The Decade 1989-1998 in Spanish Psychology: An Analysis of Research in Development and Educational Psychology

Emilio Sánchez-Miguel
University of Salamanca

Jesús-Nicasio García-Sánchez
University of Leon

In this study, we identified 67 research trends that meet the criteria of this special issue. In the following pages, all the research trends will be reviewed, grouped into five categories: personal and social development, cognitive and linguistic development, developmental and educational contexts, cognition and instruction, and development and learning disabilities. A general overview of the area is obtained by dividing each category into subcategories, thus arranging the identified research trends in a four-level hierarchical structure. Taking into account this analysis, in our Conclusions section, we note the regularities with regard to the issues that have been studied the most, the predominant type of works, and, more important, the most noteworthy imbalances. We reached six conclusions: (1) Research on educational changes predominates over the study of developmental changes; (2) the study of formal education is predominant over informal education; (3) cognitive-linguistic aspects predominate over personal and social aspects; (4) application of knowledge predominates over the generation of new knowledge; (5) new educational-practice proposals predominate over the study of these educational practices; and (6) the study of change is not related to the proposals that promote change.

En este trabajo hemos identificado 67 líneas de investigación que satisfacen los criterios adoptados en esta monografía. En estas páginas se pasa revista a todas ellas, agrupándolas en cinco categorías: el desarrollo personal y social, el desarrollo cognitivo y lingüístico, los contextos del desarrollo y educación, cognición e instrucción y dificultades en el desarrollo y aprendizaje. Cada una de estas categorías se descomponen en diferentes subcategorías conformando una estructura jerárquica de cuatro niveles diferentes que permite ordenar todas las líneas identificadas y apreciar una imagen global del área de conocimientos. En función de este primer análisis, señalamos en el apartado dedicado a las conclusiones las regularidades que hemos podido apreciar sobre cuáles son las cuestiones más estudiadas, qué tipo de trabajos predominan y, lo que seguramente es más importante, qué desequilibrios son más notorios. Anticipando lo que seguramente es el núcleo de este trabajo, cabe mencionar estas seis conclusiones: 1) predomina la investigación sobre los cambios educativos frente al estudio de los cambios evolutivos, 2) el estudio de la educación formal respecto de la informal, 3) lo cognitivo-lingüístico respecto de lo personal y social, 4) la aplicación del conocimiento más que la génesis de nuevo conocimiento, 5) las propuestas de nuevas prácticas educativas más que el estudio de esas mismas prácticas educativas, 6) se aprecia una desconexión entre el estudio del cambio y las propuestas que se formulan realmente para promoverlo.

Dr. Emilio Sánchez-Miguel, Departamento de Psicología Evolutiva y de la Educación, Universidad de Salamanca, Avda. de la Merced, 109-131, 37005-Salamanca, Spain (E-mail: esanchez@gugu.usal.es)

Dr. Jesús-Nicasio García-Sánchez, Departamento de Filosofía y Ciencias de la Educación, Universidad de León, Campus de Vegazana, s/n, 24071-León, Spain (E-mail:dfcjgs@unileon.es).

In an attempt to present the academic production of the field of developmental and educational psychology in an organized manner, communication with colleagues from other countries inevitably becomes an act of awareness of what is occurring in Spanish universities in this field. Therefore, before embarking on this twofold process, we deemed it necessary to offer some distinctive notes both on the area and the methodology used to collect and analyze the research trends.

Three important traits characterise our field as compared to the rest of the fields reviewed in this special issue: (a) our field is present in a extensive amount of material and of very diverse academic degrees; (b) the coincidence of the decade covered in this review and the implementation of an educational reform that was directly promoted by many of the ideas and theories developed within our field; and (c) the importance of publishing in Spanish and, consequently, the proliferation of academic journals.

First, our field is present in many institutions (Psychology and Educational Faculties, Educational Schools, etc.) and academic degrees ("Licenciaturas" [European University Degree] in Psychology, Educational Sciences, Psychopedagogy, and 3-year college degrees in Social Education or Teacher Education, with seven different titles). This diversity implies variety of curricular content, which exceeds the simple division into developmental and educational psychology.

In this sense, this diversity is not clearly reflected in the research trends identified in this work, which focus on classical material (development and education). This may be because the "new" materials, proceeding from recently created academic careers, need some time to mature and develop. If a similar analysis were carried out in the next decade, the situation would probably be quite different.

Many of the professors from this field (57% of the total) teach 3-year college courses ("Diplomaturas") and most of them (42%) have no obligation to investigate, according to the "Ley de Reforma Universitaria" [University Reform Law], currently applied in the Spanish university. On the other hand, these professors compensate this lack by dedicating more time to teaching than do university-degree professors. The division of professors who teach 3-year courses and those who teach 5-year university courses will probably disappear progressively. This will increase research potential in this field.

A second distinctive trait is that, in the decade of this study, a very ambitious educational reform[1] was developed, which has raised at least three big issues directly related to the analysis of research trends.

On the one hand, the reform implies a comprehensive concept of education, in which a common educational experience is provided to all students. Assuming this principle, compulsory education has been extended for two more academic courses, involving a common educational course for the entire population between 6 and 16 years old. The consequence is an educational challenge: How can we ensure that all the students incorporate the basic skills and knowledge (learning to read and write well, regulation and autonomy systems, or the development of a satisfactory identity)? Our field is particularly sensitive about these issues.

In addition, Special Education, instead of being separate from the Ordinary Educational System, has become an integral part of it. Thus, following the English model based on the Warnock report, a continuum between normality and learning disabilities is assumed, as well as an interactive view of the nature of this continuum, in which context (that is, the opportunities offered to each student) determines outcome. Consequently, attention to diversity has become one of the main challenges, which requires new methodological, instructional, and access to institutional resources (team-work, flexibility in curriculum design and development). Within this framework, Multiprofessional Special Education Team personnel -subsequently, Psychopedagogical Teams- became generalized. Thus, psychology, as a profession, became part of the Ordinary Educational System.

In view of the educational reform, the entire educational community was encouraged to accept the possibility of many types of school knowledge: conceptual, procedural, and attitudinal (Coll, 1987). More important, the community was encouraged to reflect about the constructive processes by which students acquire such varied contents. This led to the need to develop resources (procedures, methodologies, intervention frameworks) to explicitly promote strategies and values in the curricular content.

It would be inaccurate to state that the educational reform determined the course of research in our field, but the reform was doubtless in line with most of the theoretical development of research. Not in vain was the reform led by influential professors from the field, such as Coll, Marchesi, or Martín. Thus, cognitive psychology, the sociocultural currents, and the constructivist concept of learning –most especially the last two– provided the precise guide in the documents and training plans involved in the development of the reform. Thus, dissemination, training of professors, the creation of new academic degrees (i.e., a new "licenciatura" in psychopedagogy) make up the background of many works. Here, an interesting

---

[1] In 1990, a new "Ley de Ordenación General del Sistema Educativo" (LOGSE, [Law of General Arrangement of the Educational System]) was declared in Spain, and in 1992, the Basic Curricular Designs that make up the official curriculum, dictated by the Government and the Autonomous Communities, were published and specified at the educational center and classroom level.

Table 1

Research Areas and Research Trends in Development and Educational Psychology

Research areas	Number of research trends	Number of articles per area	Mean number of of articles per area
Personal & Social Development	9	83	9.22
Cognitive & Linguistic Development	13	142	10.92
Development & Educational Contexts	5	70	14
Cognition & Instruction	23	242	10.52
Developmental & Learning Disabilities	17	129	7.59
Total	67	666	9.94

phenomenon is observed: In many cases, there is no precise correspondence between the individuals who have influenced the educational community (in articles in which predominate reflection, development of educational proposals, or dissemination) and those who have emphasized research. Of course, this study does not take for granted that research is all that matters (in fact, we have many misgivings); on the other hand, in this article, we must review research. Nevertheless, we will attempt to offer a perspective as complete as possible, without violating the common principles adopted in this review, offering a special section on academic activity.

We also emphasize the importance of publishing in Spanish. Our field has a broad range of dissemination possibilities via the written word: an extensive public demands reflection and contextualized proposals in the immediate setting, to interpret the development and educational processes in which psychology participates. This has led to the proliferation of journals, which in turn promotes the existence of scientific journals in Spanish. This public is not only Spanish but also includes Latin America. From our point of view, it is probably much more important to publish in Spanish in our field than in any other field.

Methodology

We identified 67 research trends with a mean of 9.94 works per trend. Given that the rest of this article is based on this corpus, we would like to comment upon the way these trends were identified and what we believe they represent. The methodology is described by Fernández (this issue) and therefore, has much in common with that employed in the other areas, such as the criterion of five articles on one topic. However, it also has some peculiarities which we shall now comment upon.

First, as the field is mostly made up of tenured professors in the University Schools (57%), and, out of these, 42% have no research obligations, their works were nevertheless

Table 2

Number of Tenured Professors by Areas in the Public Universities, Percentages and Dedication

Area and total number of tenured professors (in brackets)	Psychology Faculties No. of tenured professors and (rounded off) percentage of the total area		University Schools No. of tenured professors and (rounded off) percentage of the total area	
	Full Professor "Catedrático" *	Professor "Titular" *	Full Professor "Catedrático" *	Professor "Titular" **
Social Psychology (192)	34 (18%)	127 (66%)	9 (5%)	22 (11%)
Developmental & Educational Psychology (430)	43 (10%)	141 (33%)	66 (15%)	180 (42%)
Personality, Assessment, & Psychological Treatment (269)	37 (14%)	204 (76%)	4 (1%)	24 (9%)
Basic Psychology (240)	45 (19%)	179 (75%)	3 (1%)	13 (5%)
Psychobiology (110)	9 (8%)	101 (92%)	0	0
Methodology of the Science of Behavior (154)	20 (13%)	133 (85%)	0	1 (0.6%)

Note. * Dedication of 240 annual hours to teaching plus 240 hours tutoring and student orientation (teaching and research).

** Dedication of 360 annual hours to teaching plus 240 hours tutoring and student orientation (only teaching, not research).

included in this review, although we were aware of their disadvantage, because, as mentioned, their teaching obligations are much weightier.

Second, as the contributions are scattered over a large number of journals of very different quality and not always well represented in the libraries, the first step was to specifically ask all the tenured professors to send us their research contributions that met the aforementioned criteria. We received many replies, but we also detected obvious absences. We therefore consulted the databases PsycLIT, MEDLINE, ERIC, PSICODOC-2000, ISOC, ISBN, and the Academic Research Elite, where we identified additional research trends. The 67 identified research trends are the result of applying both criteria; that is, the same criteria but in an inverse sequence of the other articles in this special issue.

Third, the criteria were applied flexibly, in order to include the maximum number of professors and research trends, always with the restriction of at least five different contributions, out of which at least three articles should have appeared in academic journals with masked reviewing processes. Elaboration of tests or validated intervention programs were accepted as contributions. Publications in prestigious journals are often specifically requested dossiers, which are subject to a different evaluation process than conventional articles. In these cases, we accepted whatever the journals had published. Regarding books, they were included provided they were not popularization or teaching material (i.e., research reports published with ISBN).

However, articles published in general or educational newspapers, popular magazines, or magazines that publish articles by request were excluded, as were publications of congress proceedings (both national and international), and books and book chapters on teaching and popularization, although we are aware that there are many valuable contributions in this field, probably more than in other fields. Therefore, we dedicated a final section to this type of works.

Taking the all the above into account, we must acknowledge some limitations. First, we accept that the criterion is debatable: Why five works? Second, its application has forced us to take some decisions that are unavoidably controversial. In this regard, we point out that *research work* is not interpreted by all colleagues in the same way. Therefore, when identifying a research trend, we required evidence that the works (at least most of them) had undergone the screening of an external evaluation. Third, some work trends are made up of more than ten different works and could be said to make up more than one research trend. This led us to another problem: How to distinguish a research trend? We have already revealed our choice in this matter. However, our first concern should be whether the research trends we identified are really a contribution to the development of knowledge. Of course, we do not formulate this issue in each of the trends we mention, but we do so with regard to the field as a whole (see the

Conclusions section). From our viewpoint, our job was not to judge the quality of each of the trends but to gather and order the contributions of the field, weighing their merits globally. Our true interest lies in the field itself. Thus, we will have treated the field more fairly than each of the professors and the research trends.

Anyhow, with the aforementioned reservations, we sincerely think that these 67 research trends make up an acceptable reflection of the scientific and academic production in our area in the decade under study. Insofar as this is correct, we will have the chance to point out some of its constants, biases, possibilities, and limitations. However, we emphasize the problems overcome in order to be able to exhibit this corpus.

Overview of the Research Trends Identified

In order to present a general and topic overview of the 67 research trends, we have used some common distinctions, not exempt from problems.

For instance, we distinguished between *developmental changes* and *educational and instructional changes*. The latter depend on the intentional actions of other persons within a formal or informal educational context. In addition, we used another habitual distinction: the separation of acquisition of *linguistic and intellectual skills* from those of a *social and personal* nature. We also distinguished between *developmental problems* and *learning disabilities*. These distinctions are problematic, but they may facilitate reading this article.

Using these distinctions (developmental / educational; formal / informal education; cognitive skills / personal and social development; learning disabilities / developmental problems), we grouped all the research trends into five categories (see Figure 1).

The first category includes *personal and social development*, referring to the study of the acquisition of skills that allow persons to communicate with themselves and with others. Here, we included works about the development of these skills, and works that explore educational procedures to promote them, which is a partial contradiction of our aforementioned distinctions. The reason is twofold. On the one hand, there are very few research trends, so that it would not be operative to divide this area into the study of social development and educational intervention. In addition, in some of the trends, both aspects are studied. According to our records, there were 9 research trends in this category.

The second category included *cognitive and linguistic development*. That is, the study of the unschooled mind (prior to school training). Here, we located 13 research trends.

In the third category, we considered the works of five research trends that analyze the *contexts* in which development and education take place: family, school, social settings, which globally matches informal education.
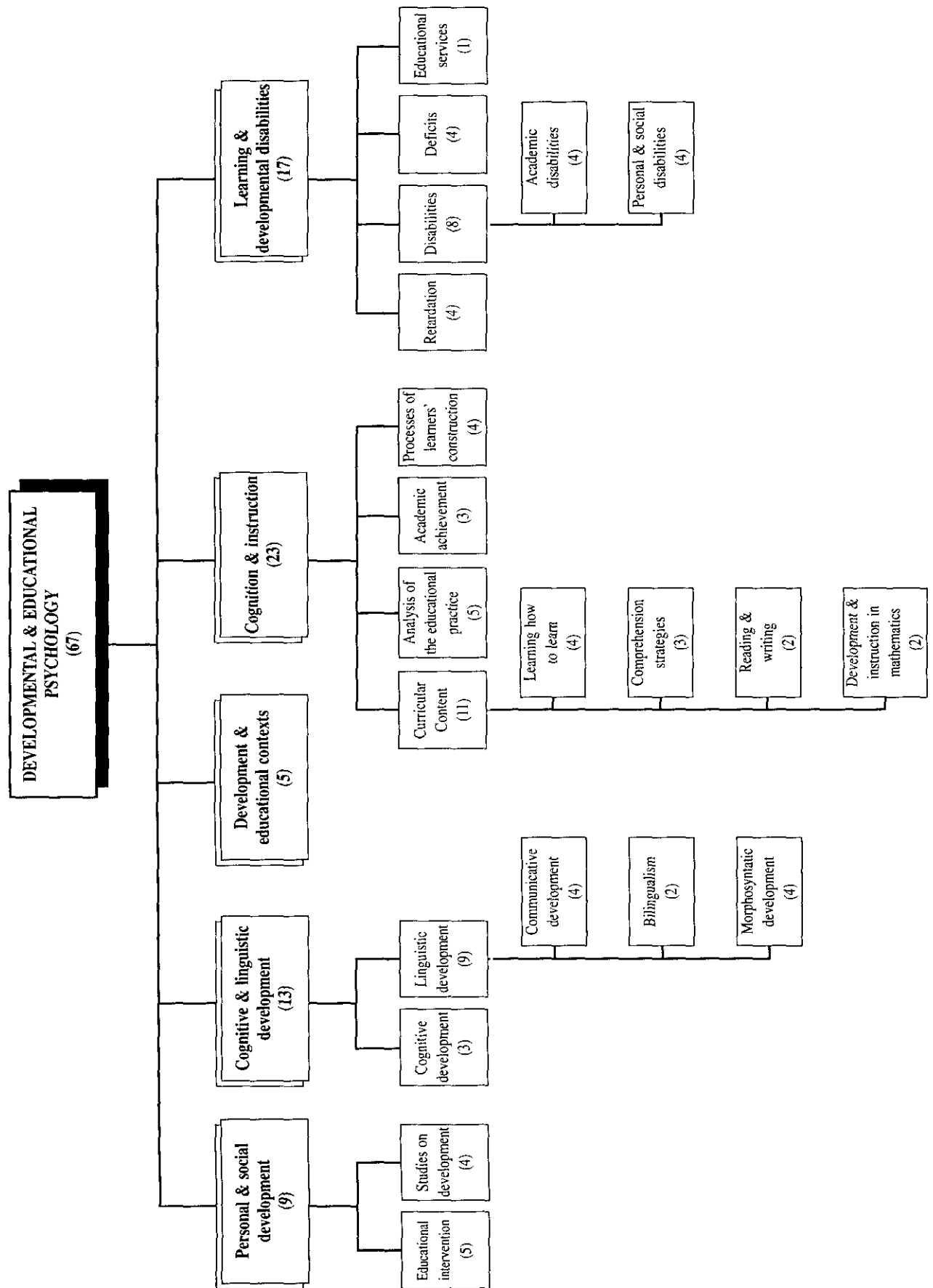
Figure 1. Synthesis of the areas, sub-areas, and number of research trends in each one.

In the fourth category, we grouped the research trends related to *cognitive and instructional* aspects, and works that focus on the analysis of the classroom and elaboration of procedures to promote development of cognitive abilities and strategies, which are as much an aim of school education as are the necessary resources for this experience. As we shall see, this is the most numerous category, with a total of 23 research trends.

In the fifth category, we included the 17 research trends that focus on the study of persons who have disabilities, not only in acquiring the skills promoted within the school context (learning disabilities), but also disabilities that affect more basic skills (developmental disorders) that are usually acquired in other contexts. We also included in this category the study of disabilities linked to personal and social development, and to cognitive and linguistic development.

What are the concerns of the studies thus grouped? What regularities (conceptual, methodological) do they present? Our aim is to answer each of these issues in each case, with some illustrations of the trends included. For this purpose, we followed some rules.

First, as it was impossible to mention all the works and contributions of the selected research trends, we decided to mention at least one study by the research group and, in some cases, when there were several contributions and/or several professors from various national or international universities, additional references were provided.

In addition, when a reference was later than the decade under study, but it illustrates the advances and contributions of a specific trend better than the reference within the decade, then this reference was also included. On the other hand, when there were many contributions about different aspects of the same research trend, then several contributions were mentioned. Lastly, the research trends that, according to the administrative distribution of the "Ley de Reforma Universitaria" [LRU; The University Reform Law], fit other fields better than ours, then they were derived to those fields.

Most of the 67 research trends identified (see Table 3) were published in Spanish (83% or 553 articles), although there is an important and growing representation in English (14.41% or 96 articles), with a few isolated publications in some of the official languages of the Autonomous Communities of Spain (Catalan or Galician). Only the research trends analyzed are included in this computation, and within them, only those that fit the criteria employed. Obviously, the total number of 666 articles is a very restrictive measure of the academic activity of the professors from the area, because papers that did not meet the criteria of identified research trends were excluded, (either due to trend dispersion or because there were less than five papers on one topic).

The articles appeared in a great variety of journals, as can be seen in Tables 4 and 5, but some regularity is observable. The journal that published the most articles, in any of the research areas considered, is *Infancia y Aprendizaje* [Journal for the Study of Education and Development] (108 articles), followed by Cultura y Educación (formerly *Comunicación, Lenguaje y Educación* [Culture and Education, formerly, Communication, Language, and Education]) (48 articles), and by the *Revista de Psicología General y Aplicada* [Journal of General and Applied Psychology] (25 articles), the *Revista de Psicología de la Educación* [Journal of Educational Psychology] (22 articles), *Estudios de Psicología* [Psychology Studies] (18 articles), and *Psicothema* (17 articles). Other journals are *Cognitiva* (17 articles), the *Revista de Educación* [Educational Journal] (11 articles), *Revista de Investigación Educativa* [Journal of Educational Research] (10 articles), or the *Anuario de Psicología* [Psychology Annual](9 articles), etc.

Most of the publications in Spanish are grouped under the heading "other publications" (248) –taking into account that this is made up of journals, tests, book chapters, or research books– so that the standards are different, although, in general, they follow APA norms or adapted norms. It was not possible to establish such clear patterns of the English publications as of those in Spanish because of the broad range of the journals.

Table 3

Journals and Language of the 666 Articles of the Research Trends

Journal (Language)	Number of articles	%
International journals (in English)[a]	96	14.41
International journals (in French)[a]	6	0.9
International journals (in Italian)[a]	1	0.15
Spanish journals (in Spanish)	553	83
Spanish journals (in Catalan)	2	0.3
Spanish journals (in Gallician)	4	0.6
Spanish and Latin American journals (in Spanish)	1	0.15
Latin American journals (in Spanish)	2	0.3
Latin American journals (in Portuguese)	1	0.15
Spanish journals (in English)	6	0.9

Note. [a]These are specialized scientific journals with an international group of Consulting Editors, and they are read all over the world.

Table 4

Distribution of Articles in Spanish Journals by Journal and Area

Area	Infancia y Aprendizaje	Cultura y Educación (antes Comunicación, Lenguaje y Educación)	Revista de Psicología General y Aplicada	Revista de Psicología de la Educación	Estudios de Psicología	Psicothema	Cognitiva	Revista de Educación	Revista de Investigación Educativa	Anuario de Psicología	Boletín de Psicología	Análisis y Modificación de Conducta	FAISCA	Substratum: Revista Ciencias Educación	Others[°]	Total
Personal & Social Development	14	8	3	6						2	2			3	39	77
Cognitive & Linguistic Development	12	8	3	6	11		9	3	1	6				4	49	112
Development & Educational Contexts	24	13			1					1				1	26	66
Cognition & Instruction	41	12	14	6	6	13	5	5	7		4	1		2	93	209
Developmental & Learning Disabilities	17	7	5	4		4	3	3	2		1	5	6	1	41	99
Total	108	48	25	22	18	17	17	11	10	9	7	6	6	11	248	563

Note. ° Investigación en la Escuela, 7 articles. The journals Substratum, Siglo Cero, or Anales de Psicología, 6 articles. Revista de Ciencias de la Educación, 5 articles. Other journals with 3 or 4 articles: Anales de la Revista de Psicología General y Aplicada – IberPsicología (4); Anuario Español e Iberoamericano de Investigaciones en Educación Especial (4); Bordón (3); Cadernos de Lingua (3); Comunicación y Cultura (3); Investigaciones Psicológicas (3); Lectura y Vida (Revista Oficial de la International Reading Association) (3); Psicologemas (3); Revista de Logopedia, Foniatría y Audiología (4); Revista de Neurología (4); Revista de Neuropsiquiatría Infanto-Juvenil; Revista de Psicología Social (3); Revista de Psicología Universitas Tarraconensis (4); TEA (tests and programs)(3).
Other journals with 1 or 2 articles: Anales de Psicología (2); Anuario de Sexología (2); Apuntes de Psicología; Aula de Innovación Educativa; Cuadernos de Consulta Psicológica; Cuadernos de Medicina Psicosomática; Cuadernos de Terapia Familiar; Didáctica de la Música; Didàctica de Lengua y Literatura; EDETANIA.; Educar; Enseñanza de las Ciencias (2); Estudios de Pedagogía y Psicología; Iber-Revista de Didáctica de las Ciencias Sociales; Infancia y Sociedad. Revista de Estudios (2); Perspectiva Escolar; Psiquis: Revista de Psiquiatría, Psicología y Psicosomática; Quinesia. Revista de Educación Especial; Revista de Educación de la Universidad de Granada (2); Revista de la Asociación Española de Neuropsiquiatría; Revista de Educación Especial; Revista Española de Geriatría y Gerontología; Revista Española de Orientación y Psicopedagogía (2); Revista Española de Pedagogía; Revista Galega de Filoloxía; Revista de Gerontología; Revista de Historia de la Psicología (2); Revista de la Sociedad Española de Lingüística Aplicada (2); Revista IRICE (2); Revista Latinoamericana de Psicología; Revista de Neuropsiquiatría Infanto-Juvenil; Revista de Orientación Educativa y Vocacional; Revista de Psicodidáctica; Revista de Psicología; Tarbiya (2); Temps d'Educació; Textos; Treball de Sociolingüística Catalana; etc.

Personal and Social Development

Personal and social development refers to the acquisition of abilities that allow relating to others and to oneself. There are several research trends in this area. One kind of trend includes research on various aspects of this dimension of development. A second kind of research includes the trends consisting of intervention proposals rather than the study of personal and social development itself, although these aspects are not always easy to distinguish.

Social development. As can be observed, most of the works mentioned below (see Promotion of Personal and Social Development) place more emphasis on the educational consequences than on the study of social development itself, except for prosocial behavior. However, two topics do not fit this pattern. They study two very different phenomena: the development of sexual and gender identity and fear of strangers.

With regard to the development of sexual and gender identity, Fernández has proposed a model to analyze the configuration of these two identities across the vital cycle and their interaction with teaching and learning settings (Fernández & Mateo, 1998). Closely related to this issue is the work by Freixas on the relation between gender (in women) and the aging process (Freixas, 1997), and its educational and social handling (in mass media).

And with regard to the fear of strangers, Ortiz (1993) has carried out detailed studies in which this reaction is analyzed in interaction with other behavior systems such as affiliation and attachment. These three behavior systems are observed in natural settings (city parks), observing behaviors that closely match the spontaneous patterns of adult-child interaction, in the attempt to discard the influence of variables that are not related to the fear of strangers. On the same topic, Lafuente has published several works on the development of attachment relationships, from parent figures to peer relations (Lafuente, 1994).

Promotion of personal and social development. In this section, we identified five research trends. The research

Table 5

Distribution of Articles by International Journal and Area

Area	Reading & Writing: An Interdisciplinary Journal	Educational and Psychological Measurement	European Journal of Psychology of Education	Higher Education Management	Journal of Learning Disabilities	Perceptual and Motor Skills	Archives de Psychologie	British Journal of Educational Psychology	International Journal of Behavioral Development	International Journal of Educational Research	Journal of Child Language	Journal of Educational Psychology	Journal of Moral Education	Journal of Neurolinguistics	Learning and Instruction	Memory and Cognition	Teaching Thinking and Problem Solving	Thinking and Reasoning	Others [a]	Total
Personal & Social Development													2						4	6
Cognitive & Linguistic Development			1					2	2		2			1		2		2	18	30
Development & Educational Contexts																			4	4
Cognition & Instruction	3	5	3	4		3	2			2		1			2				8	33
Developmental & Learning Disabilities	2		1		3							1		1			2		20	30
Total	5	5	5	4	3	3	2	2	2	2	2	2	2	2	2	2	2	2	54	103

Note.[a] The following entities published 1 article: Anthropology & Education Quarterly; Augmentative and Alternative Communication; Brain and Language; Behavior Research Methods, Instruments & Computers; British Journal of Developmental Psychology; Bulletin de Psychologie; Cahiers de Psychologie; Child Abuse and Neglect: The International Journal; Comunication & Cognition; Cuadernos de Pesquisa. Fundaçao Carlos Chagas; Culture and Psycholoy; Current Psychology of Cognition; Early Development and Parenting; Educational Psychology; Educating Able Children; Enfance; European Journal of Cognitive Psychology; European Journal of Psychological Assessment; Explorations in Sociocultural Studies (book); First Language; Folia Phoniatrica; Glossa, les cahiers de l'Unadrio; Higher Education; Jönköping University Press (book); Journal of Clinical and Experimental Neuropsychology; Journal of Memory and Language; Journal of Prenatal and Perinatal Psychology and Health; Journal of Psycholinguistic Research; Lawrence Erlbaum Associates (2 Tests); Limits; Whurr Publishers (book); Mind, Culture and Activiy; Modern theories of cognitive development go to school (book); OECD Publications (chapter); Pre and Perinatal Psychology Journal; Prospects. Quarterly Review of Comparative Education; Psychologische Beiträge; Quarterly Journal of Experimental Psychology; Sex Roles; Sociocultural Studies of Mind; Studi di Psicologi dell'Educazione; Teaching and Teacher Education; Teaching Thinking and Problem Solving; The High School Journal ; The Spanish Journal of Psychology; Vaasan Yliopiston Julkaisuja; Young Minds.

team led by López has focused on the study of altruism and prosocial behavior (Fuentes et al., 1993), analyzing the relations between variables such as empathy, the quality of the attachment links, and the capacity of putting oneself in another's place (predictors) and various indicators of prosocial and altruistic behavior. Other works by these same authors (for example, Etxebarría et al., 1994) have determined the impact of some educational experiences that influence the predictors of the development of prosocial and altruistic behavior, using experimental designs of an instructional nature.

Another trend has focused on evaluation and intervention in the components of intrapersonal and emotional intelligence. Here, we note the programs developed by Hernández (i.e., the "Programa Instruccional Emotivo para el Crecimiento y la Autorrealización Personal", PIECAP [Emotive Instructional Program for Personal Development Self-Realization]), which has a broad and integrative range of contents (30 cognitive-affective strategies identified in previous studies). The authors have verified and evaluated the efficacy of these programs, developing evaluation scales. See, for example, the work by Hernández, Aciego de Mendoza, & Domínguez (1997), in which an attempt was made to analyze the profiles of the students who achieved the most gains from these programs.

Based on the Kohlberg and neo-Kohlberg theories of moral development, Medrano's works (Medrano & Cava, 1994) attempt to show the dependence between the content of moral dilemmas and the way people think about them. Consequently, in their intervention proposal to improve moral reasoning, the authors highlight the importance of the socio-cultural context in socio-moral education.

An additional research trend is represented by the works of Goñi, based on Turiel's model, which has focused on the development of the notion of privacy (as seen in judgements about prudent behavior) and its relation with the development of the notion of justice and morality (linked to valuing solidarity). Consequently, this author (Goñi, 1989) has proposed a socio-moral education that relates the individual (happiness / privacy) with the solidarity aspects (morality).

Table 6
Personal and Social Development Research Trends

Social Development
Sex and gender development across life-span
Women and ageing
Attachment: reaction to strangers
Attachment: evolution of attachment relations
Promotion of personal and social development
Development of procosial behavior and empathy and
educational intervention
Socio-affective education
Construction of socio-personal knowledge (privacy, learning
how to get on with others, moral behavior)
Development of values and education
Children's play and education

Also noteworthy are the works by Ortega, dedicated to integrating two theoretical viewpoints on play: the Piagetian perspectives (that place emphasis on subjectivity, spontaneity, and the organization level of the activity) and the Vygotskian perspective (that highlights the symbolic and normed nature of play). These works culminated in the design of a curricular proposal in Child Education, accepted in the Andalusian Autonomous Community, indirectly related to the promotion of socialization processes in the school setting (Ortega, 1991).

Cognitive and Linguistic Development

Within this category, we distinguished 13 research trends. Many of them are dedicated to language development, an issue also extensively studied by professors from other fields (see Igoa, this issue). In addition, we differentiated a series of works about the development of various world conceptualizations with obvious consequences in the understanding of development itself.

Cognitive development. A large portion of the research trends about cognitive development have studied the construction process of various concepts. Thus, the trend by Rodrigo has focused on the problem, ever-present in all investigations of this category, of the representation of knowledge and the nature of the epistemic change. Specifically, she attempted to respond to two important issues: (a) What kind of knowledge is activated in each change situation? (b) What are these changes? Rodrigo defends the importance of what she denominates "the episodic construction of knowledge" (Rodrigo, Vega, & Castañeda, 1992), a process related to specific knowledge domains and which is sensitive to the various task requirements. She has tried to reflect the validity of these ideas by studying parent's concepts about their children's development and education, and the relations with action systems that parents use to regulate their children's behavior, and the educational scenarios they generate (Rodrigo & Triana, 1996).

Another trend that explores the process of concept construction is the one developed Delval, about the understanding of the economic and social world. Thus, using Piagetian methodology, the child's comprehension of notions such as poverty, war, or economic exchange are investigated. The work by Delval and Echeíta (1991) analyzes children's difficulties to understand the process of buying-selling that occurs in shops and other concepts related to economical exchange (i.e., the concept of gain). These difficulties are related both to cognitive and to socio-moral development, according to the authors.

In addition, there are some research trends about the acquisition of academic notions related to History, Chemistry, and Physics, that, according to our categorization, correspond to the field of cognition and instruction. However, they are mentioned here because the relations between scientific knowledge and everyday knowledge forms a part of the reflections of this group of research trends. See Igoa (this issue) for more extensive references.

Also noteworthy are the works carried out by Carranza on children's cognitive development, especially, although not exclusively, on sensorimotor development, focused on the analysis of the VI Sensorimotor Stage: the object-permanence error of the IV Substage (Carranza, Brito, & Escudero, 1990).

The works by García-Madruga explore the predictions and explanatory capacity of the mental models approach to deductive reasoning (i.e., Santamaría, García-Madruga, & Johnson-Laird, 1998). Thus, they have attempted to interpret the effects of content and context in deductive reasoning by referring to the subjective relations among

Table 7
Cognitive and Linguistic Development Research Trends

Cognitive Development
Construction of mental models and implicit theories
Construction of social thought from the perspective of Piaget
Cognitive sensory-motor development
Deductive reasoning
Linguistic Development
Communicative Development and Interaction
Communicative mother-child interaction; manipulative
play and acquisition of first meanings
Communicative interaction: joint regulation
Communicative interaction in students with sensory and
learning deficits
Morphosyntactic Development
Language development: morphosyntactic development
Development of mono- and bilingual language
Development of vocabulary
Bilingualism
Bilingualism
Linguistic immersion and educationn

the concepts included in the problems. More specifically, they have studied the developmental changes observed between preadolescence and adulthood in the strategy of looking for counter-examples (Velasco & García-Madruga, 1997).

Linguistic development. The research trends on linguistic development can be grouped into three very common concerns in this field: the study of communicative interaction, the study of morphosyntactic development, and the analysis of linguistic and cognitive skills in bilingual contexts.

With regard to the study of communication and communicative interaction, we note two research trends. In one of them, Perinat has carried out various longitudinal studies on the development of child play (based on the notion of conjoint action formats), attempting to explain the mental states and communication processes involved in symbolic play. More precisely, this author states that the critical moment is when the child switches from the role of actor to that of observer (around the age of 2 years), which involves the capacity of conceiving other's behavior as signs and the development of a series of new abilities - mirror reflection, recoursiveness, self-reference, and the creation of frameworks- (Perinat & Sadurní, 1999). A related trend is the study of other decisive communicative experiences such as the regulation of conjoint attention, the use and function of temporal forms, and the study of the give-and-take format (Vila & Zanón, 1992). Clemente has also carried out many studies in which she examines adult-child communicative interaction in normal and special populations of persons with developmental or learning disabilities. Thus, although her work could also be classified in this field, it is only analyzed in the area of children with hearing disabilities (deaf children) or with specific learning disabilities, or with mental deficiency (Down's syndrome) (Clemente, Sánchez, & González, 1993).

Concerning language development, two research trends are concerned with the study of patterns, sequence, and mechanisms in language acquisition, either in monolingual or in bilingual settings. The first one, developed by Shum (Shum, Conde, & Díaz, 1989), has focused on the study of acquisition patterns and the use of the pronoun in the Spanish language, and on learning and the use of the deictic terms of person, space, time, mode, and verb. The second trend, by Pérez Pereira, has been dedicated to the acquisition of other morphosyntactic elements, such as the acquisition of gender morphemes and the use of pronouns (Pérez Pereira, 1991). Pérez Pereira has also carried out many works analyzing the development of language in blind people and comparing their evolution to that of normal people in such crucial aspects as prelinguistic patterns of action or the acquisition of the pronoun, among others. This has led the author to defend an "idiosyncratic" language development in blind children, although it falls within normal parameters (Pérez Pereira & Castro, 1997). This contribution would also fit in the field of learning and developmental disabilities.

The study of children's vocabulary has an extensive tradition within the study of language development. Within this framework is a research trend that has focused on the estimation of children's vocabulary, the elaboration of two computerized lexical databases, the study and function of self-semantic terms. Similarly, the elaboration of dictionaries of syllabic frequencies of written Spanish is very useful when investigating reading and writing from a psycholinguistic viewpoint. This latter issue has been addressed by this research trend (Justicia, Santiago, Palma, Huertas, & Gutiérrez, 1996).

The study of bilingualism is especially interesting in those cases in which both languages are shared within the same territory, as occurs in our country in various autonomous communities in which two languages share co-officialdom. Huguet (1995) expresses two types of concerns: (a) the relations between the academic domain and the oral use of the languages by the minority students; (b) another important issue is how children achieve mastery over a second language that is not their mother tongue (the dominant language) similar to that of their monolingual companions, so as to avoid academic disadvantage. Similarly, an additional trend is seen in the works that analyze the effects of linguistic immersion on national identity and categorization processes in bilingual contexts, which has theoretical and educational implications (Vila, Valle, Perera, Monreal, & Barrett, 1998).

International projection of the research trends is observed in this area of cognitive and linguistic development, because many of them have published their results in international journals.

Developmental and Educational Contexts

In this area, we have grouped the works by authors who consider that developmental changes cannot be understood without studying the educational and developmental contexts in which they occur. The processes of educational influence are analyzed from systemic and socio-historical-cultural approaches at the family, school, and community levels, where children evolve and acquire information, skills, rules, cultural patterns, world visions, etc.

Table 8
Developmental and Educational Contexts Research Trends

Family, school, and community (educational contexts)
Child-raising and educational contexts
Mother-child interaction in problem solving
Cultural genetics and theory and methodology in cultural genetics and cultural psychology
Learning and socio-cultural context

In this perspective are included the works that analyze the influence of family context on development in general and various aspects of personal development in particular. For example, parent's developmental-educational notions and parent-children interactions (Palacios, 1989), the organization and structuring of everyday family life, and children's developmental characteristics have been analyzed (Palacios, Lera, & Moreno, 1994). This kind of study illustrates the link between theory and application, and the social impact of the improvement of children's educational and developmental processes.

Along the same line are Vila's works, focused on perception of children's capacities, the study of developmental expectations, and families' and teachers' ideas and beliefs about education, or the conjunction of personal construction and the social origins of the higher functions (Vila & Bassedas, 1994).

On the other hand, several research trends converge in "cultural genetics," analyzing the influence of social and cultural environment on the developmental processes, for example, on identity and directivity (Río & Álvarez, 1995). Within this same theoretical framework are Lacasa's works, who has studied the role of context in cognitive development, in particular, the development of self-regulation (Lacasa, Martín, & Herranz, 1995), planning written-composition tasks, as well as situations or tasks where both family and school coincide, such as academic homework (Lacasa, Pardo, Herranz, & Martín, 1995). Gil has also carried out various studies in which she analyzes adult-child interaction in problem-solving task performance (Gil-Carnicero & Sánchez-Carretero, 1996).

Cognition and Instruction

In this category, we include those works focusing on educational changes within the formal education provided by the school. As we shall see, this is an extensive category, with 23 research trends in which are distinguished the subsections shown in Table 9

On the one hand, some research trends have been dedicated to the study of basic capacities acquired within the school setting, corresponding to explicit curricular content (with the Educational Reform). Reading comprehension, mathematical reasoning, written comprehension, and learning strategies make up a broad group of research trends (11). A second group of works (5) studies educational practice. A third group of research trends (3) analyzes academic achievement and its determinants. Lastly, a number of works (4) studies the crucial role of learners' construction processes.

Curricular content. Regarding the research trends (usually procedural) included within this area, a subgroup refers to the treatment of learning strategies: learning how to learn (4), comprehension strategies (3), reading and

Table 9
Cognition and Instruction Research Trends

Curricular content
Learning how to learn
Instrumental enrichment and learning potential
Learning strategies
Strategies, styles, and approaches to learning
Learning strategies and educational programs
Comprehension strategies
Text comprehension: nature of difficulties and optimal instruction conditions
Comprehension capacity and working memory in learning from texts
Development of text comprehension competence by intervention in texts and in students
Reading and writing
Reading development (reading processes) and phonological awareness
Reading and writing: socio-cultural approach
Mathematics development and instruction
Development and instruction of mathematics
Instruction of mathematics and difficulties
Analysis of the educational practice
Analysis of the educational practice and educational influence mechanisms
Verbal explanation: comparison of expert and beginner teachers' verbal explanations: from dialogue to monologue
Psychopedagogical counseling
Educational orientation and psychopedagogical counseling
Evaluation of university teaching quality
Academic achievement
Determinants of academic achievement
Attributional theory of motivation
Predictive models of the attributional and motivational relations and academic achievement
Processes of learner construction
Debate about constructivism
Cognitive-social learning
Construction of notions of natural sciences
Field dependent / independent cognitive style

writing (2), and mathematical thought (2). Taken together, they cover a great amount of the most basic curricular content. In any case, the trends propose the development of educational interventions, in which can be observed some degree of integration of cognitive psychology (which identifies what should be taught) and Vygotsky-type psychology (which involves the way to plan training and student-teacher-task relations). Many authors who were involved in reflection on constructivism will be uneasy with this conjunction (or at least, with some of its manifestations).

1. Learning how to learn. In this section, there are several research trends, for instance, the trend by Prieto (1991) –see also Developmental and Learning Disabilities– who has studied instrumental enrichment and learning potential. Román has developed an instrument to evaluate students' use of strategies (ACRA; Román & Gallego, 1994), as well as numerous intervention proposals in cognitive and social development. The ACRA -an acronym for acquisition, coding, recovery and aid-consists of four independent scales *that evaluate students' habitual use of these strategies in* Compulsory Secondary Education (from 12 to 16 years old), and later on with regard to seven acquisition strategies, thirteen information-coding strategies, four information-recovery strategies, and nine information-processing strategies. *The ACRA is currently used in educational* interventions as an evaluation instrument and to develop instructional programs.

A third sample of this concern with learning how to learn is seen in the work by Cano and Justicia (1994), in which they attempt to integrate three notions that usually correspond to independent trends: learning strategies, learning styles, and learning approaches. These authors study the complex relations of these notions and their instructional implications.

Monereo has reflected about the requirements of curricular treatment of instruction in the learning strategies, which would involve a learning curriculum, and a certain type of teacher. More specifically, this author has carried out various studies on the way students take notes, as this is a very specific strategic niche in which different methods may be distinguished among students (Castelló & Monereo, 1999).

2. Comprehension strategies. At least three research trends were identified in this section, in which various instructional procedures were tested. In general, all the procedures emphasize teaching strategies to help readers to understand the coherence relations that lend unity to texts, and to integrate this textual information with prior information. The three trends lean strongly on psycholinguistic comprehension models (e.g., models by van Dijk & Kintsch, 1983) and are based on experiments. Nevertheless, the relative distance between these proposals and the classroom is fully acknowledged by the authors (García-Madruga, Martín Cordero, Luque, & Santamaría, 1996; Sánchez, 1990; Vidal-Abarca & Gilabert, 1995). (See in Igoa, this issue, other authors interested in this topic).

The study of the capacity of comprehension is not very widespread, although the work by Elosúa, Gutiérrez, García-Madruga, Luque, and Gárate (1996) has focused on one of the variables that has attracted the most attention: working memory. Lastly, the study of the impact of textual variables complements the global study of comprehension, as seen in the many experimental works by Vidal-Abarca (e.g., Vidal-Abarca, Sanjosé, & Solaz, 1994), *in which the authors* analyze the impact of different versions of the same text on various comprehension measures.

3. Reading and writing. Another issue that has been extensively studied is reading and writing, in which two tendencies are noted. On the one hand, the psycholinguistic tendency, which stresses the importance of phonological awareness in learning to read, is represented by the research trend by Defior, in which the incidence of early intervention in phonological awareness tasks on subsequent learning to read has been tested (Defior & Tudela, 1994). This trend has concluded with the development of intervention procedures that have been extensively disseminated and are related to those proposed for the treatment of learning disabilities. Defior has also studied the development of word-recognition processes by means of cross-sectional studies (see in Igoa, this issue, the related works by Cuetos, Vega and Carreiras).

Another research trend has emphasized the active role of the learner in the learning process and the importance of attending one's own conceptions about what is written, establishing (communicative) contact with the written language. Although this trend has also acknowledged the importance of meta-linguistic reflection, its consideration has been secondary, given the emphasis on the students' active process of appropriation and the various hypotheses they can generate at different times. Teberosky has influenced the development, justification, and dissemination of this conception (Teberosky & Tolchinsky, 1992).

4. Development and instruction in mathematics. Mathematics is another topic that has attracted researchers' interest. Here we find two complementary research trends. On the one hand, that of Bermejo, who has addressed various *issues related to the acquisition of the notion of numbers,* such as the representation and magnitude of addends in solving addition problems or the development of processes and stages in the acquisition of cardinality. This group has also studied comprehension of the commutative property in additions, problem-solving strategies, and verbal problems of comparison and comprehension of the comparative relationship (Bermejo & Lago, 1990).

In the second trend, Orrantia has focused on arithmetic problem-solving processes, in which simple additive relationships are involved: an action that operates on two states, two states that make up a third state, or two states that enter into a comparison relationship. Orrantia has attempted to empirically validate an instruction procedure to solve this kind of problem and to analyze students' difficulties with these problems (Orrantia, Morán, & Gracia, 1998).

Analysis of educational practice. In this section, instead of on content, emphasis is placed on how to develop analysis systems to help us to understand the educational *relationship between students, teachers, and the task that* links them physically and mentally. We have identified five research trends.

The trend led by Coll and Onrubia has focused on the development of a methodology to describe this threefold interaction (student-teacher-task) and the changes taking place in the organization of the activity and in the process of transfer of control that may occur over time. This double analysis is based on the discourse in the classroom and has been applied to various educational situations that make up a didactic unit (logical-mathematical activities, teaching computer procedures, etc.). In addition to this empirical work, the authors have also attempted to systematize this proposal theoretically (Coll, Colomina, Onrubia, & Rochera, 1992).

In the second trend, Sánchez has analyzed teachers' verbal explanations at various educational levels: primary, secondary, and university. The aim is to understand the demands required of students and teachers due to their capacity to share meanings through discourse. The authors have also attempted to understand the evolution of students' and teachers' resources, which form a continuum which goes from dialogue to monologue. In a typical study, verbal explanations of teachers are compared at various stages of differing teaching experience, extracting regularities that may be theoretically interpreted (Sánchez, Rosales, Cañedo, & Conde, 1994).

A third research trend is the study of psychopedagogic counseling carried out by professionals in educational centers. Solé has reflected throughout this decade on the activities, problems, and procedures employed by these professionals (Solé & Colomina, 1997). A second trend, by Luque, on the same topic, has been concerned with educational guidance and psychopedagogic counseling (Luque, 1998), and with the activities of young children's teachers (Castaño et al., 1997).

In this section we also find the studies on the evaluation of the quality of university teaching, in order to optimize and improve its efficacy and efficiency. The authors have proposed a model to evaluate teaching quality, developing and validating specific assessment instruments in various Spanish universities, and they have investigated the dimensions of university teaching quality and other factors (such as the class size) that influence the quality of university teaching. The basic notion is the circular evaluation method, which means that all the agents of the teaching-learning situation should participate in each other's evaluation: everyone evaluates and, at the same time, is evaluated (Fernández & Mateo, 1992).

Academic achievement. This is the last large block of the Cognition and Instruction section. The influence of cognitive-motivational, affective, and self-regulation variables in the learning process of students with and without learning disabilities has been analyzed (González-Pienda, Núñez Pérez, & Valle Arias, 1992), with focus on the study of abilities and basic cognitive processes, thinking styles, learning strategies, self-concept, causal attributions, and

learning goals. In fact, these authors have studied the various elements that determine academic achievement and they have elaborated scales and questionnaires to evaluate these elements and aspects (Núñez Pérez et al., 1998).

Many factors directly or indirectly influence academic achievement, for instance, institutional variables -the internal activities of the educational center, the educational and instructional process- and more personal variables -teacher's and students' expectations, learning strategies, psychosocial factors, attributional and motivational variables, or intelligence. Several research trends have been concerned with the development of causal models that systematically operationalize and integrate many of these factors. These trends are reflected in the work of professors from various Spanish universities at several educational levels (Castejón, Navas, & Sampascual, 1996; Castejón & Vera, 1996). (See also "high capacity" under the Disabilities section below.)

Processes of learner construction. In this last category, we find a group of works concerned with clarifying the nature of the process that takes place when students acquire new knowledge. Examples of this concern are the monographic numbers published in various journals and monographic books in which this topic is reviewed, for instance, the volume coordinated by Martí (1996) on *Constructivismo a Debate* [Debate on Constructivism], which reveals this author's profound concern about this.

This debate, common to all countries, is especially relevant in Spain because of the pronounced constructivist inspiration of the Educational Reform. Thus, issues such as the confrontation of various viewpoints that assume the postulates of constructivist epistemology -Piagetian, socio-cultural, or cognitive- are underlined when we observe that, to a great extent, educational dissemination uses some version of one of these three perspectives (including synthesis attempts), as well as the remaining educational proposals examined in the other categories (i.e., the polemic raised by Delval, 1997). Likewise, the need to mark the explanatory limits of constructivism becomes especially relevant when instructional constructivist methodology approaches are proposed to teach writing, comprehension, or learning strategies, in which high- and low-level mental processes (automatic and cognitive and metacognitive) can be differentiated. This debate has its roots in the research trends included in cognitive and linguistic development, and obviously, the level of reflection achieved in these debates is not the same as that reflected in the educational proposals. This asymmetry is not always explicit in the publications we shall now comment upon.

Various research trends about the development of nuclear notions of the different knowledge domains have evolved, for example, the works carried out by Carretero, Pozo, and Asensio, which are reviewed by Igoa (this issue). Here, we can also mention the works by Cubero (1998) on biology notions (i.e., understanding digestion).

We also note Peralbo's works about observational learning, in which he has analyzed the effects of contextual variables and age on generalization of what is learned by observation and the impact of expectations as behavioral guides (Peralbo, Méndez, & Vázquez, 1990).

Tinajero and Páramo have focused on the cognitive style field dependence-independence. Following the pioneer works of Witkin, these authors have contrasted the hypothesis of neutrality of this style with regard to adaptive processes. According to their numerous studies, at least regarding adaptation to the school environment, the achievement of field-independent students of both sexes is superior to that of field-dependent students in most of the academic domains (mathematics, social sciences, natural sciences, and language) (Tinajero & Páramo, 1998). On the other hand, the authors have also studied the relations between family environment (in the flexibility-rigidity dimension) and field independence-dependence, revealing data that support the relationships between flexibility-independence and rigidity-dependence (Páramo, Dosil, & Tinajero, 1991).

Developmental and Learning Disabilities

In order to organize the 17 research trends identified in this section, we shall distinguish four types of works. On the one hand, we have grouped the trends focusing on disorders whose basic characteristic is developmental retardation: autism (severe developmental retardation), mental deficiency, language and communication retardation, or retardation in the control of self-regulation processes and of impulses. A second type of studies has focused on the development of persons with various deficits (e.g., motor or visual deficits). We shall also consider research on disabilities, distinguishing those that are manifested in learning academic settings -including difficulties associated with exceptionally gifted children- from the disabilities that interfere with adequate personal and social development (for example, maltreatment). Lastly, we shall consider some works that have examined some aspects, such as attitudes towards mainstreaming, in the educational services that are responsible for all disorders and disabilities, aspects.

A notable characteristic in this research area, common to all four sections, is the focus on educational intervention, either by means of instructional proposals, global intervention proposals, or testing their efficacy and their applicability in educational settings. Sometimes the determinants that condition the problem are analyzed. A few works focus on the nature of the phenomenon under study.

Developmental retardation. We identified four research trends that have focused on retardation, predominantly, on educational intervention. We shall start with the more profound and generalized retardation (autism), and go on to more specific retardation (mental deficiency, language and communication retardation, retardation in control of impulses).

Rivière's pioneer interest was an impelling force in our country in the creation of services for persons with autism and severe developmental disorders and for their families; at the same time, it was the start of a fruitful period of research on this topic. See Igoa (this issue).

Within this framework, an attempt has been made in a research trend to clarify the contradictory results in prior research on autism, contrasting the double-psychological development hypothesis in the theory of mind versus the instrumental theory. Various comparative studies of the development of communicative intention, of the use of objects and imitation, and of cognitive development have been carried out. According to the data, the nucleus of autism is considered a deficit in the development of the theory of mind, and not of the instrumental theory, which clarifies the specific deficits (García, 1994).

A second research trend has focused on mental deficiency, using Feuerstein's Instrumental Enrichment Program. The trend by Prieto and collaborators has investigated, adapted, or validated several assessment and intervention instruments: the Evaluation of Learning Potential Program, Instruments and Strategies to Evaluate and Train Learning Potential, the Cognitive Structural Modifiability, and Feuerstein's Instrumental Enrichment Program. These authors have also evaluated the cognitive and meta-cognitive

Table 10
Developmental and Learning Disabilities Research Trends

Developmental retardation
    Autism and developmental disorders
    Dynamic Assessment in special students
    Analysis of linguistic and cognitive competence in Down's Syndrome
    Attention deficit hyperactivity disorder
Deficits
    Augmentative and alternative systems
    Language development in the blind
    Psychology of blindness
    Sensory aphasia
Disabilities
    Academic disabilities
        Learning disabilities
        Learning disabilities from a psycholinguistic perspective
        Phonological awareness and reading-learning disabilities (dyslexia)
        Intelligence and high abilities: difficulties
    Personal and social disabilities
        Maltreatment
        Social deviation and educational solutions
        Bullying
        Sexual abuse
Educational services
    Normalization and attitudes toward mainstreaming

capacities of learning potential, and studied experimentally the development of cognitive skills in special education students, who are in the supporting classes of the initial cycle of kindergarten. This group has also designed and investigated programs of ability and learning processes in students with special-education requirements, and have used dynamic evaluation to assess meta-cognitive processes, etc. (Prieto, Rodríguez, & Bermejo, 1991).

Likewise, linguistic and cognitive competence, in persons with Down's syndrome, have been studied by Lalueza and Perinat (1994) (see the section on cognitive and linguistic development). The processes of communicative interaction in deaf persons, in persons with Down's syndrome, or in persons with learning disabilities interacting with adults (see Clemente et al., 1993, in the section on cognitive and linguistic development, and not analyzed here) have also been studied.

Lastly, a trend has focused on attention-deficit hyperactivity disorder (ADHD), of which the nuclear problem is considered to be retardation in the capacity to self-regulate and control impulses. Interest has been centered on a contextualized and multi-component approach of evaluation and intervention, reflected in the trend by Miranda et al. (Miranda & Presentación, 2000). The studies that have attempted to determine the ideal ingredients of the various interventions with students who present learning disabilities (given that learning disabilities and ADHD overlap, although they are different syndromes) are also noteworthy (Miranda, Vidal-Abarca, & Villaescusa, 1997).

Development in persons with sensory and motor deficits. We identified three research trends, focused on the search for solutions to problems generated by these deficits.

The aforementioned educational intervention, predominant in the research trends of this area, is illustrated in focus on the needs of persons with developmental disabilities and problems and who may frequently have communication and language problems. This interest has led to the implementation of alternative communication systems or systems to intensify communication. These are useful for severe developmental problems, but they are essential in the case of "nonverbal" individuals. A trend has focused on this possibility, especially in children who present severe motor impairments and verbal communication deficits (Soro & Basil, 1993).

Likewise, a study on the development of language in persons with visual deficits, carried out by Pérez Pereira (Pérez Pereira & Castro, 1997), has helped these people and their families and has led to understanding the nature of linguistic development (see also the reference to this work in the section on cognitive and linguistic development).

In this same population, several issues have been examined, such as spatial representation in blind children –from the viewpoint of developmental psychology and of psychology of blindness– or word-recognition processes in tactile Braille reading –from psycholinguistic approaches

and from psychology of blindness (Simón, Ochaíta, & Huertas, 1996) – or how to teach and learn Braille. All these issues are theoretically relevant and significant for the improvement of the educational processes and the quality of life of blind persons. This trend is an example of how to study issues of great theoretical and applied interest, such as reading and writing in persons with developmental disabilities, as we shall comment upon below.

In another disorder, somewhat different from the others in this section, the underlying mechanisms in some manifestations (i.e., comprehension of negative sentences) of Wernicke's aphasia are studied. The works of Juncos-Rabadán suggest that the main deterioration of these patients consists of a cognitive deficit in the elaboration of logical-semantic representations of linguistic information, which would lead them to compensate with pragmatic information. Similarly, this group has studied the linguistic capacities in older people, comparing individuals from various linguistic environments (Catalan, Galician, French, etc.). Thus, for example, they have studied story-telling capacity at various ages, and taken into account variables such as the structure of the story, the cohesion links, the deictic elements, etc., showing not only which aspects decline with age, but also which variables may reduce its impact (Juncos-Rabadán, 1992; Juncos-Rabadán & Iglesias, 1994).

Disabilities. We shall comment upon academic and personal and social disabilities.

1. Disabilities in the academic domain. Another group of research trends refers to learning disabilities (according to the conjoint conception of the National Joint Committee on Learning Disabilities, 1998), disabilities of social origin (maltreatment, bullying), or disabilities originating in exceptional abilities or talents.

A research trend about the determinants of academic achievement in students with and without learning disabilities has already been commented upon in the section of Cognition and Instruction, and is therefore not analyzed here as a trend (González-Pienda et al., 1992 or Núñez et al., 1998). In view of the recent appearance of new academic titles, such as the "Licenciatura" in Psychopedagogy, a number of investigations have been published in the last few years about learning disabilities that are not reflected in this report because of the specified time interval, ending in 1998.

Regarding research trends about learning disabilities, two trends have studied very basic and identifiable phenomena, such as phonological awareness, and have led to the elaboration of precise tasks and instruments and instructional strategies for improvement.

Learning disabilities refer to significant retardation in learning to read or write, or in mathematics, independent of the IQ. A precise instrument to assess phonological awareness (which facilitates early identification of possible learning disabilities and preventive intervention) and its relation with learning to read has been developed. These authors have also

studied the relation between phonological awareness and the linguistic properties of words. phonological processes in learning disabilities. and writing and mathematical learning disabilities (Jiménez, 1997; Jiménez & Haro, 1995; Jiménez & Rodrigo, 1994).

The other trend is represented by the works on intervention in segmental awareness in dyslexic individuals. The authors have attempted to determine the consequences of this kind of formative experience on reading or writing in dyslexic persons, and to identify the specific components responsible for these effects (Sánchez & Rueda, 1991).

Lastly, mental deficiency and high capacities have been studied using Sternberg's triarchic intelligence model exploring the individualized educational response in these two extreme types of students. The authors have also carried various validation studies of the Sternberg Triarchic Abilities Test (Prieto, Castejón, & Bermejo, 1999).

2. Disabilities in personal and social development. Maltreatment, included in this section, refers to physical, sexual, psychological or emotional maltreatment, and to negligence and desertion. Basically, the trends have focused on assessment, intervention and on the development of preventive strategies. One research trend has focused on the study of the consequences in the child's psychological and general development (Gallardo & Trianes, 1999), and another trend has centered on the different types of developmental disabilities, such as those of social origin (maltreatment), those involving impulsiveness or inhibition, those that produce stress in infancy, or those that are the cause of legal difficulties (Trianes, Rivas, & Muñoz, 1991).

Sexual abuse is another problem related to social development. López has carried out several studies in which he analyzed the prevalence of such experiences in the population, the predominant characteristics of the people who carried out these abuses and of those who suffered them, and the short- and long-term effects they may have on the development of the persons involved. Intervention programs have also been carried out to coordinate the actions that affect the children, the parents, and the professionals involved in the children's education (López, Carpintero, & Hernández, 1995).

In addition to parent-child maltreatment, the study of the phenomenon of bullying among peers is of great interest, as is the reaction of professionals and parents to bullying. Within this context, the "Sevilla Anti-Violencia Escolar" (SAVE [Seville Anti-School-Violence]) project was developed to investigate the nature of the problem and preventive intervention at school, considered a community (Ortega, 1997).

Educational services. It is relevant that the creation of educational services and other social services in our country is guided by the normalization principle, which involves providing specialized or nonspecialized services within the ordinary educational system. School mainstreaming is a concrete representation of this principle. Therefore, an important aspect is the study of professors' and teachers' attitudes about school mainstreaming of children with special educational needs. Experimental research has been carried out in the natural context of the educational institution to modify attitudes about school mainstreaming of students with visual deficits (García, 1993).

In short, in this research area, the identified trends have focused primarily on intervention in developmental or learning disabilities, although various models are employed. We have also found some research trends centered on the nature of the disabilities. The viewpoint of the problems is basically psychological, although other approaches, such as educational, social, and community approaches are also necessary for an integral intervention with people who present some kind of developmental or learning disability.

Teaching and Researching Contributions

This review of the research trends wuld not be complete without referring to the work of a large number of professors and teachers via reflections and manuals, a stimulus to research trends and programs, and the pioneer work that this has represented for the evolution of Developmental and Educational Psychology in Spain.

As mentioned in the introduction, many contributions have guided teaching the main curricular material in this area. These have made up the framework within the educational community and in society in general to interpret developmental and educational phenomena from a psychological viewpoint. We have considered it relevant to summarize this kind of contribution, referring to those that have had and still have influence in the area, either in the form of doctoral dissertations, promotion or creation of some research area, or teaching the many curricular subjects of the area.

We can synthesize these contributions, grouping them generically in developmental psychology and educational psychology. Both traditions have made contributions since the psychology started to become generalized in Spain, although we shall focus on the those from the past decade.

With regard to the first group, in addition to *Psicología Evolutiva* [Developmental Psychology], in three volumes, edited by Marchesi, Carretero, and Palacios (1983) and *Psicología Evolutiva*, also three volumes, edited by Vega Vega (1987), the works by Palacios, Marchesi, and Coll (1990), and García-Madruga and Lacasa (1990) on developmental psychology in two volumes, and by Delval (1994) on human development are also noteworthy. Other contributions address more specific aspects of adult development and ageing, for instance, the works by Vega Vega (e.g., Vega Vega & Bueno Martínez 1995), Rubio Herrera (1992), the works on developmental and educational contexts, family-school-community connection, prosocial development with intervention-program proposals (Díaz-

Aguado, 1996). Also noteworthy are early interventions by means of massive programs, such as the one carried in Galicia by Dosil (1995) with all newborn infants from 0 to 6 years old (Grow and Develop programs). We also refer to Linaza (1984), who presented the work of Bruner on Spanish the decade before. This is merely an example of some interesting contributions.

Regarding the second group, educational psychology, in this decade, the contributions are an extension of the previous decade, for instance *Psicología Educacional* [Educational Psychology], in two volumes, edited by Beltrán (1985), or *Consejo y Orientación Psicológica* [Counseling and Psychological Guidance], also two volumes, edited by Genovard (1982). In addition to the contribution to instructional psychology by Genovard and Gotzens (1990), other works of diverse influence have been published in the area of educational psychology by Coll, Palacios, & Marchesi (1990) or, more specifically, in instructional psychology by Beltrán & Genovard (1996), strategic psychology, counseling and vocational guidance (Rivas, 1997), special educational needs (Marchesi, Coll, & Palacios, 1990), or psychopedagogical intervention in general.

This is just to offer examples, without being exhaustive, of some of the contributions of the area that are not reflected in previous paragraphs.

Similarly, this article only cites research trends by tenured Spanish university professors, considered individually. Contributions from private universities or from professors teaching in foreign universities, such as Gómez (1990), who teaches in St. Andrews, should also be taken into account.

From the brief reflections in this section, one can see the need to analyze not only the research trends, but also the instruction and teaching contributions, or the contributions that have involved the development of educational intervention programs, but this would be the object of another article.

Conclusions

Taking this report into consideration globally, we could make a "map" that reflects the way we arranged the various research trends represented in Figure 1. This map provides a synthesis of the areas, sub-areas, and number of research trends identified, according to the explicit criteria.

With this map, we detected at least six important regularities in research during the decade under study of the tenured professors in the Spanish public universities, in the area of developmental and educational psychology. We would like to call the readers' attention to these regularities.

First, assuming the debatable distinction of the study of developmental and educational changes, we found more works on educational changes than on the former aspect. Note that the research trends on developmental changes are listed in the less frequent categories: cognitive and linguistic

development, developmental and educational contexts, and partly in personal and social development (only the part that refers to social development). Although the distinction is arbitrary (but justified), 22 research trends on developmental changes versus 45 on educational changes reveals a great disproportion. This may be because the social context (see the first pages of this article) demands new resources with which to address the complex educational task in which we are involved, the more so when considering how to facilitate students' acquisition of certain educational contents, or how to understand many students' difficulties in acquiring those contents. In any case, there are research trends on most of the educational contents (both academic and related to personal and social aspects), and on the difficulties that students may encounter in their development and education. This issue should not go unnoticed.

Second, it is also noteworthy that most of the research is on formal rather than informal education.

Third, the study of "classical" academic competencies predominates over personal and social competencies (although this distinction is becoming ever less appropriate).

Fourth, we also point out that there is an obvious disproportion between research focused on understanding the problems and research aimed at solving problems. This occurs in the educational sphere, where, as mentioned, there are more research trends that attempt to help students to understand or learn to learn than there are trends that study the processes involved in learning texts or in supervision, etc. This also occurs in many "developmental" trends that attempt to prevent problems (especially with reference to the context) or to solve problems by means of interventions that are the object of study. Therefore, it can be concluded that researchers from this area are more interested in the applications derived from knowledge than in participating in the generation of new knowledge.

Fifth, there is also a large disproportion between the number of trends that attempt to develop proposals to improve the educational practice (in any context) and those that attempt to study these same practices. Typically, we find the following pattern in the first type of research trends: (a) The trends are based on a more or less precise model that attempts to explain a specific knowledge domain and from which is deduced a specific intervention procedure; (b) This procedure is developed in detail and its effects are tested in one or more experimental studies; (c) Obviously, the consequences for the educational practice are highlighted, assuming that if people would behave as indicated in the procedure, they could achieve valuable educational results, although exactly how this would occur is rarely analyzed. If we contrast this procedure with the way educational practice is studied, the striking disconnection between both types of study is evident. Of course, this disconnection affects what is studied but it also affects the method and the theoretical perspective adopted, and this fact no doubt fosters the familiar complaints about the breach between intervention proposals and practice.

We consider this an important reflection topic that would probably promote an increase in works on the study of educational practice in the immediate future.

Sixth, it is easy to see some disconnection between those who have attempted to reflect about the change and its conditions and those who use that knowledge (or some version of it) to justify their specific intervention proposals. For instance, compare the type of discussion raised in the research trends listed under the Learners' Constructive Processes Section with the content of the trends listed under the Curricular Content Section to become aware of this disconnection. This dialogue should be taken into account by both sides, but the need for this dialogue becomes obvious when reading these pages.

These reflections seem to indicate that it is necessary to carry our more research of the following characteristics: (a) developmental; (b) in social development versus the study of "classical" academic abilities; (c) in educational contexts other than the classroom; (d) in the study of the nature of the phenomena (as opposed to application of knowledge); (e) more dialogue between those who analyze the educational practice and those who propose changes in this practice; and (f) more dialogue between those who analyze the conditions evoked and enhanced by the changes and those who propose measures to favor the changes. Nevertheless, we acknowledge that this can not necessarily be inferred from these pages (except perhaps points e and f, of which we declare ourselves firmly in favor). It is arguable that our country needs (and will still need in the future) potent applied research, carried out in school settings, that will explain the most common problems encountered. In any case, we should caution about the limitations and possibilities of the option that seems to be prevalent. These pages represent an attempt to offer the clearest image possible of research in our area in the decade 1989-1998, and an invitation to reconsider whether this image should change in the future. Of course, we, the authors of this work, have our own opinion about this but we believe that we should conclude these pages with this invitation to discuss these issues.

References

Beltrán, J. (Ed.). (1985). *Psicología educational*. Madrid: UNED.

Beltrán, J., & Genovard, C. (Eds.). (1996). *Psicología de la instrucción I. Variables y procesos básicos*. Madrid: Síntesis.

Bermejo, V., & Lago, M.O. (1990). Developmental processes and stages in the acquisition of cardinality. *International Journal of Behavioral Development, 13*, 231-250.

Cano, F., & Justicia, F. (1994). Learning strategies, styles and approaches: An analysis of their interrelationships. *Higher Education, 27*, 239-260.

Carranza, J., Brito, A., & Escudero, A. (1990). The absence of the second container in the A not-B error. *Archives de Psychologie, 58*, 275-282.

Castaño, E., Elías, I., Luque, A., Martín, A.E., Navarrete, M.C., Sánchez, S., Puente, C., Santos, M., & Vázquez, I. (1997). Una investigación en la escuela infantil tomando la actividad de las maestras como objeto de estudio. *Investigación en la Escuela, 33*, 67-78.

Castejón, J. L., Navas, L., & Sampascual, G. (1996). Un modelo estructural del rendimiento académico en matemáticas en la educación secundaria. *Revista de Psicología General y Aplicada, 49*, 27-43.

Castejón, J.L., & Vera, M.I. (1996). A causal model about the individual and contextual determinants of academic achievement. *The High School Journal, 80*, 20-28.

Castelló, M., & Monereo, C. (1999). El conocimiento estratégico en la toma de apuntes: un estudio en la educación superior. *Infancia y Aprendizaje, 88, 25-42*.

Clemente, R.A., Sánchez, P., & González, A. (1993). Estilo materno y adquisición lingüística infantil. El caso particular del niño sordo. *Comunicación, Lenguaje y Educación, 19-20*, 183-192.

Coll, C. (1987). *Psicología y currículum. Una aproximación psicopedagógica a la elaboración del curriculum escolar.* Barcelona: Laia.

Coll, C., Colomina, R., Onrubia, J., & Rochera, M.J. (1992). Actividad conjunta y habla: una aproximación al estudio de los mecanismos de influencia educativa. *Infancia y Aprendizaje, 59-60*, 189-232.

Coll, C., Palacios, J., & Marchesi, A. (Eds.). (1990). *Desarrollo psicológico y educación, II. Psicología de la Educación.* Madrid: Alianza Editorial.

Cubero, R. (1998). La construcción del conocimiento del proceso digestivo. Un estudio longitudinal. In E. Banet & A. de Pro (Eds.), *Investigación e innovación en la enseñanza de las ciencias* (Vol. 2, pp. 102-110). Murcia, Spain: Diego Marín.

Defior, S., & Tudela, P. (1994). Effect of phonological training on reading and writing acquisition. *Reading & Writing. An Interdisciplinary Journal, 6*, 299-320.

Delval, J. (1994). *El desarrollo humano.* Madrid: Siglo XXI.

Delval, J. (1997). Hoy todos son constructivistas. *Cuadernos de Pedagogía, 257*, 78-84.

Delval, J., & Echeíta, G. (1991). La comprensión en el niño del mecanismo de intercambio económico y el problema de la ganancia. *Infancia y Aprendizaje, 54*, 71–108.

Díaz-Aguado, M.J. (1996). *Desarrollo de la tolerancia y prevención de la violencia en jóvenes.* Madrid: Ministerio de Trabajo y Asuntos Sociales.

Dosil, A. (Ed..). (1995). *En familia. Programa de educación integral. Programa Medrar. Programa Criar.* A Coruña, Spain: Xunta de Galicia.

Elosúa, M.R., Gutiérrez, F., García-Madruga, J.A., Luque, J.L., & Gárate, M. (1996). Adaptación española del "Reading Span Test" de Daneman y Carpenter. *Psicothema, 2*, 383-395.

Etxebarria, I., Apodaka, P., Ezeiza, A., Fuentes, M.J., López, F., & Ortiz, M.J. (1994). Design and evaluation of a programme to promote prosocial-altruistic behaviour in the school. *Journal of Moral Education , 23*, 409-425.

Fernández, J. (this issue). Research trends in Spanish psychology (1989-1998).

Fernández, J., & Mateo, M.A. (1992). Student evaluation of university teaching quality: Analysis of a questionnaire for a sample of university students in Sapin. *Educational and Psychological Measurement, 52*, 675-686.

Fernández, J., & Mateo, M.A. (1998). Student and faculty gender in ratings of university teaching. *Sex Roles, 37*, 997-1003.

Freixas, A. (1997). Envejecimiento y género: otras perspectivas necesarias. *Anuario de Psicología, 73*, 31-42.

Fuentes, M.J., Apodaca, P., Etxebarria, I., Ledesma, A.R., López, F., & Ortiz, M.J. (1993). Empatía, role-taking, y concepto de ser humano como factores asociados a la conducta prosocial-altruista. *Infancia y Aprendizaje, 61*, 73-87.

Gallardo, J.A., & Trianes, M.V. (1999). Impacto del robo y de la fuga en niños maltratados físicamente. *Revista de Psicología General y Aplicada, 52*, 537-550.

García, S.J.N. (1993). Simulación del déficit visual como técnica de modificación de actitudes hacia la integración escolar de alumnos deficientes visuales. *Análisis y Modificación de Conducta. 19*, 819-844.

García, S.J.N. (1994). ¿Son específicos los trastornos cognitivo-sensoriomotores observados en los autistas? *Infancia y Aprendizaje, 66-67*, 147-162.

García-Madruga, J.A., & Lacasa, P. (Eds.). (1990). *Psicología evolutiva 1 y 2*. Madrid: UNED.

García-Madruga, J.A., Martín Cordero, J.I., Luque, J.L., & Santamaría, C. (1996). Intervención sobre la comprensión y recuerdo de textos: un programa de instrucción experimental. *Infancia y Aprendizaje, 74*, 67-82.

Genovard, C. (Ed.). (1982). *Consejo y orientación psicológica*. Madrid. UNED.

Genovard, C., & Gotzens, C. (1990). *Psicología de la instrucción*. Madrid: Santillana.

Gil-Carnicero, P., & Sánchez-Carretero, N. (1996). Factores que inciden en la dinámica de la interacción adulto-bebé en situación de solución de tareas: un diseño longitudinal. *Infancia y Aprendizaje, 75*, 21-40.

Gómez, J.C. (1990). The emergence of intentional communication as a problem-solving strategy in the gorilla. In S.T. Parker & K.R. Gibson (Eds.), *"Language" and intelligence in monkeys and apes: Comparative developmental perspectives* (pp. 333-355). New York: Cambridge University Press.

Goñi, A. (1989). La conceptualización de la vida social escolar. *Infancia y Aprendizaje, 47*, 101-116.

González-Pienda, J.A., Núñez Pérez, J.C., & Valle Arias, A (1992). Proceso de comparación externa/interna, autoconcepto y rendimiento académico. *Revista de Psicología General y Aplicada, 54*, 73-81.

Hernández, P., Aciego de Mendoza, R., & Domínguez, R. (1997). Perfil de los escolares que más se benefician de un programa de educación en valores. *Infancia y Aprendizaje, 78*, 107-117.

Huguet, A. (1995). Evaluación del conocimiento lingüístico de los escolares de la franja oriental de Aragón: incidencia de algunos factores. *Revista de Educación, 308*, 217-239.

Igoa, J.M. (this issue). The decade 1989-1998 in Spanish psychology: An analysis of research on basic psychological proceses, history of psychology, and other related topics.

Jiménez, J.E. (1997). A reading-level design study of phonemic processes underlying reading disabilities in a transparent orthography. *Reading & Writing: An Interdisciplinary Journal, 9*, 23-40.

Jiménez, J.E., & Haro, C. (1995). Effects of word linguistic properties on phonological awareness in Spanish children. *Journal of Educational Psychology, 87*, 193-201.

Jiménez, J.E., & Rodrigo, M. (1994). Is it true that the differences in reading performance between students with and without LD cannot be explained by IQ? *Journal of Learning Disabilities, 27*,155-163.

Juncos-Rabadán, O. (1992). The processing of negative sentences in fluent aphasics: Semantic and pragmatic aspects. *Brain and Language, 43*, 96-106.

Juncos-Rabadán, O., & Iglesias, F. (1994). Decline in the elderly language: Evidence from crosslinguistic data. *Journal of Neurolinguistics , 8*, 183-190.

Justicia, F., Santiago J., Palma, A., Huertas, D., & Gutiérrez, N. (1996). La frecuencia silábica del español escrito por niños: estudio estadístico. *Cognitiva, 8*, 131-168.

Lacasa, P., Martín, B., & Herranz, P. (1995). Autorregulación y relaciones entre iguales en tareas de construcción: un análisis de las situaciones de interacción. *Infancia y Aprendizaje, 72*, 71-94.

Lacasa, P., Pardo, P., Herranz, P., & Martín, B. (1995). Texto y contexto social: aprendiendo a planificar en un taller de escritura. *Infancia y Aprendizaje, 69-70*, 157-182.

Lafuente, M.J. (1994). El desplazamiento escalonado de los componentes del apego desde las figuras parentales a los iguales a lo largo de la vida. *Revista de Psicología de la Educación, 15*, 5-21

Lalueza, J.L., & Perinat, A. (1994). Desarrollo de los significados compartidos en el juego entre adultos y niños con síndrome de Down. *Infancia y Aprendizaje, 67-68*, 133-146.

Linaza, J.L. (Ed.). (1984). *Acción, pensamiento y lenguaje*. Madrid: Alianza Editorial.

López, F., Carpintero, E., & Hernández, A. (1995). Prevalence and consequences of child sexual abuse in Spain. *Child Abuse and Neglect,19*, 1039-1050.

Luque, A. (1998). Orientación y asesoramiento psicopedagógico en centros de Educación Secundaria. El estado de la cuestión. *Papeles del Psicólogo, 71*, 15-26.

Marchesi, A., Carretero, M., & Palacios, J. (Eds.). (1983). *Psicología evolutiva*. Madrid: Alianza Editorial.

Marchesi, A., Coll, C., & Palacios, J. (Comp.). (1990). *Desarrollo psicológico y educación, III. Necesidades educativas especiales y aprendizaje escolar.* Madrid: Alianza Editorial.

Martí, E. (1996). El constructivismo y sus sombras. *Anuario de Psicología, 68*, 3-10.

Medrano, C., & Cava, M.A., de la (1994). A model of intervention for improving moral reasoning: An experiment in the Basque Country. *Journal of Moral Education, 23*, 427-439.

Miranda, A., & Presentación, M.J. (2000). Efectos de un tratamiento cognitivo-conductual en niños con trastornos por déficit de atención con hiperactividad, agresivos y no agresivos. Cambio clínicamente significativo. *Infancia y Aprendizaje, 92*, 51-70.

Miranda, A., Vidal-Abarca, E., & Villaescusa, I. (1997). Is attributtion retraining necessary? Use of self-regulation procedures for enhancing the reading comprehension strategies of children with learning disabilities. *Journal of Learning Disabilities, 30*, 503-512.

National Joint Commitee on Learning Disabilities (1998). Operationalizing the NJCLD definition of learning disabilities for ongoing assessment in schools. *Learning Disability Quarterly, 21*, 186-193.

Núñez Pérez, J.C., González-Pienda, J.A., García Rodríguez, S., González-Pumariega, S., Roces Montero, C., Álvarez Pérez, L., & González Torres, M. (1998). Estrategias de aprendizaje, autoconcepto y rendimiento académico. *Psicothema, 10*, 97-109.

Orrantia, J., Morán, M.C., & Gracia, A.D. (1998). Evaluación estática versus evaluación dinámica. Una comparación experimental. *Estudios de Psicología, 61*, 35-50.

Ortega, R. (1991). Un marco conceptual para la interpretación psicológica del juego infantil. *Infancia y Aprendizaje, 55*, 87-102.

Ortega, R. (1997). El proyecto Sevilla anti-violencia escolar. Un modelo de intervención preventiva contra los malos tratos entre iguales. *Revista de Educación, 313*, 143-158.

Ortiz, M.J. (1993). Fear, attachment and affiliation: The interaction of functional systems in 8-and 12- month-old infants. Early Development and Parenting, 2, 121-130.

Palacios, J. (1989). Contextos de crianza y educación de los niños españoles menores de seis años. IEA Preliminary Project. *Infancia y Aprendizaje, 46*, 83-116.

Palacios, J., Lera, M.J., & Moreno, M.C. (1994). Evaluación de los contextos familiares y extrafamiliares en los años preescolares: escalas HOME y ECERS. *Infancia y Aprendizaje, 66*, 71-88.

Palacios, J., Marchesi, A., & Coll, C. (Comp.). (1990). *Desarrollo psicológico y educación, 1*. Psicología Evolutiva. Madrid: Alianza Editorial.

Páramo, M.F., Dosil, A., & Tinajero, C. (1991). An approach to family antecedents of field dependent-independent cognitive style based on Lautrey's model. *Cahiers de Psychologie Cognitive/Current Psychology of Cognition,11*, 605-618.

Peralbo, M., Méndez, C., & Vázquez, R. (1990). Las claves contextuales y la edad en la generalización de lo aprendido por observación. *Revista de Psicología General y Aplicada, 43*, 207-215.

Pérez Pereira, M. (1991). The acquisition of gender: What Spanish children tell us. *Journal of Child Language, 18*, 571-590.

Pérez Pereira, M., & Castro, J. (1997). Language acquisition and the compensation of visual deficit: New comparative data on a controversial topic. *British Journal of Developmental Psychology, 15*, 439-459.

Perinat, A., & Sadurní, M. (1999). The ontogenesis of meaning. An interactional approach. *Mind, Culture and Activity, 6*, 33-52.

Prieto, M.D. (1991). A study of instrumental enrichment as a tool for improving language proficiency. *Teaching Thinking and Problem Solving, 13*, 9-16.

Prieto, M.D., Castejón, M.D., & Bermejo, M.R. (1999). Identification and analysis of differential caracteristics among able pupils. *Educating Able Children, 3*, 25-32.

Prieto, M.D., Rodríguez, A., & Bermejo, M.R. (1991). Diseño e investigación de un programa de habilidades, procesos y estrategias de aprendizaje en una muestra de sujetos con necesidades educativas especiales. *Anuario Español e Iberoamericano de Investigación en Educación Especial, 2*, 130-162.

Río, P. del, & Álvarez, A. (1995). Directivity: The cultural and educational construction of morality and agency. Some questions arising from the legacy of L.S.Vygotsky. *Anthropology & Education Quarterly , 26*, 384-409.

Rivas, F. (1997). *El proceso de enseñanza/aprendizaje en la situación educativa*. Barcelona: Ariel.

Rodrigo, M.J., & Triana, B. (1996). Parental beliefs about child development and parental inferences about actions during child-rearing episodes. *European Journal of Psychology and Education, 11*, 55-78.

Rodrigo, M.J., Vega, M. de, & Castañeda, J. (1992). Updating mental models in predictive reasoning. *European Journal of Cognitive Psychology, 4*, 141-157.

Román, J.M., & Gallego, S. (1994). *ACRA: Escalas de Estrategias de Aprendizaje*. Madrid: TEA.

Rubio Herrera, R. (1992). *Psicología del desarrollo*. Madrid: CCS.

Sánchez, E. (1990). Estructuras textuales y procesos de comprensión: Un programa para instruir en la comprensión de los textos. *Estudios de Psicología, 41*, 21-40.

Sánchez, E., Rosales, J.M., Cañedo, I., & Conde, P. (1994). El discurso expositivo: una comparación entre profesores expertos y principiantes. *Infancia y Aprendizaje, 67-68*, 51-74.

Sánchez, E., & Rueda, M.I. (1991). Segmental awareness and dyslexia: Is it possible learn to segment well and yet read and write poorly? *Reading and Writing, 3*, 11-18.

Santamaría, C., García-Madruga, J.A., & Johnson-Laird, P.N. (1998). Reasoning from múltiple conditionals: The interaction between content and structure. *Thinking and Reasoning, 4*, 97-122.

Shum, G. Conde, A., & Díaz, C. (1989). ¿Cómo se adquieren y usan los términos deícticos en lengua española? Un estudio longitudinal. *Infancia y Aprendizaje, 48*, 45-64

Simón, C., Ochaíta, E., & Huertas, J.A. (1996). Los procesos de reconocimiento de palabra en la lectura táctil del Braille. *Infancia y Aprendizaje, 76*, 49-58.

Solé, I., & Colomina, R. (1997). La concepción constructivista y el asesoramiento en centros. *Infancia y Aprendizaje, 77*, 77-95

Soro, E., & Basil, C. (1993). Estrategias para facilitar las iniciativas de interacción en hablantes asistidos. *Infancia y Aprendizaje, 64*, 29-48.

Teberosky, A., & Tolchinsky, L. (1992). Más allá de la alfabetización. *Infancia y Aprendizaje, 58*, 5-13.

Tinajero, C., & Páramo, M.F. (1998). Field dependence-independence cognitive style and academic achievement: A review of research and theory. *European Journal of Psychology of Education, 13,* 227-251.

Trianes, T.M.V., Rivas, M.T., & Muñoz, S.A. (1991). Eficacia diferencial de una intervención psicoeducativa sobre las habilidades sociales en niños preescolares inhibidos e impulsivos. *Análisis y Modificación de Conducta, 17,* 895-916.

van Dijk, T.A., & Kintsch, W. (1983). *Strategies of discourse comprehension.* New York: Academic Press.

Vega Vega, J.L. (Ed.) (1987). *Psicología evolutiva.* Madrid: UNED.

Vega Vega, J.L., & Bueno Martínez, B. (1995). *Desarrollo adulto y envejecimiento.* Madrid: Síntesis.

Velasco, J., & García-Madruga, J.A. (1997). El desarrollo de los procesos metalógicos y el razonamiento lógico. *Cognitiva, 9,* 139-158.

Vidal-Abarca, E., Gilabert, R. (1995). Teaching strategies to create visual representations of key ideas in content area text materials: A long-term intervention inserted in school curriculum. *European Journal of Psychology of Education, 10,* 433-447.

Vidal-Abarca, E., Sanjosé, V., & Solaz, J.J. (1994). Efectos de las estrategias de estudio, el conocimiento previo y los cambios textuales en el recuerdo, la comprensión y el aprendizaje de textos científicos. *Infancia y Aprendizaje, 67-68,* 75-90.

Vila, I., & Bassedas, M. (1994). Actividades en el contexto familiar y percepción de las capacidades infantiles. *Infancia y Aprendizaje, 66,* 59-70.

Vila, I., & Zanón, J. (1992). Action et communication: Le format "donner-prendre" et la demande. *Bulletin de Psychologie, 45,* 36-41.

Vila, I., Valle, A. del, Perera, P., Monreal, P., & Barrett, M. (1998). Autocategorización, identidad nacional y contexto lingüístico. *Estudios de Psicología, 60,* 3-14.