and empathising with peers and seeking language information and feedback. Affective strategies involve self-regulatory processes of affect to reduce learning anxiety, reward oneself, and self-motivate.

Observed overlap in enumeration and categorisation of language learning strategies is inherent to learning theories and their fundamental assumptions and is therefore "inevitable" (Oxford, 1990, p. 17). Nonetheless, Hsiao and Oxford (2002) examined available theories on language learning strategies and provided evidence in support of a systematic advantage of O'Malley and Chamot (1990) and Oxford's (1990) categorisations in providing an advanced understanding of learning strategies. Hsiao and Oxford (2002) suggested, "Oxford's 6-factor strategy taxonomy is the most consistent with learners' strategy use" (p. 368). It is to note that, differences in categorisation of learning strategies in the two cited strategy systems constitute a question of methodological concern, except for cognitive and memory strategies. For Oxford (1990), memory strategies resemble mnemonics and tend not to contribute to deep and meaningful processing of language information, unless they are used simultaneously with metacognitive strategies, compared to cognitive strategies that tend to contribute to deep processing and help in immediate use of language.

Available research literature has constantly indicated the intriguing relation between learners' attitude to learner autonomy, learning strategies, and language proficiency and achievement in various cultural contexts. However, it is currently unknown if this holds true to Algerian EFL context where learners have long been characterised by their passivity and exam-orientated motivation. It is the aim of the current research to address this question.

3- Research Questions:

In the current research, we addressed the following questions:

- (a) What are Algerian EFL learners' attitudes to learner autonomy?
- (b) What is the Algerian learners' strategy use profile?
- (c) What are the relationships between learners' attitudes to learner autonomy, used strategies, and language achievement?

4- Materials and Methods

4.1- Participants

Participants were 82 Algerian students majoring in English as a foreign language, at Mentouri University of Constantine, Algeria, with a mean age of 19.74 years ($SD = 2.27$). There were 70 female learners and 12 male learners. By the time of the study, the participants had: (a) 7-year experience with English as a foreign language, learned past the age of 11; and (b) 9-year experience with French as a second language, learned past the age of eight. All learners were native Arabic speakers, enrolled in a 3-year English programme and had similar language experience with English outside of formal instruction. Thus, we assumed that participants would form a homogeneous sample in terms of quantity of instructional input and quality of cultural environment.

4.2- Instruments

The study used a 2-part questionnaire adapted from Cottrel (1995), Broady (1996), and Gan's (2004) works on attitudes to learner autonomy, and Oxford's (1990) inventory for language learning strategies, *SILL*. Following Garner (1990, p. 517) and LoCastro's (1994, p. 413) recommendations to take into consideration learning environmental factors in carefully designing context-sensitive quantitative tools for collecting data about learners' strategies, we brought some modifications to these research instruments to fit Algerian educational environment specificities (see Appendix for detail on individual items of the questionnaires). Contrary to Oxford (1990), we listed memory strategies under cognitive strategies, for we believe memory is an essential component of human cognition and that deep or shallow processing of

information are not inherent to memory as a cognitive structure but rather resultant of information processing levels as hypothesised by Craik & Lockhart (1972). Therefore, we believe that all strategic actions relative to processing of linguistic information are initially cognitive and that memory remains a strong evidence of learning (Sprengr, 1999), and that there is no reason to categorise memory strategies as rote learning, probably at the disservice of learning (Baumgart & Halse, 1999; Hattie, Biggs, & Purdie, 1996). Moreover, we listed compensation strategies under strategies for perseverant learning that we think are inclusive of both learning actions undertaken in case of limitations and perseverance in learning.

Part I was a 21-item questionnaire, consisting of four attitudinal factors associated with learner autonomy: (a) perceptions of self-efficacy (4 items); (b) attitudes to the learner's role (7 items); (c) attitudes to the teacher's role (5 items); and (d) perceptions of self-initiated learning (5 items). Items were measured against a 5-point Likert scale, where a low score indicated low agreement and a high score indicated strong agreement. Part II was a 42-item questionnaire, consisting of five factors: (a) cognitive strategies (16 items); (b) metacognitive strategies (12 items), (c) affective strategies (5 items), (d) social strategies (4 items), and (e) strategies for perseverant learning (5 items). Items were measured against a 5-point Likert scale, where a low score indicated low frequency use of the strategy and a high score indicated the opposite.

Participants' language achievement was an average score of three achievement tests for three language skill courses: (a) English grammar mastery; (b) speaking and listening comprehension; and (c) English writing skills. The three courses were the core curriculum of the second-year English programme. Achievement test scores were obtained from the registrar's office, with prior consent of the participants.

4.3- Procedure

We gave participants comprehensive information on questionnaire's research purpose and provided them with clear instructions on how to fill it. We assured participants that: (a) we would use questionnaire data for research purposes only; (b) we would keep their identities strictly confidential; and (c) we would not disclose of their identities and respective data to a third party prior to their consent. To avoid social desirability bias, we informed participants there were no right or wrong answers to the items and that they were required to report true information of themselves. We administered the questionnaire to participants at an amphitheatre in their free time, during which we allowed them sufficient room to fill in the questionnaire under no pressure. We were present through the completion of the questionnaire to make sure we would provide immediate assistance to participants when needed.

4.3-1. Analysis

We processed data using IBM SPSS Statistics Version 24. We ran descriptive statistics to identify the general tendency of participants' responses for self-reported attitudes and strategies. We computed correlation coefficients to examine associations between attitudes, strategies, and achievement. We ran one-way ANOVA analyses between subjects design, followed by Games-Howell post-hoc test for further scrutiny of significant differences in pairwise comparisons. We chose Games-Howell post hoc test to adjust for unequal variances and sizes of the three achievement groups. We ran multiple regression analysis to report variation in achievement as explained by attitudes and strategies as predictor variables. We ran all statistical tests within the 95% confidence interval.

5. Results

5.1- Attitudes to learner autonomy and language achievement

Descriptive statistics in Table 1 shows overall characteristics of participants' mean attitudes to learner autonomy, demonstrating positive support for both learner autonomy and the teacher's role simultaneously. Participants' mean attitudes to the teacher's role was even more favourable than those of their agency in English language learning, $t(81) = -1.93$, 2-tailed $p < .06$.

Table 1. Mean Attitudes to Learner Autonomy

Factor	<i>M</i>	<i>SD</i>
Perceptions of self-efficacy (PSE)	4.12	0.69
Attitude to the learner's role (ATLR)	3.85	0.72
Attitude to the teacher's role (ATTR)	4.03	0.56
Perceptions of self-initiated learning (PSIL)	3.74	0.74

Listwise N = 82.

Values are rounded to second decimal.

While participants revealed favourable perceptions of self-efficacy in pursue of successful English learning, they reported less favourable perceptions of self-initiated learning. Frequency data of individual items relative to participants' perceptions of self-efficacy were manifested by: (a) 74.39% of participants showing moderate to strong agreement with the statement '*I feel confident about my abilities to study English successfully*' and (b) 71.95% of

participants showing similar agreement intensity with the statement '*I know how to find my own style of learning English*'. More than 50% of participants showed a similar agreement pattern with the two remaining items. Again, similar pattern of positive appraisal was observed with participants' perception of their agency, with less than 65% of participants reporting moderate to strong agreement with corresponding factor items. As participants' perceptions of learner and teacher's roles were alike, more than 60% of participants reported moderate to strong agreement with the item '*The best way to learn English for me is mostly in the classroom from the teacher*' and '*It is important for me that my teacher evaluates my assignments regularly*'. This strong positive appraisal of the teacher's role within the Algerian educational setting should not be surprising, for the Algerian learning environment does not provide learners with first-hand enhancing experience with English language input. Aside from learning and practice opportunities inside the classroom, there are less opportunities to enhance the already learned language. This is the reason why learners might believe the teacher is both an invaluable source of language input and a standard against which required language achievement and proficiency would be measured.

As showed in Table 2, all attitudinal factors, except for mean attitude to the teacher's role, showed a positive significant relationship with language achievement, with perceptions of self-initiated learning as the strongest of all ($r = .46$, 2-tailed $p < .01$); followed by participants' attitudes to the learner's role ($r = .42$, 2-tailed $p < .01$); and perceptions of self-efficacy ($r = .30$, 2-tailed $p < .01$). Although probably indirectly, these significant results indicated the significant impact perceptions of autonomy had on language achievement. Other inter-attitudinal correlations indicated several positive significant relationships between: (a) participants' perceptions of self-efficacy and their attitudes to their role in pursuing successful learning ($r = .29$, 2-tailed $p < .01$); and (b) participants' attitudes to their role and their perceptions of self-initiated learning ($r = .59$, 2-tailed $p < .01$). The latter association demonstrated a strong consistency between participants' perceptions of both their role and self-initiated learning. It is to note that, participants' attitudes to the teacher's role correlated significantly positively with their perceptions of self-initiated learning ($r = .23$, 2-tailed $p < .05$). This finding may not suggest ambivalence and controversy in participants' appraisal of their autonomy as much as it may raise questions about the complex nature of perceptions of the learner and teacher's roles in an EFL context. The lack of direct contact with the language in the learners' immediate environment may cause learners to consider teachers as both a substitute for physically immediate contact with the language and an

Ramzi NOUIOUA

effective source of guidance and motivation to engage in more self-initiated learning activities.

Table 2. Correlation Matrix Between Attitudes, Strategies, and Achievement

Factor	PSE	ATLR	ATTR	PSIL	CS	MS	AS	SS	SPL	ELA
PSE	1									
ATLR	.29*	1								
ATTR	.07	.13	1							
PSIL	.21	.59**	.23*	1						
CS	.18	.39**	-.08	.30*	1					
MS	.21	.26*	.18	.32*	.47*	1				
AS	-.04	.10	.04	.02	.36*	.45*	1			
SS	.11	.06	.30**	.17	.11	.31*	.13	1		
SPL	.28*	.33*	.10	.36*	.27*	.46*	.43*	.18	1	
ELA	.30*	.42**	.08	.46*	.19	.32*	.07	.08	.43*	1

Listwise N = 82.

Values are rounded to second decimal.

** . Correlation is significant at the .01 level (2-tailed).

* . Correlation is significant at the .05 level (2-tailed).

PSE: Perceptions of self-efficacy

ATLR: Attitudes to the learner's role

ATTR: Attitudes to the teacher's role

PSIL: Perceptions of self-initiated learning

ELA: English language achievement

CS: Cognitive strategies

MS: Metacognitive strategies

AS : Affective strategies

SS: Social strategies

SPL: Strategies for perseverant learning

Prior to running one-way ANOVA, we divided participants in three achievement groups as a function of their average achievement score, following the standard of university grading system⁽¹⁾: (a) low: 18 (performing

Table 3. Variation in Mean Attitudes to Learner Autonomy Among Achievement Groups

Factor	Achievement level						F-test	MS E	² η	Comments
	High		Medium		Low					
	M	SD	M	SD	M	SD				
Perceptions of self-efficacy	4.49	0.52	4.22	0.51	3.67	1.02	6.08 <i>p</i> = .00	2.59	.13	H > L (p = .04)
Attitudes to the learner's role	4.55	0.37	3.93	0.53	3.33	0.99	10.17 <i>p</i> = .00	4.27	.20	H > M (p = .01) H > L (p = .00)
Attitudes to the teacher's role	3.80	0.79	4.10	0.52	3.91	0.58	1.42 <i>p</i> = .25	0.44	.03	
Perceptions of self-initiated learning	4.46	0.47	3.78	0.67	3.32	0.78	7.31 <i>p</i> = .00	3.42	.16	H > M (p = .02) H > L (p = .00)

Listwise N = 82

Values are rounded to second decimal.

H: High; M: Medium; L: Low

below the 25th percentile); b) medium: 57 (performing above the 25th percentile and below the 91st percentile); and (c) high: 7 (performing above the 91st percentile). As showed in Table 3, there were statistically significant differences between

groups across all attitudinal factors, except for attitudes to the teacher's role. Pairwise comparisons of the three groups' attitudes revealed further systematic differences:

- (a) Mean attitudes to all factors were statistically significantly higher for high achievers than for low achievers, except for the teacher's role.
- (b) Mean attitudes to the learner's role and perceptions of self-initiated learning for high achievers were statistically higher than medium achievers.
- (c) There were no statistically significant differences in all mean attitudes to all factors among low and medium achievers.

The findings suggest an attitudinal pattern towards learner autonomy characteristic of high achievers, manifesting itself in positive attitudes to learner's role and self-initiated learning as a sine qua non of successful learning. It is equally of interest to note that, regardless of absence of statistical significance, high achievers reported a less positive attitude to the teacher's role in comparison with the two other groups of achievers, showing a remarkable higher sense of probable perceived causality of agency compared to others.

5.2- Learning strategies and language achievement

Table 4 shows a description of participants' overall frequency use of learning strategies. Measured against the frequency use range suggested by Oxford (1990) as high (3.5-5.0), medium (2.5-3.4), and low (1.0-2.4), participants' mean frequency use of cognitive and metacognitive strategies were high while affective, social, and strategies for perseverant learning fell within the average range. The higher frequency use of metacognitive and cognitive strategies among Algerian EFL learners might indicate largely: (a) a high sense of awareness about the importance of learning management, self-monitoring, and self-evaluation; and (b) a high degree of formality in learning English (Oxford, 1990). The sense of awareness in organising and planning the learning process among participants would originate in their conception of the nature of university studies, where they would feel more freedom and reduced amount of guidance in comparison to those experienced in high school. Given the fact that Algerian EFL learners had a previous language experience with French as a second language, they would tend to generalise and transfer already

learned rules from French to English given the similarities between French and English at several levels. The widely held assumption of transfer in second and foreign language education was confirmed by 71.02% of participants reporting frequent use of translation strategy.

Participants' frequency use of affective strategic behaviours revealed a substantial control of their affect when learning English. Average percentage of merged responses of 'I always' and 'I usually' were reported for the item 'I talk to myself in English outside of the classroom' and 'I give myself a reward when I perform well on a test', with 63.41% and 46.34% respectively. Similar percentages of participants reported average to high frequency use of strategies for perseverant learning in learning English irrespective of teachers' asking, except for the strategy 'I prepare my lesson in advance on my own initiative without being asked for'. The latter was reported to be frequently employed by only 28.05% of participants, raising important questions about participants' orientation in learning English.

Probably, the most intriguing finding in participants' frequency use of learning strategies concerns social strategies. Although the mean frequency use fell within the average range index, $M = 2.76 (>2.5)$, $SD = 0.87$, social strategies were the least used ones in comparison to all other strategies, raising questions about effectiveness of social interaction within the Algerian EFL learning context and cooperative learning activities. Less than 30% of participants reported average use of English as a means of communication outside of the classroom, demonstrating probable unwillingness to communicate despite the lack of communication opportunities with potential users of English aside from university learners.

Table 4. Mean Frequency Use of Learning Strategies

Factor	<i>M</i>	<i>SD</i>
Cognitive strategies	3.51	0.51
Metacognitive strategies	3.60	0.52
Affective strategies	3.36	0.68
Social strategies	2.76	0.87
Strategies for perseverant learning	3.39	0.75

Listwise N = 82

Values are rounded to second decimal.

There were two positive significant correlations between learners' achievement and frequency use of metacognitive and strategies for perseverant learning, the latter being the most strongly correlated ($r = .43$, 2-tailed $p < .01$)

compared to the former ($r = .32$, 2-tailed $p < .01$). Some inter-strategies frequency use correlations were also positively statistically significant as showed in Table 2, where metacognitive strategies correlated statistically significantly with the four types of learning strategies, showing the strong leading role of metacognition in management and coordination of almost every aspect of the learning process at the university level. Although statistically non-significant, the negative correlation between participants' frequency use of social strategies and their achievement is as interesting as their lowest frequency use. As social strategies involve learners in communication, engaging in conversations using the English language may not have long-term effect on learning the language, if it is not associated with a real intention of learning. For example, regarding the use of vocabulary items, Cohen (1998) stated, "learners may use a vocabulary item encountered for the first time in a given lesson to communicate a thought without any intention of trying to learn the word" (p. 7).

The absence of statistically significant correlation among social and affective strategies, $r = .13$, 2-tailed $p = .24$, coupled with social strategies' negative, though non-significant, correlation with English language achievement constituted counter-intuitive findings that may stress the question on the relevance of social empathy and cooperation in alleviating anxiety in EFL context. These findings involve issues of: (a) competition and cooperation as group processes in university education, (b) the impact of informal social learning in a linguistically limited setting on foreign language learners' achievement; and (c) the impact of normative-based standards on learners' engagement in social learning activities and valuing of intrinsic learning.

As determined by one-way ANOVA in Table 5, there were statistically significant differences in frequency use of metacognitive strategies, $F(2, 79) = 4.61$, $p = .01$, $\eta^2 = .10$; and strategies for perseverant learning, $F(2, 79) = 14.39$, $p = .00$, $\eta^2 = .27$, among the three achievement groups. Games-Howell post hoc test revealed that there were significant differences in frequency use of strategies for perseverant learning among the three English language achievement groups, with high achievers reporting the highest frequency use of the strategies in question, followed by medium and low achievers, respectively. Games-Howell post hoc test revealed that only high achievers used significantly more metacognitive strategies than low achievers and that there was no statistically significant difference between high and medium achievers. That is, the more learners used strategies for perseverant learning and metacognitive strategies, the higher their performance on achievement tests would be. It is of interest to note that, irrespective of the non-significant differences in frequency use of cognitive, affective, and social strategies among

the three achievement groups; high achievers were the most engaged in the use of cognitive and affective strategies, except for social strategies that they proved to use the least.

Table 5. Variation in Mean Frequency Use of Learning Strategies Among Achievement Groups

Factor	Achievement level						F-test	MS E	² η	Comments
	High		Medium		Low					
	M	SD	M	SD	M	SD				
Cognitive strategies	3.65	0.42	3.55	0.48	3.30	0.58	2.00 <i>p</i> = .14	0.50	.05	
Metacognitive strategies	4.03	0.45	3.62	0.51	3.36	0.49	4.61 <i>p</i> = .01	1.15	.10	H > L (<i>p</i> = .02)
Affective strategies	3.77	0.56	3.34	0.62	3.28	0.87	1.45 <i>p</i> = .24	0.66	.04	
Social strategies	2.46	0.57	2.82	0.86	2.67	0.99	0.66 <i>p</i> = .52	0.50	.02	
Strategies for perseverant learning	4.25	0.46	3.47	0.65	2.78	0.73	14.39 <i>p</i> = .00	6.16	.27	H > M (<i>p</i> = .01) H > L (<i>p</i> = .00) M > L (<i>p</i> = .00)

Listwise N = 82

Values are rounded to second decimal.

H: High; M: Medium; L: Low

5.3- *Attitudes and strategies in learner autonomy*

As displayed in Table 2, there were several significant correlations between attitudes and strategies. Perceptions of self-efficacy correlated statistically significantly with strategies for perseverant learning, $r = .28$, 2-tailed $p < .05$, indicating a relationship between perceived capacity to learn and perseverance in learning efforts. Measures of attitudes to the learner's role statistically significantly correlated with frequency use of cognitive strategies, $r = .39$, 2-tailed $p < .01$; metacognitive strategies, $r = .26$, 2-tailed $p < .05$; and strategies for perseverant learning, $r = .42$, 2-tailed $p < .01$. The statistically significant correlation between learners' measures of attitudes to the teacher's role and frequency use of social strategies, $r = .30$, 2-tailed $p < .01$, confirmed our previous belief in the probable causal relationship between perceived agency and undertaking learning actions implicating the significant other. Consistent with the two previous findings, measure of perceptions of self-initiated learning statistically significantly correlated with frequency use of cognitive strategies, $r = .30$, 2-tailed $p < .01$; metacognitive strategies, $r = .32$, 2-tailed $p < .01$; and strategies for perseverant learning, $r = .45$, 2-tailed $p < .01$. However, the lack of significant relationships between learners' measures of perceptions of autonomy and the use of affective strategies was unexpected.

Finally, we ran a multiple regression analysis to predict participants' achievement from attitudinal factors and learning strategies as showed in Table 6. The obtained findings indicated that our factors significantly predicted achievement, $F(9, 72) = 5.02$, $p = .000$, $R^2 = .39$. The factors explained 39% of the variance in the participants' English language achievement, with social strategies and strategies for perseverant learning adding statistically significantly to the prediction, $\beta = -.23$, $p = .03$; and $\beta = .26$, $p = .03$, respectively. As predicted by the regression model, higher frequency use of strategies for perseverant learning increased language achievement, $\beta = .26$, $p = .03$; and higher frequency use of social strategies decreased language achievement, $\beta = -.23$, $p = .03$. The findings demonstrated the advantage of learning strategies over attitudinal factors in predicting participants' language achievement.

Table 6. Multiple Regression Analysis: All Factors as Predictors of Achievement

Factor	Standardised Beta coefficient	t	Sig.
Perceptions of self-efficacy	.12	1.19	.24
Attitudes to the learner's role	.16	1.27	.21
Attitudes to the teacher's role	-.00	-0.01	.99
Perceptions of self-initiated learning	.24	1.95	.05
Cognitive strategies	-.08	-0.70	.49
Metacognitive strategies	.21	1.70	.09
Affective strategies	-.09	-0.74	.46
Social strategies	-.23	-2.28	.03
Strategies for perseverant learning	.26	2.17	.03

Listwise N = 82

$R^2 = .39$ (adjusted $R^2 = .31$)

Values are rounded to second decimal.

6. Discussion

The purpose of this study was to investigate attitudes to learner autonomy among 82 Algerian learners of English, strategy use profile, and determine the way attitudes and strategies related to achievement and differed across learners. The discussion examines closely these points in the mentioned order.

6.1- Attitudes to learner autonomy and language achievement

Descriptive findings attest to learners' remarkable favourable attitudes to learner autonomy in learning English. Contrary to the common belief among Algerian English teachers that university learners are teacher-dependent, learners' perceptions of self-efficacy, attitudes to learner's role, and perceptions of self-initiated efforts indicate learners' strong confidence in perceived capacity to pursue autonomous successful learning. This fact is not surprising given the learners' level of instruction and prior learning achievements as they form a substantial "enactive mastery experience" (Bandura, 1997, p. 80). That is, learners' previous learning achievements and successes might have led them form a robust belief in their personal efficacy. Additionally, learners' favourable attitude to their role in learning is indicative

of their self-attributed responsibility for the learning success, as theorised by Weiner (1986), “causal perceptions are instrumental to goal attainment” (p. 21). Learners’ predisposition to autonomy proves consistent with conceptualisation of autonomy as an attribute of the learner (Holec, 1981), advocating a natural autonomy among adult learners that requires appropriate degree of choice in learning to develop (Littlewood, 1996; Smith, 2003; Benson, 2006).

More interesting, however, are learners’ strong favourable attitudes to the teacher’s role in learning English successfully. This finding shows some overlap with Breeze (2002) and Gan’s (2004) research findings, reporting favourable simultaneous attitudes to both learner and teacher’s roles in pursuing self-directed language learning among Spanish and Chinese learners of English, respectively. Breeze (2002) stated that, regardless of learners’ reported exercised control of their own English learning process, Spanish learners “exhibited a higher degree of teacher dependency and felt that they could not improve without a class” (p. 23). Accounting for Chinese learners’ favourable attitudes to the teacher’s role, Gan (2004) argued that the teacher’s role could facilitate initiative and persistent efforts among learners for successful learning. In view of that, we may argue that holding simultaneous favourable attitudes to learner and teacher’s roles in language learning may not form an empirical attitudinal ambivalence, since the teacher and learner’s roles are two different attitude objects, presumed contradictory for theoretical and conceptual considerations only.

Several theoretical explanations apply to this attitudinal intricate situation, where conception of autonomy as complete detachment from others is differentiated from autonomy with social interdependence (Little, 1991, 2007; Littlewood, 1999; Ryan, 1991; Yashima, 2014). Ryan (1991) disentangled clearly overstated autonomy from the “contorted form of egoistic achievement and freedom from intrusions of others” (p. 210), and emphasised the concept of “*relatedness*” to others that does not implicate freedom loss. Similarly, Little (1991, 2007) prioritised social interdependence in education over exaggerated detachment in defining learner autonomy as a capacity for balanced independence and social interaction, but not as an absolute freedom that may constitute social impairment. In the same vein, Littlewood (1999) argued that the need for a teacher would form an initial stimulating impetus to cause learners act for themselves, and dubbed it, “reactive autonomy” (p. 76). Yashima (2014) concurred with the latter concept and invoked “autonomous dependency” (p.76) as a required initial reliance on guidance of the teacher, a trusted expert, to develop learners’ language competence. Consequently, given the highly formal Algerian EFL context, we argue that reactive autonomy

characterises Algerian learners' autonomy through which they perceive the teacher as an invaluable support for the development of their sense of self and agency.

Examination of attitudinal data in relation to language achievement offers support for significant variation in predisposition to learner autonomy among low and high achievers, with the latter holding more favourable perceptions of self-efficacy, self-initiated learning, and attitudes to the learner's role. These findings display some overlap and consistency with previous research findings. For example, Gan (2004) showed that high proficient learners had slightly higher means for attitudinal factors to learner autonomy than low proficient ones, including attitudes to the teacher's role. Reporting a similar finding, Abdel Razeq (2014) found differences in learners' perceptions of responsibilities between low and high achievers, with the latter claiming more responsibility for progress in learning English outside of classroom.

Significant correlations between learners' predisposition to autonomy and English language achievement suggest a considerable indirect relationship between attitudes and language achievement mediated probably by the use of learning strategies. Magogwe and Oliver (2007) suggested that level of education and language proficiency "combine in complex ways with regard to their relationship with self-efficacy beliefs and use of learning strategies" (p. 348).

6.2- Learning strategies and language achievement

Findings on the use of learning strategies corroborate the major theoretical assumptions in the field accounting for the development of self-system structures in adult learners, allowing them control of the learning process, learning objectives, and learning success (Ablard & Lipschultz, 1998; Cohen & Weaver, 1998; Corno, 1989; Ehrman, Leaver, & Oxford, 2003; McCombs, 1989; O'Malley & Chamot, 1990; Oxford, 1990; Rubin, 1975; Rubin & Thompson, 1982; Wenden, 1991; Wenden, 1998; Zimmerman & Schunk, 2004). Descriptive findings suggest learners' ordered preference for metacognitive and cognitive strategies, followed by strategies for perseverant learning, affective, and social strategies. Systematic differences in use of metacognitive strategies and strategies for perseverant learning among achievers, contributes to the lack of consistency in research findings on frequency use of strategies among learners and their variation across proficiency and achievement levels in various cultural contexts (Gan, 2004; Green & Oxford, 1995; Hong-Nam & Leavell, 2006; Kim, 2006; Mochizuki, 1999; Murray, 2010; Chamot & O'Malley, 1987; Oxford & Ehrman, 1995; Park, 1997; Phakiti, 2003).

The lowest use of social strategies among high achievers compared to the four other strategies may have several explanations. It may be due to learners' probable inherent belief in competitive individualistic myths of education, exam-orientated pedagogy of the Algerian education system, and the lack of experience with structured cooperative learning tasks (King, McNerey, & Watkins, 2012). High achievers' unwillingness to engage in cooperative learning activities and probable lack of creativity to conceive joint learning goals have likely explanations in performance-approach goals (Harackiewicz, Barron, Pintrich, Elliot, & Thrash, 2002) and theory of cooperation and competition. Following Deutsch (1949a, 1949b) and Johnson and Johnson's (2005) works, we may argue that high achievers would not engage in cooperative learning tasks because they may perceive themselves as pursuing independent goals, that is, not "promotively interdependent goals" (Deutsch, 1949a, p. 150), and that their goal achievement is not affected by others. Such a perception may result in individualistic learning efforts and little or no interaction with others (Johnson & Johnson, 2005, p. 293). Moreover, high achievers' higher use of affective strategies suggests their further advantage in self-regulating affect as a probable requirement in an exam-orientated education system, as negativity, stress, and personal insecurity are generally associated with competitiveness and performance achievement goals (Deutsch, 1949b; Dykman, 1998). Though the latter view may hold to certain validity, we believe that, in a collectivistic society such as that of the Algerian learners, having a competitive trait may be also a "catalyst for self-improvement and the development of competence" (King, McNerey, & Watkins, 2012, p. 449).

Correlation findings of strategies with language achievement are congruent with prior research findings, suggesting the considerable role of language learning strategies in effective language learning (Chamot & El-Dinary, 1999; Ehrman & Oxford, 1995; Gan, 2004; Gan, Humphreys, & Hamp-Lyons, 2004; Vandergrift, 2005). Metacognitive strategies and strategies for perseverant learning showed significant relationships with learners' language achievement, while cognitive strategies correlated positively with achievement though non-significantly. One probable explanation of the observed ineffectiveness of social learning strategies in Algerian EFL context may be their intermittent self-handicapping nature that jeopardises learning (Berglas & Jones, 1987; Zimmerman & Schunk, 2004). In face of difficult learning tasks in a highly formal context, learners may seek out a learning setting that "enhances the opportunity to externalize (or excuse) failure and to internalize (reasonably accept credit for) success" (Berglas & Jones, 1978, p. 406). That is, by engaging in learning activities through interactions with others, learners may simply attempt to minimise their probable perceived

incapacity in face of failure and increase the feeling of self-esteem in case of success achieved without appropriate investment of learning effort.

6.3- *Attitudes to learner autonomy and learning strategies*

Significant associations between attitudes to learner autonomy and learning strategies strengthen the suggestion that attitudes to learner autonomy relate directly or indirectly to the courses of action learners choose to pursue and the amount of effort they put forth for effective and successful language learning. Among the four attitudinal factors, attitudes to the role of the learner and perceptions of self-initiated learning seem to correlate with cognitive, metacognitive, and perseverant learning strategies. However, most of attitudinal factors seem to have no significant relationship with learners' actions to regulate affect and cooperate with others. Self-efficacy belief system and exercise of control provides support for our research findings regarding the effect of perceived confidence and the learner's agency in use of learning strategies to attain performance goals. As theorised by Bandura (1997), strong perceived self-efficacy in the learning context leads the learner to self-regulate consistently at the affective, behavioural, and cognitive levels to improve learning conditions and performance. The case holds true for Algerian learners with strong perceived self-efficacy that seems to have a significant relationship with learners perseverance in pursuing self-initiated learning and language achievement, $r = .28$, 2-tailed $p < .05$; and $r = .30$, 2-tailed $p < .01$, respectively. More significantly even are the associations between learners' perceptions of self-initiated learning with: (a) the use of cognitive strategies, $r = .30$, 2-tailed $p < .01$; (b) metacognitive strategies, $r = .32$, 2-tailed $p < .01$; (c) strategies for perseverant learning, $r = .36$, 2-tailed $p < .01$; and (d) English achievement, $r = .45$, 2-tailed $p < .01$. Gan (2004) made a similar discovery, demonstrating a significant relationship of Chinese EFL learners' perceptions of their autonomy with frequency use of self-directed English learning strategies and learners' proficiency in English. Finally, while attitudinal factors and learning strategies explained 39% of the variance in learners' achievement, learning strategies as predictors confirm the predictive advantage of the behavioural component over the perceptual one in achievement prediction.

7. Conclusion

This study investigated attitudes to learner autonomy, learning strategies, and language achievement. Findings revealed learners' reactive autonomy characteristic of 82 undergraduate Algerian EFL learners and their use of a panoply of learning strategies, showing high preference for cognitive and metacognitive strategies. Unlike previous research, this research found the least preference for social strategies among high achievers compared to low

achievers, suggesting the complex pattern of strategy use that is likely determined by learning context and general learning orientation. The research findings demonstrated further several significant interrelationships among attitudinal factors to autonomy, learning strategies, and achievement that combined in an intricate way, reflecting afforded possibilities and constraining ones that might be the by-product of culture-specific learning context. Multiple regression analysis demonstrated the predictive power of strategies for perseverant learning and social strategies in significantly predicting learners' achievement. Despite the statistically non-significant association between achievement and social strategies, the use of the latter in an EFL context and exam-orientated education system, is a research area worthy of further investigation, notably within a general framework of motivation and self-efficacy. Being exploratory in nature, this research does not extend to suggest practical implications for language pedagogy, as findings may not be generalisable given the small number of participants in the sample and the unequal representation of gender. Still, we believe an extra-curricular course designed primarily to incorporate learning strategies may be helpful to investigate their potential effects on English language achievement.

References

- Abdel Razeq, A. A. (2014). University EFL learners' perceptions of their autonomous learning responsibilities and abilities. *RELC Journal*, 45(3), 321-336. doi: 10.1177/0033688214547035
- Ablard, K. E., & Lipschultz, R. E. (1998). Self-regulated learning in high-achieving students: Relations to advanced reasoning, achievement goals, and gender. *Journal of Educational Psychology*, 90(1), 94-101. doi:10.1037/0022-0663.90.1.94
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman and Company.
- Baumgart, N., & Halse, C. (1999). Approaches to learning across cultures: The role of assessment. *Assessment in Education: Principles, Policy & Practice*, 6(3), 321-339. doi:10.1080/09695949992775
- Benson, P., & Lor, W. (1999). Conceptions of language and language learning. *System*, 27, 459-472. doi:10.1016/S0346-251X(99)00045-7
- Benson, P. (1997). The philosophy and politics of learner autonomy. In P. Benson & P. Voller (Eds.), *Autonomy and independence in language learning*, pp. 18-34. London: Longman.
- Benson, P. (2006). Autonomy in language teaching and learning. *Language Teaching*, 40, 21-40. doi: 10.1017/S0261444806003958

- Berglas, S., & Jones, E. E. (1978). Drug choice as a self-handicapping strategy in response to noncontingent success. *Journal of Personality and Social Psychology*, 36(4), 405-417. doi:10.1037/0022-3514.36.4.405
- Breeze, R. (2002). Attitudes to learner autonomy among Spanish university students. *Atlantis*, 14(2), 23-36.
- Broady, E. (1996). Learner attitudes to self-direction. In E. Broady & M. Kenning (Eds.), *Promoting learner autonomy in language teaching*, pp. 215-235. London: Association for French Language Studies/CILT.
- Chamot, A. U., & O'Malley, J. M. (1987). The cognitive academic language learning approach: A bridge to the mainstream. *TESOL Quarterly*, 21(2), 227-249. doi:10.2307/3586733
- Cohen, A. D., & Weaver, S. J. (1998). Strategies-based instruction for second language learners. In W. A. Renandya & G. M. Jacobs (Eds.), *Learners and language learning*, pp. 1-25. Anthology Series 39. Singapore: SEAMEO Regional Language Centre.
- Cohen, A. D. (1998). *Strategies in learning and using a second language*. Harlow, England: Longman.
- Corno, L. (1989). Self-regulated learning: A volitional process. In B. J. Zimmerman & D. H. Schunk (Eds.), *Self-regulated learning and academic achievement: Theory, research, and practice*, pp. 111-141. New York: Springer-Verlag.
- Cotteral, S. (1995). Developing a course strategy for learner autonomy. *ELT Journal*, 49(3), 219-227. doi:10.1093/elt/49.3.219
- Craik, F. I. M., & Lockhart, R. S. (1972). Levels of processing: A framework for memory research. *Journal of Verbal Learning and Verbal Behavior*, 11, 671-684. doi:[10.1016/S0022-5371\(72\)80001-X](https://doi.org/10.1016/S0022-5371(72)80001-X)
- Deutsch, M. (1949a). A theory of co-operation and competition. *Human Relations*, 2(2), 129-152. doi:10.1177/001872674900200204
- Deutsch, M. (1949b). An experimental study of the effects of co-operation and competition upon group process. *Human Relations*, 2(3), 199-231. doi:10.1177/001872674900200301
- Dykman, B. M. (1998). Integrating cognitive and motivational factors in depression: Initial tests of a goal-orientation approach. *Journal of Personality and Social Psychology*, 74(1), 139-158. doi:10.1037/0022-3514.74.1.139
- Eagly, A. h., & Chaiken, S. (1993). *The psychology of attitudes*. Orlando, FL: Harcourt Brace Jovanovich College.

- Ehrman, M. E., and Oxford, R. L. (1995). Cognition plus: Correlates of language learning. *The Modern Language Journal*, 79(1), 67-89. doi:10.1111/j.1540-4781.1995.tb05417.x
- Ehrman, M. E., Leaver, B. L., & Oxford, R. L. (2003). A brief overview on individual differences in second language learning. *System*, 31, 313-330. doi: 10.1016/S0346-251X(03)00045-9
- Gan, Z. (2004). Attitudes and strategies as predictors of self-directed language learning in an EFL context. *International Journal of Applied Linguistics*, 14(3), 389-411. doi:10.1111/j.1473-4192.2004.00071.x
- Gan, Z., Humphreys, G., & Hamp-Lyons, L. (2004). Understanding successful and unsuccessful EFL students in Chinese universities. *The Modern Language Journal*, 88(2), 229-244. doi:10.1111/j.0026-7902.2004.00227.x
- Gardner, R. C. (1985). *Social psychology and second language learning: The role of attitudes and motivation*. London: Edward Arnold.
- Gardner, R. C. (2000). Correlation, causation, motivation, and second language acquisition. *Canadian Psychology*, 41, 10-24. doi:10.1037/h0086854
- Graham, S. (2007). Learner strategies and self-efficacy: Making the connection. *The Language Learning Journal*, 35(1), 81-93. doi:10.1080/09571730701315832
- Green, J. M. & Oxford, R. L. (1995). A closer look at learning strategies, L2 proficiency, and gender. *TESOL Quarterly*, 29(2), 261-297. doi: 10.2307/3587625
- Harackiewicz, J. M., Barron, K. E., Pintrich, P. R., Elliot, A. J., & Thrash, T. M. (2002). Revision of achievement goal theory: Necessary and illuminating. *Educational Psychology*, 94(3), 638-645. doi:10.1037/0022-0663.94.3.638
- Hattie, J., Biggs, J., & Purdie, N. (1996). Effects of learning skills intervention on student learning: A meta-analysis. *Review of Educational Research*, 66(2), 99-136. doi:[10.3102/00346543066002099](https://doi.org/10.3102/00346543066002099)
- Holec, H. (1981). *Autonomy and foreign language learning*. Oxford: Pergamon Press.
- Holec, H. (1987). The learner as manager: Managing learning or managing to learn? In A. Wenden & J. Rubin (Eds.), *Learner strategies in language learning*, pp. 145-156. London: Prentice Hall.
- Hong-Nam, K., & Leavell, A. G. (2006). Language learning strategy use of ESL students in an intensive English learning context. *System*, 34, 399-415. doi:[10.1016/j.system.2006.02.002](https://doi.org/10.1016/j.system.2006.02.002)

- Horwitz, E. K. (1987). Surveying student beliefs about language learning. In A. Wenden, & J. Rubin (Eds.), *Learner strategies in language learning*, pp. 119-129. London: Prentice Hall.
- Horwitz, E. K. (1988). The beliefs about language learning of beginning university language students. *The Modern Language Journal*, 72(3), 283-294. doi: 10.1111/j.1540-4781.1988.tb04190.x
- Horwitz, E. K. (1999). Cultural and situational influences on foreign language learners' beliefs about language learning: A review of BALLI studies. *System*, 27, 557-576. doi: 10.1016/S0346-251X(99)00050-0
- Hsiao, T.-Y., & Oxford, R. L. (2002). Comparing theories of language learning strategies: A confirmatory factor analysis. *The Modern Language Journal*, 86(3), 368-383. doi: 10.1111/1540-4781.00155
- Johnson, D. W., & Johnson, R. T. (2005). New developments in social interdependence theory. *Genetic, Social, and General Psychology Monographs*, 131(4), 285-358. doi: 10.3200/MONO.131.4.285-358
- Kim, H. (2006). Use of strategy inventory for language learning (SILL) in the translation classroom. *Forum*, 4(1), 83-101. doi: [10.1075/forum.4.1.05kim](https://doi.org/10.1075/forum.4.1.05kim)
- King, R. B., McNerey, D. M., & Watkins, D. A. (2012). Competitiveness is not that bad...at least in the East: Testing the hierarchical model of achievement motivation in the Asian context. *International journal of Intercultural Relations*, 36, 446-457.
- Le, Quynh X. (2013). *Fostering learner autonomy in language learning in tertiary education: An intervention study of university students in Hochiminh City, Vietnam*. PhD. Thesis, University of Nottingham.
- Little, D. (1991). *Learner autonomy I: Definitions, issues, and problems*. Dublin: Authentik Language Learning Resources.
- Little, D. (2007). Language learner autonomy: Some fundamental considerations revisited. *Innovation in Language Learning and Teaching*, 1(1), 14-29. doi: 10.2167/illt040.0
- Littlewood, W. (1996). "Autonomy": An anatomy and a framework. *System*, 24(4), 427-435. doi:10.1016/S0346-251X(96)00039-5
- Littlewood, W. (1999). Defining and developing autonomy in East Asian contexts. *Applied Linguistics*, 20(1), 71-94. doi: <https://doi.org/10.1093/applin/20.1.71>
- LoCastro, V. (1994). Learning strategies and learning environments. *TESOL Quarterly*, 28, 409-414. doi:10.2307/3587445
- Magogwe, J. M., & Oliver, R. (2007). The relationship between language learning strategies, proficiency, age and self-efficacy beliefs: A study

- of language learners in Botswana. *System*, 35, 338-352. doi:10.1016/j.system.2007.01.003
- Mantle-Bromley, C. (1995). Positive attitudes and realistic beliefs: Links to proficiency. *The Modern Language Journal*, 79(3), 372-386. doi:10.1111/j.1540-4781.1995.tb01114.x
- Masgoret, A. -M., & Gardner, R. C. (2003). Attitudes, motivation, and second language learning: A meta-analysis of studies conducted by Gardner and associates. *Language Learning*, 53, 167-210. doi: 10.1111/1467-9922.00227
- McCombs, B. L. (1989). Self-regulated learning and academic achievement: A phenomenological view. In B. J. Zimmerman & D. H. Schunk (Eds.), *Self-regulated learning and academic achievement: Theory, research, and practice*, pp. 51-82. New York: Springer-Verlag.
- McCombs, B. L., & Marzano, R. J. (1990). Putting the self in self-regulated learning: The self as agent in integrating will and skill. *Educational Psychologist*, 25(1), 51-69. doi: 10.1207/s15326985ep2501_5
- Mochizuki, A. (1999). Language learning strategies used by Japanese university students. *RELC Journal*, 30(2), 101-113. doi:[10.1177/003368829903000206](https://doi.org/10.1177/003368829903000206)
- Murase, F. (2015). Measuring learner autonomy: Problems and possibilities. In C. J. Everhard, L. Murphy (Eds.), *Assessment and autonomy in language learning*, pp. 35-63. London, England: Palgrave Macmillan.
- Murray, B. (2010). Students' language learning strategy use and achievement in the Korean as a foreign language classroom. *Foreign Language Annals*, 43(4), 624-634. doi: 10.1111/j.1944-9720.2010.01105.x
- Naiman, N., Fröhlich, M., Stern, H. H., & Todesco, A. (1996). *The good language learner*. Multilingual Matters.
- Noels, K. A., Clément, R., & Pelletier, L. G. (1999). Perceptions of teachers' communicative style and students' intrinsic and extrinsic motivation. *The Modern Language Journal*, 83(1), 23-34. doi:10.1111/0026-7902.00003
- Noels, K. A. (2001). Learning Spanish as a second language: Learners' orientations and perceptions of their teachers' communication style. *Language Learning*, 51(1), 107-144. doi:10.1111/0023-8333.00149
- O'Malley, J. M., & Chamot, A. U. (1990). *Learning strategies in language acquisition*. Cambridge: Cambridge University Press.
- Oxford, R. L. (1990). *Language learning strategies: What every teacher should know*. Boston, Massachusetts: Heinle & Heinle Publishers.

- Oxford, R. L., & Ehrman, M. E. (1995). Adults' language learning strategies in an intensive foreign language program in the United States. *System*, 23(3), 359-386. doi:[10.1016/0346-251X\(95\)00023-D](https://doi.org/10.1016/0346-251X(95)00023-D)
- Oxford, R. L. (2003). Toward a more systematic model of L2 learner autonomy. In D. Palfreyman & R. C. Smith (Eds.), *Learner Autonomy across Cultures*, pp. 75-91. Palgrave Macmillan.
- Park, G-P. (1997). Language learning strategies and English proficiency in Korean university students. *Foreign Language Annals*, 30(2), 211-221. doi: 10.1111/j.1944-9720.1997.tb02343.x
- Phakiti, A. (2003). A closer look at the relationship of cognitive and metacognitive strategies use to EFL reading achievement and performance. *Language Testing*, 20(1), 26-56. doi:[10.1191/0265532203lt243oa](https://doi.org/10.1191/0265532203lt243oa)
- Riley, P. (1988). The ethnography of autonomy. In A. Brookes, P. Grundy (Eds.), *Individualization and autonomy in language learning*, pp. 12-34. London: Modern English Publications and British Council.
- Rubin, J., & Thompson, I. (1982). *How to be a more successful language learner*. Boston, Massachusetts: Heinle & Heinle Publishers.
- Rubin, J. (1975). What the "good language learner" can teach us? *TESOL Quarterly*, 9(1), 41-51. doi: 10.2307/3586011
- Ryan, R. M. (1991). The nature of the self in autonomy and relatedness. In J. Strauss, & G. R. Goethals (Eds.), *The self: Interdisciplinary approaches*, pp. 208-238. New York: Springer-Verlag.
- Savignon, S. J. (1997). *Communicative competence: Theory and classroom practice* (2nd ed.). New York: MacGraw-Hill.
- Smith, R. C. (2003). Pedagogy for autonomy as (becoming-)approach appropriate methodology. In D. Palfreyman and R. C. Smith (Eds.), *Learner Autonomy across Cultures: Language Education Perspectives*, pp. 129-146. Palgrave Macmillan.
- Sprenger, M. (1999). *Learning and memory: The brain in action*. Alexandria, Virginia: Association for Supervision and Curriculum Development.
- Stern, H. H. (1975). What can we learn from the good language learner? *Canadian Modern Language Review*, 31(4), 304-318.
- Weiner, B. (1986). *An attributional theory of motivation and emotion*. New York: Springer-Verlag.
- Wenden, A., & Rubin, J. (1987). *Learner strategies in language learning*. Hemel Hempstead: Prentice Hall International.
- Wenden, A. (1986). What do second-language learners know about their language learning? A second look at retrospective accounts. *Applied Linguistics*, 7(2), 186-205. doi:[10.1093/applin/7.2.186](https://doi.org/10.1093/applin/7.2.186)

- Wenden, A. (1991). *Learner strategies for learner autonomy*. London: Prentice Hall.
- Wenden, A. (1998). Metacognitive knowledge and language learning. *Applied Linguistics*, 19(4), 515-537.
- Wright, T. (1987). *Roles of teachers and learners*. Oxford: Oxford University Press.
- Yashima, T. (2014). Self-regulation and autonomous dependency amongst Japanese learners of English. In G. Murphy (Ed.), *Autonomy in language learning*, pp. 60-77. London, England: Palgrave Macmillan.
- Zimmerman, B. J., & Schunk, D. H. (2004). Self-regulating intellectual processes and outcomes: A social cognitive perspective. In D. Y. Dai & R. J. Sternberg (Eds.), *Motivation, emotion, and cognition: Integrative perspectives on intellectual functioning and development*, pp. 323-350. Mahwah, New Jersey: Lawrence Erlbaum Associates.

APPENDIX

Attitudinal factors

1. *Perceptions of self-efficacy (PSE)*
 1. I know the appropriate way for me to learn English successfully.
 2. I feel positive about my abilities to learn English successfully.
 3. I am self-confident enough to learn English successfully.
 4. I know the skills I need to improve.
2. *Attitudes towards learner's role (ATLR)*
 1. I think my learning efforts outside the classroom are important to learn English.
 2. I think my learning efforts outside the classroom are important to perform well on tests.
 3. I think it is important for me to improve my English skills outside the classroom.
 4. I think I can learn more English through my free study than through attending courses.
 5. I think it is important for me to plan and organise my own learning.
 6. I think it is important for me to self-assess to improve better my English skills.
 7. I think it is important for me to borrow books from the library for further study material.
3. *Attitudes towards the teacher's role (ATTR)*
 1. I think it is important for me to finish my tasks and assignments.
 2. I think it is important for me to attend courses.
 3. I think it is important for me to use textbooks.

4. I think my teacher should evaluate my assignments regularly.
5. I think the best way to learn English for me is mostly in the classroom from the teacher.
4. *Perceptions of self-initiated learning (PSIL)*
 1. I think it is important for me to spend more efforts outside the classroom to improve my English.
 2. I think I need more freedom to choose topics for discussion in speaking and listening comprehension course.
 3. I think it is important for me to get actively involved in classroom activities.
 4. It is important for me to propose topics for English writing skills course.
 5. It is important for me to ask my teacher for extra classes when I think I need it.

Learning strategies

1. *Cognitive strategies (CS)*
 1. I use new English words in a sentence so I can remember them.
 2. I remember new English words or phrases by remembering their location on the page, board, etc.
 3. I use rhymes (as in poetry) to remember new English words.
 4. I memorise new English words by saying or writing them repeatedly.
 5. I listen carefully to native speakers and try to imitate them.
 6. I use English words I know in different contexts.
 7. I summarise what I read in English books when I prepare papers.
 8. I listen to varieties of English to be familiar with English accents.
 9. I listen to conversations in English on various topics to learn new English words.
 10. I guess meaning of words that I do not understand.
 11. I use French grammar rules to write and speak English.
 12. I compare English grammar rules to French grammar rules to learn faster.
 13. I make use of French vocabulary to speak and write in English.
 14. I use letter-to-sound correspondence in French to pronounce English words.
 15. I translate English words to French or Arabic to understand them.
 16. I guess meaning of long English words by dividing it into parts that I understand.
2. *Metacognitive strategies (MS)*
 1. I notice my English mistakes and try to correct them.
 2. I review my own performance on some difficult learning tasks.

3. I choose my own English books to read.
4. I select my own English dictionary to look up words in.
5. I make a plan to carry out my learning tasks outside the classroom.
6. I reflect on how to be a better English learner and user.
7. I make a plan to follow to read literary works intended for literature course.
8. I set short- and long-term English learning goals.
9. I plan to improve my writingskill
10. I create opportunities to practice English with my classmates and friends.
11. When I perform poorly on an English test, I try to learn from my mistakes.
12. I think about whether I am making a progress in learning English.
3. *Affective strategies (AS)*
 1. I keep a private journal where I write my feelings about English learning.
 2. I encourage myself to use English, even if I am afraid of making mistakes.
 3. I talk to myself in English outside the classroom to feel good that I can express myself in English.
 4. I reward myself when I perform well on an English test.
 5. Whenever I feel stressed and anxious in understanding or using English, I try to relax and take a deep breath.
4. *Social strategies (SS)*
 1. I review lessons with my classmates after class.
 2. I seek feedback on my understanding and pronunciation from my classmates.
 3. I work with my classmates to prepare papers and assignments.
 4. I talk to my classmates in English outside of the classroom.
 5. I ask my teacher for help whenever I have problems learning English.
5. *Strategies for perseverant learning (SPL)*
 1. I keep watching TV programmes in English even if they are hard to understand.
 2. I prepare lessons in advance on my own initiative even if I am not required to do so.
 3. I keep working on learning tasks even when I think they are boring.
 4. I spend time improving my English skills to become a proficient English user.
 5. I keep working on my assignments until I get them well done.