This annotated bibliography contains 33 references related to the topic of individual difference correlates of second-language achievement found in 26 journals available in the University of Western Ontario, and follows up a 1988 bibliography covering the years 1984-1987. Bibliographic information provided includes author, title, source, abstracts (from the original articles when available), and coding for the individual difference variables referred to in the reference, including aptitude and intelligence, attitudes and motivation, language learning and teaching strategies, and personality traits. (MSE)

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Research Bulletin No. 691
May, 1990

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DEPARTMENT OF PSYCHOLOGY
THE UNIVERSITY OF WESTERN ONTARIO  LONDON, CANADA
Individual Difference Correlates of Second-Language Achievement:
Second Annotated Bibliography, 1988 and 1989

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This annotated bibliography contains 33 references related to the topic of individual difference correlates of second-language achievement from 1988 and 1989 found in 26 journals available in the University of Western Ontario library system. This is a follow-up of Research Bulletin No. 667 from April, 1988, which contained 64 references for the years 1984 to 1987.

Abstracts from the original articles are presented here when available and are marked with asterisks. The other abstracts were prepared by the authors of this bibliography.

Entries are coded according to the individual difference variables referred to, as follows:

A/I aptitude and intelligence
A/M attitudes and motivation
LLS language learning/teaching strategies
P personality (anxiety, introversion/extraversion, sociability, field dependence/independence, ambiguity tolerance, risk-taking, etc.)

Preparation of this bibliography was supported by Grant No. 410-88-0158 from the Social Sciences and Humanities Research Council of Canada.

The social-psychological theory of second-language (L2) learning proposed by R. C. Gardner (Gardner & Lambert, 1959; Gardner, 1979; Gardner, 1982; Gardner, 1983) has been one of the most long-standing theories of L2 learning. For the past 25 years, it has generated a substantial number of studies in various parts of the world. Interestingly enough, a comprehensive and detailed evaluation of the theory has not been forthcoming. This paper attempts to do just that. It begins with an overview of Gardner's theory. The theory is then analyzed into five major propositions, each of which will be evaluated in the light of relevant studies. Recent developments will then be discussed.


A series of experiments was devised to study the following hypotheses: (1) readers who use certain problem-solving strategies will understand more of what they read than those who do not use reading strategies; (2) readers who perceive that they use strategies generally considered effective will understand more of what they read than those who do not think they use such strategies. Ss were 278 fourth-semester college French students enrolled in the last course of the foreign language requirement. Ss were divided into 19 classes, and 4 classes used experimental and innovative reading materials and activities designed to help students develop more effective reading strategies. During the tenth week of the semester, the experiment was conducted to obtain background knowledge scores, comprehension scores, strategy-use scores and perceived use scores. Group means were obtained, and a two-factor analysis of variance was performed on these means. Although the strategy group had higher means on each measure, the variance was statistically significant only for strategy use.


Bilingual and unilingual students in a grade-eight English-French bilingual programme in Ontario were compared on measures of French proficiency. Forty-seven students were selected on the basis of their first language: English, Italian or a non-Romance language. French proficiency was measured using two written cloze tests and two oral story-telling tasks. One of each pair of tests was presented in a context-reduced condition and the other in a context-embedded condition. As hypothesised, bilinguals were found to perform significantly better than unilinguals on almost all the measures. No differences were discernible, however, with respect to their performance on context-embedded and context-reduced tasks. It was concluded that knowing a second language facilitates the learning of a third language and thus, bilingual children are excellent candidates for French immersion programmes.
This study set out to investigate the relationships between readers' metacognitive awareness of (i.e., judgments about) various types of reading strategies and their reading ability in both their L1 and their L2. Ss consisted of two groups of university students: one group of 45 native speakers of Spanish from various countries, and one of 75 native speakers of English studying Spanish. Ss were tested in a second language session, and then in a first language session. They read two texts and answered 10 multiple choice comprehension questions about each text, and then judged 36 statements about silent reading strategies in English and Spanish. For reading in the L1, "local" reading strategies (focussing on grammatical structures, sound-letter, word-meaning, and text details) tended to be negatively correlated with reading performance. For reading in the L2, some differences emerged between the Spanish L1 and English L1 groups. For the English L1 group at lower proficiency levels, some of the "local" reading strategies were positively correlated with reading performance. For the Spanish L1 group, at slightly higher proficiency levels, some "global" reading strategies were positively correlated with reading performance.


The primary research question of this investigation was whether a relationship exists between field dependence/independence and learners' performance on language tests of formal linguistic achievement and of functional language proficiency in courses with these two different types of orientation. A secondary question was whether learners' perceptions of the foreign language learning process were related to the orientation of the course and to their own degree of field dependence/independence. Ss were students in second-quarter Spanish classes at two public midwestern American universities. Spanish linguistic achievement, communicative Spanish language proficiency, and degree of field dependence/independence were assessed as well as Ss ratings of the usefulness of various foreign language learning strategies and resources. There were 72 students, 36 from each course.

Field independence was found conducive to success on both formal achievement and functional proficiency tasks, independently of the relatively formal or functional orientation of the course.


* This paper summarizes the findings of a three year project which investigated the use of learning strategies by foreign language students and their teachers, and suggests specific classroom applications for learning strategy instruction. Three studies were conducted under this project: (a) a Descriptive Study, which identified learning strategies used in studying foreign languages, (b) a Longitudinal Study, which identified differences in the strategy use of effective and ineffective language learners and analyzed changes in strategy use over time, and (c) a Course Development Study, in which foreign language instructors taught students how to apply learning strategies.
Classroom applications discussed in the paper include guidelines for developing students' metacognition and motivation through the identification and discussion of their existing language learning strategies, and techniques for modeling and practicing additional strategies that can help students become more effective and independent language learners.


* To expand the current theoretical base in second language acquisition, this article proposes nine generalizations on optimal age, L1 cognitive development, and L2 academic achievement. These generalizations summarize the author's and others' research on second language acquisition for school purposes. In this synthesis, relationships among the following variables are considered: first language acquisition, second language acquisition, student age at the time of exposure to a second language, academic achievement (as measured by standardized tests in all subject areas), membership in a language majority or language minority community, and language(s) of instruction in school. The five new generalizations presented at the end of the article, which are based on research on academic achievement in a second language, merit additional research to validate and refine them.


This study examined language learning strategies in relation to (1) sex differences, (2) career choice, (3) cognitive style, and (4) aspects of personality. 78 Ss took part -- 22 professional language trainers, 26 Foreign Service Institute language instructors, and 30 Foreign Service students. They completed the Meyers-Briggs Type Indicator (MBTI) for psychological type (personality and cognitive elements) and the Strategy Inventory for Language Learning (SILL), a self-report survey of preferred language learning techniques. Descriptive statistics were obtained through the SAS statistical package for the MBTI and SILL results. Then the SAS general linear model procedure was used to conduct analyses of variance, with MBTI preferences as independent variables and SILL factor scores as dependent variables.

Women reported greater strategy use than men, and professional language trainers used a wider variety of strategies than others. Various personality types used different different language learning techniques, and career choice as an influence on strategy use was more strongly supported than in earlier studies.


* This study investigated the degree to which students' personality characteristics influence their attitudes toward various learning activities in the language classroom. The research study was conducted with a group of 125 students of Spanish at the university level. The hypotheses of the study were that: (1) Language Class Risktaking positively affects attitudes toward activities involving relatively free language use; (2) Language Class
Sociability positively affects attitudes toward activities involving the sharing of ideas or "performing"; and (3) Language Class Risktaking and Language Class Sociability negatively affect attitudes toward highly-structured grammar practice. Multiple regression analysis provided partial confirmation of the hypotheses. The findings suggest the importance of taking personality into consideration in language instruction.


* This study developed a scale of tolerance of ambiguity (as an aspect of personality or cognitive style) related to second language learning. The scale was used to discover if tolerance of ambiguity influences students' use of various second language strategies. The research was carried out with students of Spanish at the university level. Multiple regression analysis provided partial confirmation of several specific hypotheses regarding tolerance of ambiguity. Strength of motivation, attitude, and concern for grade were also found to influence use of strategies.


* Au criticizes the socio-educational model of second-language learning and argues that the research literature does not offer strong support for it. The present article responds to these criticisms, indicating where they are based on invalid assumptions and/or a simplistic interpretation of the model, and reviews research findings that attest to the validity of the model. It is argued that Au's criticisms are valuable, however, in that they highlight issues in this research area, and some of the ones that are believed to be most important are then reviewed.


* This study attempted to determine the prevalence of certain common beliefs about language learning among typical groups of language learners. Ss were 241 first semester language students of German, French and Spanish at university. They completed the Beliefs About Language Learning Inventory (BALLI), which consists of 34 items designed to assess student opinions on a variety of issues and controversies related to language learning. The similarity of beliefs among the different target language groups is an important finding here. The overall pattern of responses remained striking consistent across language groups.


* Several papers have appeared on the strategies of communication used by L2 learners. However, very little work has been done to determine the underlying
psychological processes that generate communication strategies (CS). This paper assumes that any description of CS should be based on a description of the processes governing CS. The paper attempts to correlate CS with psychological processes by analyzing interlanguage (IL) written discourse produced by advanced Tamil learners of English as a Second Language. The analysis aims at isolating instances of lexical simplification, identifying co-relative CS and inferring probable psychological processes. The data chosen for study show that the learners employed eight communication strategies (extended use of lexical item, lexical paraphrase, word coinage, L1 equivalence, literal translation of L1 idiom, CL mode of emphasis, CL mode of linking constructions and CL cohesive devices) corresponding to three psychological processes, namely, (a) overgeneralization, a process in which second language learners violate certain semantic/stylistic/collocational restrictions, (b) creative transfer, a process in which learners seem to effect required morphological and syntactic transformations to the items they transfer to L2 discourse, and (c) cultural relativity, a process in which learners appear to operate in the mode and sequence of thought patterns characteristic of their native culture. In the light of these findings, probable implications for second language learning and teaching are discussed.


An introspective study of four advanced learners under conditions of initial extensive exposure to the L2 community was described. Analysis was based on both written reports and interviews. A considerable degree of concurrence was found both among subjects and between the written and oral reports. This provided some confirmation for the validity of the technique and also suggested a commonness of approach among subjects to their learning task.

It was found that Ss initially adopted a strategy of listening similar to that described by Wong Fillmore (1976) for young children. Subjects' motivation was essentially to learn the language, and they did not fit into the crude classification of integratively versus instrumentally motivated learners very well. Ss were focused on communication rather than "correctness", although they did receive limited error correction in the L2 community. Ss tended to apply different production strategies under different circumstances and reported that their language was very much influenced by the interlocutor. They were aware of their own deficiencies and mistakes, and experimented in production to seek out feedback and practice new linguistic items. Advanced learner performance would appear to be characterized by uncertainty.


Applications of schema theory to L2 listening remain largely unexplored. The purpose of the present article was to point out the need for research in L2 listening, to highlight recurrent themes in the literature on background knowledge, and to show the probable importance of those themes to L2 listening.

Reviews of the literature on foreign-language anxiety show a considerable amount of ambiguity arising from the conflicting results of past studies. This study attempts to show that these difficulties can be resolved given an awareness of the theoretical perspective from which this research has developed. Specifically, it was predicted that anxiety based on the language environment would be associated with language learning whereas other types of anxiety would not show consistent relationships to performance. Eleven anxiety scales were factor analyzed yielding two orthogonal dimensions of anxiety which were labelled General Anxiety and Communicative Anxiety. It was found that only Communicative Anxiety is a factor in both the acquisition and production of French vocabulary. Analyses of the correlations between the anxiety scales and the measures of achievement show that scales of foreign-language anxiety and state anxiety are associated with performance. Scales of test anxiety, audience sensitivity, trait anxiety, and other types of anxiety did not correlate with any of the production measures. Finally, a model is proposed which describes the development of foreign language anxiety.


Participants in this study were 491 first and second year university students of French, German and Spanish. They completed the Myers-Briggs Type Indicator (MBTI) to assess personality. The results of these language students were compared with a sample of 18,592 general college students previously tested. Among the language students, there were more Intuitive types than Sensing types, and more Thinking types than Feelings types. Minor differences slightly favoured Introverts and Perceptives. These results were consistent with other studies of personality and language learning.


Research into general linguistic and cognitive processes in humans has been aided by studies of analogous processes in animals. Studies on how birds develop their species-specific song have been of particular interest to researchers seeking to identify critical variables and universals in first language acquisition in humans. Because of recent studies on exceptional song acquisition, that is, time-independent learning of second dialects or song by birds generally thought to acquire a single song during a limited sensitive period, we suggest that there also exist significant parallels between human second language acquisition and avian bilingualism. The purpose of this paper is to highlight these parallels and to demonstrate that such interspecies comparisons may provide new insights into the processes of second language acquisition.

A study of classroom processes was initiated to shed some light on the question of the instructional processes which affect language learning. The study examined the teaching style of teachers in elementary French immersion classes. Students in three classes were given the Canadian Cognitive Abilities Test (CCAT) to measure English language scholastic ability and the Tourond Test diagnostique de lecture to measure French language achievement. Teacher self-report data was also collected. Two of the classes departed from expectations with respect to achievement levels, indicating differences in classroom processes. Although the three teachers followed the same prescribed curriculum, there were significant differences between the classrooms with respect to teaching strategies used and the percentage of time spent on different types of activities. Implications for high and low achievers as well as language learners in general were discussed.


This research was conducted in order to describe the orientations of learners of German as a second language and to determine the relationships between these orientations and the other social psychological aspects which have been shown to be involved in the second language learning process. Ss were 114 university students registered in first-year German classes. They completed an orientation questionnaire and an attitude and motivation questionnaire. Permission was requested for the experimenter to have access to the students' interim marks.

The results of the first factor analysis revealed the existence of five orientations to second language learning. These orientations were related to attitude, motivational strength, aspects of contact, and self-confidence along lines that replicate and extend conclusions drawn from previous results. The results of the second factor analysis and the multivariate analysis of variance showed that Ss with a German-speaking background did tend to demonstrate a higher incidence of contact, higher self-confidence, and a stronger endorsement of the identity-influence reasons for learning German. They did not, however, evidence stronger motivation or higher achievement. The results obtained for students with a German family background were at variance with the theoretical expectations.


* The study of language attrition, whether it is concerned with first or second languages, focuses on the effects resulting from an individual's reduced use of the attrited language. Such reduction in use can be due to a change in the linguistic environment or to the termination of an instructional program. In either case, some other language (or languages) is or becomes the dominant one.
The present article reports on a series of studies, all focusing on individual attrition of English as a second language (ESL) in an environment where Hebrew is the dominant language. The predictor variables discussed are age, sociolinguistic features, input variables, and linguistic variables. The attrition process affecting English as a second language in a Hebrew dominant context seems to exhibit two major trends of change in language use: (a) a greater variability in the application of peripheral and highly marked structural rules, and (b) lower accessibility of specific lexical items. In each of these trends one can identify a limited reversal of the acquisition process, particularly with young children (5 - 8-year-olds) as well as a typological transfer process from the dominant language.


The purpose of this paper was to survey research on language learning strategies (LLS), the behaviors used by learners to move toward proficiency or competence in a second or foreign language. The authors discussed research terminology and methodology and looked in detail at LLS research itself, using research methods as the organizing principle for the discussion. Finally they summarized instructional and other issues, and commented on how LLS research might be improved.


* The principles of the communicative approach to language learning and teaching foster the use of appropriate, positive learning strategies. Communicative principles and learning strategies, in combination, have powerful implications for the language classroom.


Two key research questions were addressed in this study. First, what kind of strategies do university foreign language students report using? Second, what variables influence the use of these strategies? Approximately 1,200 students of university language courses completed the Strategy Inventory for Language Learning (SILL) and a background questionnaire covering sex, years of foreign language study, elective vs. required course status, self-perceptions of proficiency and motivation, and other topics. To understand the data, the researchers (1) calculated descriptive statistics such as frequencies to determine overall patterns; (2) discerned the underlying factors on the SILL through factor analysis; (3) determined the variables which had the greatest influence on the choice of learning strategies through analysis of variance (ANOVA) on SILL factor scores; and (4) when necessary, conducted post-hoc tests to determine the precise contrasts in which the observed significance occurred.
Ss frequently reported employing strategies likely to be useful in a traditional, structure-oriented, discrete-point foreign language instructional environment geared toward tests and assignments. Strategies which involved a concerted extracurricular effort to communicate in the new language or required working independently on mnemonic or metacognitive aspects were mostly shunned by Ss in this sample. Motivation had a pervasive influence on the reported use of specific kinds of strategies, as well as on the degree of active involvement in language learning as reflected in the overall frequency of strategy use in general. Effects of sex, years of study and other variables on choice of language learning strategies were also demonstrated.


Sex has been omitted as a variable in most research on language learning strategies. This is a serious omission, given that sex is typically a significant predictor in other educational, psychological, and linguistic research. This article reports on the few studies which have explored sex differences in the use of language learning strategies. The authors of this article speculate why females appear to use a far wider range of language learning strategies than do males, and why social strategies -- which contribute strongly to the development of communicative competence -- seem to be more popular among women than men. Research implications of the few available findings on sex differences in strategy use are presented.


The sample in this study consisted of 82 students who were randomly selected from the population of Hispanic ESL students in grades 3, 4 and 5 of a public elementary school. They completed the reading comprehension section of the Stanford Diagnostic Reading Test in January and again in April to determine the relationship between the strategies cited by students and gains in reading comprehension. They also answered the Reading Strategy Questionnaire. Stepwise multiple regression was used to examine which reading strategies significantly predicted students' posttest achievement, after statistically controlling for students' pretest achievement. Students' perceptions of the cognitive strategies they used had predictive validity for their reading comprehension. Two of the negative strategies included on the questionnaire were found to be negatively related to students' gains in reading comprehension. These findings supported previous metacognitive research conducted with monolinguals, which has found that lower achieving students use less sophisticated and inappropriate cognitive reading strategies during reading. The use of negative strategies by Hispanic students may be another factor other than English proficiency that interferes with their reading comprehension and thus negatively affects their reading achievement.

Evidence for transfer of academic competence between Shona and English was examined to determine when instruction in L2 reading should begin for native Shona speakers. Third-, fourth-, and fifth-grade children attending a rural Zimbabwean primary school participated in the study. The children, who were receiving reading instruction both in Shona and in English, were randomly assigned to take one of four vocabulary tests. The tests, designed to examine the transfer of academic competence, measured the effects of language (Shona or English), translation (original or translation), and grade level. Analysis of the data indicated that with the exception of the fifth graders, there was little evidence of transfer of language skills between languages. The results suggest that these children might benefit from a delay in the introduction of L2 reading. The data are consistent with Cummins's (1985) transfer threshold hypothesis and may explain the inefficiency of L2 reading instruction. However, since the data reported in this study are drawn from a single case of a single rural primary school, the conclusions must be regarded as tentative and subject to replication.


Although the number of public secondary school students enrolled in foreign language courses increased by 5.8 percent between 1982 and 1985, student enrollment in French and Spanish classes continued to decline precipitously from Level I (first year) to Level V (fifth year). This study addressed the issue of student retention in and withdrawal from French and Spanish classes beyond the basic two-year high school sequence. The degree of influence of 16 factors on the continue/discontinue decision was measured through a Likert-scale questionnaire as well as through demographic data. Chi-square testing, t tests, and comparison of ranks were utilized to determine the strongest and weakest influences for continuing and discontinuing students. Continuing students indicated practical, utilitarian reasons as prime motivators for continuing (enhancement of college applications and language usage). Discontinuing students withdrew because of other courses that they found more suitable and because of concerns about both the level of difficulty of the following course and concerns about their present progress.


This article explores the requirements for a general theory of second language learning that can account both for the fact that people can learn more than one language and for the generalizable individual differences that occur in such learning. Such a general theory will be able to explain and describe differences between second and foreign language learning, between learning for general and special purposes, between formal and informal learning, and between developing knowledge and skills. It will need to be precise and clear on the nature of the goals and outcomes of learning and to recognize the complexity of the concept of knowing a second language, which can vary almost without
restriction in both kind and amount. The model must be integrated and interactive, to assume that all or many parts of it apply to any specific kind of learning and that there is close interaction among the various parts. The theory proposed allows for a formally valued eclecticism, provided by the use of a preference model. This article considers the formalization of such a model in an expert system and the more recent implications of the Parallel Distributed Processing model.


In this article, the authors' intent was to make two points that are strongly supported by research from Canadian immersion programs. First, older learners may not only exhibit as much success in learning certain aspects of a second language as younger learners, but they can also accomplish this learning in a shorter period of time than can younger learners. This point is particularly pertinent to those concerned with adult second language learners. Second, in this era of "communicative language teaching", it is faulty to assume that one accomplishes good language teaching by simply teaching content. Integration of content teaching and language teaching is paramount.


The study compares bilingual college students learning a third language with monolinguals learning a second language. It also compares bilinguals who have received formal classroom training in a language semantically related to the target language with bilinguals who have informally acquired the related language. The results indicate that English-speaking students with prior knowledge of Spanish have an advantage over monolinguals when performing those activities usually associated with learning French formally in a classroom. The study further reveals that English-Spanish bilinguals who have received a minimum of two years' formal training in Spanish may have developed a conscious awareness of language as a system that provides them with additional advantages over bilinguals who have informally acquired Spanish at home. The results provide evidence that developing students' metalinguistic awareness may increase the potential advantage of knowing two languages when learning a third.


In this paper some results of a study of children's acquisition of foreign languages (in this particular case English) at an early school age will be discussed. The study on which the paper is based has been conducted in formal classroom situations with children aged eight being exposed to English for a couple of periods per week and being surrounded by the language and culture of their native country. Consequently, this is a case of foreign language learning rather than second language acquisition.
The focus of the analysis is the motivation of the learners and the sources of difficulties during the learning process.

The advantages of an early start with a foreign language are discussed: the familiarisation with the linguistic properties of the foreign idiom at an age when it is readily accepted; the beneficial effect upon the cognitive growth of the individual; and the prevention of the development of ethnocentric tendencies in later life.

Since 1984 when the first generation of 'early starters' reached the final year of their primary school, their attitude to English has been observed and compared to the control groups who started English at a later age. In the paper some findings of the observations are reported.


There is considerable research evidence to prove that the English-medium education in Hong Kong is ineffective for the majority of pupils, but hardly any research has been done on the factors that lead to this phenomenon. The present study is an attempt to examine some contributory factors.

118 subjects responded to a questionnaire designed to investigate the subjects' language, educational and social background as well as their opinions on the two languages and the medium of instruction. The responses indicated that several factors contributed to the ineffectiveness of the English-medium education in Hong Kong: the pupils' lack of exposure to English outside the classroom; the absence of the Hawthorne effect previously shown to have positive influence on new second-language immersion programmes; and the possibility that the pupils suffer from 'subtractive bilingualism', which prevents them from learning the languages effectively.