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Profesión

In the last few issues of *Papeles del Psicólogo* we mentioned how appropriate it would be to make some changes to the running and the content of the journal, at a time when the Spanish Psychological Association reaches the respectable age of 25.

As we have stressed, we consider that the profession continues to need an organ for disseminating advances in Psychology in the applied context, whose content bears the hallmark of relevance and immediacy for professionals, and which at the same time displays the scientific rigour demanded of a science characterized by its critical perspective on reality and its foundation in empirical data.

We have also argued that, while basic research is essential for a science to make progress, it is equally necessary to be able to translate scientific findings into concrete professional solutions; and that *Papeles del Psicólogo* should fulfil the dual objective of maintaining the highest methodological quality and theoretical foundation in the issues dealt with and of contributing technical developments and practical applications to meet the needs of professionals. It must be, if it is to provide a service to the profession and to society, a journal of applied research, open to all the areas of Psychology, which offers solutions, discussion, experience, guidelines, instruments and methods relevant to the problems and issues professionals encounter in their everyday practice.

The aims are ambitious, and even if the resources available are not ideal, we should not be deterred from trying; and if we are to achieve our goals, the initiative and collaboration of all is required. The achievement of our aims seems all the more possible when we observe the social recognition attained by Spanish Psychology professionals and the respect we have earned in the international context – the fruits of a decisive commitment to improvement, to high standards and to progress in all the applied fields of our discipline.

In turn, *Papeles del Psicólogo* states its commitment to renew its vocation as a medium of communication for all members of the Psychology fraternity in Spain, as a channel of ongoing education that contributes to the acquisition of the knowledge and practical competence necessary for meeting the new demands of the profession. We thus invite all our colleagues with something to contribute toward these goals to participate in this noble undertaking.



IS PSYCHOLOGY A HEALTH PROFESSION?*

Gualberto Buela-Casal

University of Granada

The question of whether or not Psychology is a health profession has undoubtedly been the most debated and discussed issue over the last two years among psychologists and psychology students in Spain. As is well known, this whole debate began with the publication of the *Ley de Ordenación de las Profesiones Sanitarias (LOPS; Law for the Organization of the Health Professions)*; since then, debate over the matter has become more and more heated. Given the confluence of so many aspects, this is quite possibly the greatest conflict to erupt in the history of Psychology in Spain, a conflict that has left no sector of the discipline indifferent. There are, then, many different groups involved in the debate. On the one hand are Psychology professionals and the representatives of professional associations and scientific societies, whose involvement is reflected in the special issue of the journal *Infocop* entitled *Los psicólogos somos profesionales sanitarios* ("We psychologists are health professionals"), from 2004 (<http://www.cop.es/extrainfocop>). On the other hand are the Psychology students' organizations, which constitute an important and active element in the process of change. On the academic side, the Conference of Psychology has included the issue as a constant item of debate in its latest meetings. But moreover, this matter has come to a head just at the time when the European Union is in the process of creating a European Higher Education Area – which obviously also affects Psychology here in Spain, but in a different way from that of other countries, given the important links between our discipline and Latin-American Psychology (see, for example, the recent issue of the *Revista Mexicana de Psicología* devoted to the assessment and accreditation of the quality of Psychology programmes in Ibero-America: <http://www.psicologia.org.mx>). And as though this were not enough, Spain's Universities Coordinating Council has just officially begun the process for the creation of

the MSc in Psychology, which ties in with the Royal Decree regulating postgraduate studies. Thus, the matter is no longer restricted to the issue of whether or not Psychology is a health profession; rather, the result of the current context of multiple reforms is a wide-ranging discussion, given that the academic and professional conception of Psychology will greatly influence the design of new study courses. Hence, the enormous relevance of the recent special issue of the journal *Análisis y Modificación de Conducta* (Analysis and Modification of Behaviour), on the topic: *¿Qué debe saber un psicólogo y qué debe saber un profesor de Psicología?* ("What should a psychologist know, and what should a Psychology teacher know?"), which makes some extremely important points, and should be "required reading" at least for those charged with the crucial task of designing the curriculum for the Psychology MSc.

The publication of the three special issues mentioned (*Infocop*, *Revista Mexicana de Psicología*, *Análisis y Modificación de Conducta*) is a clear indication of the involvement of Psychology professionals and teachers in Spain in the extensive changes taking place. However, there is obviously an element of the human bias of seeing the problem in terms of the way one is affected by it; thus, while students are especially preoccupied about their career opportunities, professionals are most interested in their status; at the same time, the primary concern of academics is whether their discipline is to be considered within the field of social and forensic sciences or that of experimental and health sciences. Moreover, there is another group, more or less well informed, that is also observing these debates with great interest – indeed, possibly the most important group –, namely the clients of Psychology, who are keen to obtain a clear idea of the kind of service that will be available, and whether or not it will be considered within the ambit of the healthcare professions.

The present special issue emerged as a consequence of the article *La Psicología: ¿una profesión sanitaria con distintas especialidades?* (Psychology: a health profes-

* The studies corresponding to the first four articles were financed through a research agreement between the Spanish Psychological Association and the University of Granada.

sion with different specialities? (<http://www.cop.es/extrainfocop/12.pdf>), which was debated at a round table organized by the Psychology students' association at the University of Granada, with the participation of Francisco Santolaya, Mariano Vera, Jesús Gil Roales-Nieto and Gualberto Buena-Casal, since one of the clearest conclusions to come out of that session was the need to discover the opinions (on the consideration of Psychology as a health profession) of the different groups involved in a more systematic way. With this aim, the University of Granada and the Spanish Psychological Association signed a research agreement that allowed the financing and implementation of the four opinion polls presented in this issue. The objective of this research, then, is to explore opinions about the image of Psychology as a health discipline and/or profession among all those sectors of the Spanish population implicated or affected in one way or another by whether or not Psychology is considered within the area of health.

Although this study may appear to constitute nothing more than an opinion poll, it does entail some degree of difficulty, not with regard to technical aspects, but in view of its scope – some six thousand opinions of people from four different sectors to be recorded and processed – and an urgency that meant implementing the entire project in record time. In order to maintain 100 percent control over the data, the research team designed a data-collection system which guaranteed that each person could respond only once to the survey, that responses were anonymous, and that respondents were unaware of the identity of the study's authors. Apart from the psychometric guarantees of the instrument analyzed for each one of the samples, as described in the articles, it can also in some way be said to present apparent validity, since the fact that the study has six thousand respondents, the majority with knowledge of the quality of the assessment instruments, is certainly an indicator of this type of validity.

The four studies that make up this study were carried out with nationwide samples, and in the order they appear in this special issue. First of all we applied a survey to a sample of 593 university teachers of Psychology and of Medicine, analyzing whether opinion differed in accordance with field of knowledge or teaching department; the aim of this study was to discover the academic opinion on the issue. Secondly, we carried out a study

with a sample of 1206 professional psychologists from the different regional official Psychology associations in Spain; the purpose of this second project was to record the opinions of those who exercise the profession. The third study consisted in a survey of 1571 final-year undergraduates from fourteen Psychology faculties in Spain, whose purpose was to reveal how future Spanish psychologists view the discipline. Finally, though no less importantly, we needed to know about the image of Psychology in the eyes of those who use it, and to this end we polled the opinion of 1562 people from the different provinces of Spain.

This special issue also includes two articles from the research teams led by Professors Larry Beutler (*University of Stanford*) and Stephen Haynes (*University of Hawaii*), which, though not dealing specifically with the issue in question, are most certainly complementary, since they contribute a view from beyond our frontiers on aspects related to the object of our study.

Like all studies, to a greater or lesser degree, the present one has its limitations, though these are due mainly to the need to accomplish our task in record time and at a juncture in which information on the issue was springing up in abundance from all quarters, and undoubtedly influencing what people thought about it. It would admittedly have been more correct to carry out this study at a time when Spanish Psychology were more settled, rather than when, as now, it were at the centre of fierce academic and professional debate, but the pressing need for such research outweighed these considerations. The articles are written in as descriptive a manner as possible; we have tried to avoid giving our personal opinion on the issue, and therefore, the discussions are basically a synthesized description of the results. The authors' intention is to present the information as neutrally as possible so that readers can draw their own conclusions.

Lastly, I should like to express my thanks to the Spanish Psychological Association and the Vice-Rectorate for Research at the University of Granada for the financial support, infrastructure and staff they have provided for the present work; to the members of my research team, especially the younger ones, who have had to make an additional effort without neglecting their research projects; and of course, to the six thousand questionnaire respondents, without whose collaboration the study would not have been possible.

THE IMAGE OF PSYCHOLOGY AS A HEALTH PROFESSION AMONG UNIVERSITY TEACHERS OF PSYCHOLOGY AND MEDICINE

Buela-Casal, G., Gil Roales-Nieto, J., Sierra, J.C., Bermúdez, M.P., Agudelo, D., Bretón-López, J. and Teva, I.

The aim of this study is to discover the opinion of university teachers in Psychology and Medicine about Psychology as a health profession. A total of 593 Psychology and Medicine teachers participated in the study. A questionnaire on Psychology as a health profession was designed and sent to the teachers by e-mail. Data were analyzed according to subject taught (Psychology or Medicine), academic area and teaching status. The results indicate a favourable opinion among Psychology and Medicine teachers about Clinical Psychology as a health profession. The data obtained are useful as an approximate indicator of opinion among Psychology and Medicine teachers about Psychology as a health profession.

El objetivo del presente estudio es conocer la imagen que tienen los profesores de Psicología y Medicina de la Psicología como disciplina sanitaria. Participaron un total de 593 profesores universitarios de Psicología y Medicina. Se les aplicó un cuestionario de opinión sobre la Psicología como profesión sanitaria elaborado por los investigadores que les fue facilitado a través de correo electrónico. Los datos se analizaron en función de la disciplina, área académica y categoría docente de los profesores. Los resultados indicaron que existe una opinión favorable de los profesores de Psicología y Medicina acerca de la Psicología Clínica como disciplina sanitaria. Los datos obtenidos son útiles como aproximación sobre la opinión de los profesores de Psicología y Medicina acerca de la Psicología como profesión sanitaria.

The exclusion of the Psychology degree (BSc) from the health sector as a result of the *Ley de Ordenación de las Profesiones Sanitarias* (LOPS; Law for the Organization of the Health Professions) has caused great controversy in Spain, and led practically all those representing Psychology as a discipline (from the official Psychological Associations to university students) to express their categorical opposition to the decision and to demand a rectification by the Government. This frontal opposition, and the actions carried out over the last few months, have led Spain's Health Ministry to consider some modifications to the Royal Decree on Clinics and Hospitals (*Real Decreto de Centros Sanitarios*), including the recognition, for the first time, of Psychology graduates as being within the field of health; nevertheless, the problem has by no means been solved.

The call for the recognition of Psychology as a health profession is far from new – indeed, and as Duro (2004)

points out, it can be considered to date from the 1970s, when it led to the creation of six positions for “resident psychologists on special programmes”. In the 1980s, Reig carried out a historical review of Psychology, demonstrating its collaboration with the health system through teaching, research and attention to patients (Reig, 1985), and clearly lending it credence as a health-related profession; a similar approach to the question is maintained in a recent work stressing the common objective of Medicine and Psychology that is human well-being (Reig-Ferrer, 2005). In this same line, Buela-Casal (2004) points to the connections between Psychology and Medicine at the origins of Spanish Psychology, and describes the relationship between Psychology and other health science disciplines dating back several decades in different health contexts, as well as the existence of interdisciplinary fields and, particularly, the emergence of Health Psychology and the incorporation of the psychologist in the hospital environment. Likewise, Carpintero (2004) lists a series of reasons why Psychology should be categorized as a health profession: it promotes well-be-

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ing and quality of life; the psychologist's training is oriented to the promotion of these using rigorous methodology; all psychological intervention involves interrelation with the client; and finally, in all their activity, psychologists attempt to promote health in accordance with the World Health Organization criteria. Recently, the Conference of Psychology Deans here in Spain has aligned itself with such positions, adducing several reasons to justify the classification of Psychology as a health profession, including its provision of health-related services and psychologists' academic training in health. As Santolaya Ochando and Berdullas Temes (2003) argue, few professionals have contributed so much to the solution of problems in the social, health and educational contexts as psychologists. In sum, psychologists are professionals sufficiently well qualified to deal with health-related behavioural problems and increase people's well-being (Berdullas Temes, Jiménez Tornero & Vallejo Parejo, 2005; Santolaya Ochando, 2005). Such analyses have led to the current broad consensus, among both academics and professionals, that situates Psychology within the Health Sciences, rather than within the Social and forensic Sciences; indeed, a specialized field within the discipline (Clinical Psychology) is already classified as part of the health context. Nevertheless, Buela-Casal (2004) goes further in advocating the same goal for other psychological disciplines, drawing parallels between different medical and psychological fields that suggest the logic of considering Psychology as a health discipline.

One way of assessing the current situation of a discipline is to run opinion polls on the attitudes to it and the image held of it among different sectors of the population. Such studies acquire special relevance in times of transition, such as those that Spanish Psychology is currently experiencing. In recent decades, numerous studies have been carried out in various countries on the image people hold of Psychology, many of them using samples from the general population, in Argentina (Sans de Uhlandt, Rovella & Barbenza, 1997), Australia (Hartwig & Delin, 2003), Austria (Friedlmayer & Rössler, 1995), the United States (Faberman, 1997; Janda, England, Lobejoy & Drury, 1998; Nevas & Farber, 2001; Rose, 2003; Schindler, Berren, Mo, Beigel & Santiago, 1987; Wood, Jones & Benjamin, 1986), Finland (Montin, 1995), Israel

(Raviv, Raviv, Propper & Schachter Fink, 2003; Raviv & Weiner, 1995), Norway (Christiansen, 1986), South Africa (Stones, 1996) and Spain (Berenguer & Quintanilla, 1994; Hidalgo, De Nicolás & Yllá, 1991; Seiseded, 1983; Yllá & Hidalgo, 2003), among others. Many of these studies focus their attention on the clinical dimension of Psychology, comparing it with other health sciences (Dollinger & Thelen, 1978; Hidalgo et al., 1991; Janda et al., 1998; Murray, 1962; Nunnally & Kittross, 1958; Small & Gault, 1975; Tallent & Reiss, 1959; Thumin & Zebelman, 1962; Webb, 1985; Wood et al., 1986). A type of sample often employed in assessing attitudes towards Psychology is that constituted by Psychology students (Alvarez-Castro, Buela-Casal & Sierra, 1994; Freixa i Baqué, 1984, 1985; García, Pérez, Gutiérrez, Gómez & Bohórquez, 2004; Oliver, Bernstein, Anderson, Blashfield & Roberts, 2004; Sans de Uhlandt et al., 1997; Sierra, Alvarez-Castro & Buela-Casal, 1994; Sierra & Freixa, 1993; Sierra, PalHegedüs, Alvarez-Castro & Freixa i Baqué, 1995; Turner & Quinn, 1999).

Other studies have concentrated on the image of Psychology among psychologists and doctors. Some of these have concluded that psychologists' own image of their profession is not particularly positive; Harnett, Simonetta and Mahoney (1989), for example, analyzing non-clinical psychologists' perception of their clinical counterparts, found the formers' image of the latter to be only moderately positive, since they claimed they would only seek professional help from 25% of the clinical psychologists they knew, while as many as 35% were undecided about or clearly unconvinced of the effectiveness of psychotherapy. In a meta-analysis of 60 studies of this type, Von Sidow and Reimer (1998) found, surprisingly, that psychologists believe their profession to be perceived by the general population more negatively than it actually is. In Spain, Sanz (2002), presented data indicating an increase in Health Psychology research and in the assessment of the efficacy of interventions, which reflects the progress of Clinical and Health Psychology that has taken place in this country in recent years. Furthermore, in a survey carried out among teachers from the Psychology Faculty at the University of Seville, they were found to consider Psychology as the Science of Behaviour, with behavioural theories once more the most well accepted



(García et al., 2004). This same tendency is discerned in the study by Santolaya Ochoa, Berdullas Temes and Fernández Hermida (2002), which analyzed the professional situation of Spanish psychologists based on a survey among 6765 members of the official psychologists' associations. The results indicated that the commonest specialization of those surveyed is Clinical Psychology, and that their theoretical orientation is predominantly behavioural; moreover, the study found that although most clinical work takes place in the private sector, its presence in the public sector has grown and become consolidated in recent years. Del Río Sánchez, Borda Más and Torres Pérez (2003), in a poll among final-year undergraduates and recent graduates in Psychology, who were asked to rate the ethics of certain behaviours in therapists, found these young people to have serious difficulties in making these ratings about some behaviours, which may in turn hinder decision-making on ethical issues. This, according to the authors, suggests the need for a reform of the Deontological Code.

In recent years Psychology has tightened its relationship with Medicine and the health field, collaborations between doctors and psychologists becoming common in a range of contexts. Thus, even in the 1980s, some 8-10% of members of the *American Psychological Association* exercised their profession in medical contexts (DeLeon, Pallak & Heffernan, 1982; Dörken, Webb & Zaro, 1982), a percentage that will certainly have increased since then. It can, indeed, be assumed that the more developed the health system, the greater the importance of the clinical psychologist's role (Laviana Cuetos, 1998).

Despite a dearth of studies analyzing the attitudes and beliefs of doctors about psychologists, in the majority of those that have been conducted, Psychology is perceived as positive and enriching. For example, Meyer, Fink and Carey (1988), in a survey of 500 GPs from rural areas in the American Midwest on their attitudes to psychological intervention in medical contexts, found in general that respondents saw Psychology as useful and necessary, despite expressing concern over psychologists' level of training in such activity. Kelly (1999), on reporting that GPs perceive psychological attention provided in health contexts in a favourable way, concluded that under-use of psychological services in medical contexts depended not on doctors' perceptions but on the value of the psy-

chological services themselves. Wayne (2000), on the other hand, found doctor's attitudes and beliefs to suggest they were in favour of collaboration with psychologists, but that the favourability of their disposition depended on the quality of their experiences of collaboration and on their contact with psychological theories during their training.

In Spain, there are only a few studies that have analyzed the attitudes of the medical and related professions towards Psychology (e.g., Cabrero García, Richart Martínez & Sancho García, 1988; Perales Blasco, Lorente Raigal, Jiménez Ortiz & Cuenca Hervás, 1994). Some of these argue that there is a need for the degree in Medicine to include courses in human sciences and medical Psychology (Soria Ruiz, 2001), and point out that doctors have demanded psychological content in university medical courses (assessment of the need to refer patients to a psychiatrist, emotional aspects of chronic or terminal patients, risk of suicide, etc.) (González-Pinto Arrillaga & Guimón Ugartechea, 2004), suggesting a positive attitude towards Psychology among the medical profession. Recently, Virués-Ortega (2004) analyzed collaboration between clinical psychologists and psychiatrists in mental health services in Spain, concluding that, although the work of psychologists is well considered in general, *it is usually treated as subsidiary to that of the psychiatrist*, and that when a distinction is made in attention to patients, psychotic disorders are associated with the psychiatrist, and anxiety, affective and adaptive disorders with the psychologist.

At such a significant time as the present one, in which the status of Psychology as a health profession is being fervently debated and discussed, it is crucial to know how the issue is viewed by both the psychologists and the doctors whose mission it is to educate and train, at university level, future members of their respective professions. The aim of the present study is to explore the image held by teachers of Psychology and Medicine about Psychology as a discipline with scope for professional health activity, regardless of other professional profiles.

METHOD

Participants

The sample was made up of 593 university teachers, of



whom 489 were teachers of Psychology (51.9% men and 48.1% women; mean age 43.55 years, standard deviation 8.96) and 104 lectured in Medicine (67.3% men and 32.7% women; mean age 50 years, standard deviation 7.53).

Instruments

- Opinion Questionnaire on Psychology as a Health Profession (*Cuestionario de Opinión sobre la Psicología como Profesión Sanitaria, COPPS*). This opinion questionnaire was designed by the authors of the present study for assessing the image of Psychology as a health profession and the estimated degree of affinity between different Psychology specializations and Medicine. It was made up of two subscales. The first of these included 15 items referring to matters of the proximity between Medicine and Psychology and the role of the latter as a health profession. This subscale offers three response options (yes, no, don't know), drawn up so that the higher the score, the more favourable the opinion about Psychology as a health profession. The second subscale, composed of 14 items, is designed to rate the degree of affinity between pairs of medical and psychological specializations. Response format is a scale with five alternatives, and the higher the score, the greater the perceived affinity. Test-retest reliability was calculated for a total of 230 teachers who responded a second time to the questionnaire one month later, and found to be 0.49 ($p < 0.001$) for the first subscale and 0.45 ($p < 0.001$) for the second. Moreover, a linear correlation between the items of the first and second application of the instrument (test-retest) revealed that for almost all the items the correlation was significant at a level of $p < 0.001$. As regards the internal consistency of the instrument, the values of α for the first subscale were 0.68 and 0.66 for pretest and post-test, respectively. For the second subscale, α values of 0.93 and 0.94 were obtained for pretest and post-test, respectively. The linear correlation coefficients obtained in the test-retest can be considered adequate if we bear in mind that this is an instrument with few items and with few response options, and that, moreover, the study was carried out at a time when a range of activities (demonstrations, debates,

publications, etc.) related to the issue of Psychology as a health profession were taking place, which may well have influenced changes in the opinions of some respondents (Bretón-López, et al., 2005).

Factor analysis indicated an adequate structure of the questionnaire's scales. Specifically, 3 factors emerged for the first subscale, the first factor including the items with content related to Psychology in general, the second the items related to Clinical Psychology, and the third the items with health content. In the case of the second subscale, which assessed the affinity between psychological and medical disciplines, there emerged a single factor in which all the items saturated. These results demonstrate a satisfactory factor structure in line with the assessment objectives for which the scales were created (Bretón-López et al., 2005).

We used a computer program in *Visual Basic* which, by means of a website, gave access to the questionnaire through a link from an e-mail message. The program allows the responses to be stored in an SQL database. Automatic recording of the responses reduces to zero the possibility of errors in the computation of data.

Design

This is a study of populations by means of questionnaires according to the classification proposed by Montero and León (2005). In writing the article we have followed, as closely as possible, the norms drawn up by Ramos-Álvarez and Catena (2004).

Procedure

The procedure consisted of the following phases:

- Search for approximately 2000 e-mail addresses of university teachers of Medicine and 2000 addresses of university teachers of Psychology. This search was made via the websites of the Psychology and Medicine departments at Spanish universities offering these subjects. Totals of 1887 and 2142 e-mail addresses of Medicine and Psychology teachers, respectively, were eventually obtained.
- Drawing-up of a questionnaire for obtaining the opinion of Spanish university teachers of Psychology and Medicine on Psychology as a health profession and

their ratings of the affinity between pairs of disciplines from the two fields. The questionnaire also requested information on whether the respondent was a teacher and a doctor, teacher and psychologist, research assistant, or other. The purpose of this section was to discard the questionnaires from non-teachers who had responded, given the difficulty in some cases of distinguishing whether the e-mail addresses belonged to teachers or not. Data was also collected on respondents' age, sex, professional status, university and field of specialization.

- E-mail message to the 4029 addresses requesting collaboration with the study. Access to the questionnaire was made by means of a link directly from the message. Once the questionnaire had been filled out and returned, the responses were stored in an SQL database, and the respondent no longer had access to the questionnaire, so as to avoid the same person responding twice or changing their original answers. Immediately after the completed questionnaire had been returned, respondents received a message of thanks for their collaboration, in which they were also told whether their data had been successfully processed or not. If those to whom the initial message

was sent did not respond within 15 days, they were sent a reminder via e-mail with a new link to the questionnaire.

- Data collection for the test-retest reliability analysis of the questionnaire. One month after the first message has been sent, those who had answered within two weeks were asked to fill out the questionnaire a second time, so that an analysis of test-retest reliability could be carried out. This analysis was made with a total of 230 teachers.
- Analysis of the responses from teachers who answered the questionnaire.

RESULTS

Here we present the results and their analysis for the teachers of Psychology and Medicine who responded with their opinions about Psychology as a health profession.

For the sake of clarity, we have divided up the data for the first and second parts of the questionnaire, and in accordance with three categories: the opinions of Medicine and Psychology teachers, the opinions of Psychology teachers by academic area or field, and the opinions of Medicine and Psychology teachers by teaching status.

TABLE 1
PERCENTAGES* OF FAVOURABLE AND UNFAVOURABLE RESPONSES FROM TEACHERS OF PSYCHOLOGY AND MEDICINE TOWARDS PSYCHOLOGY AS A HEALTH PROFESSION

Item	Teachers of Psychology (%)		Teachers of Medicine (%)	
	YES	NO	YES	NO
1. Psychologists can help to prevent health problems	99.2	0.2	90.4	5.8
2. Psychology and Medicine are sciences that belong to the same field of knowledge	31.3	62.0	38.5	51.9
3. Clinical Psychology and Medicine are sciences that belong to the same field of knowledge	71.0	25.2	76.0	20.2
4. Any type of psychologist is qualified to diagnose mental problems	13.1	83.6	5.8	81.7
5. Clinical psychologists are qualified to diagnose mental problems	94.5	2.5	54.8	26.0
6. Psychology is closer to Medicine than to other fields of knowledge	44.8	46.8	64.4	24.0
7. Any type of psychologist is qualified to treat emotional and mental problems that affect health	17.2	78.9	3.8	85.6
8. Clinical psychologists are qualified to treat emotional and mental problems that affect health	95.5	2.7	62.5	22.1
9. Psychology can help to improve people's health	99.0	0.8	94.2	1.9
10. The work of the psychiatrist and the psychologist is very similar	36.0	58.7	19.2	73.1
11. The work of the psychiatrist and the clinical psychologist is very similar	69.6	25.9	32.3	54.8
12. Psychologists should form part of professional teams in hospitals	72.6	21.5	36.5	48.1
13. Clinical psychologists should form part of professional teams in hospitals	99.0	0.2	95.2	4.8
14. One of the central aspects of Psychology is to promote healthy behaviours	93.0	4.3	85.6	4.8
15. Psychologists are as qualified as psychiatrists for making expert assessment in the legal context	86.9	5.5	18.3	46.2

* The shortfall for 100% corresponds to the option DON'T KNOW.

These levels of analysis were considered relevant for assessing the difference between these two groups of professionals. Even so, in the case of academic area we included only the Psychology teachers, since the specializations of Medicine represented in the sample obtained do not cover the entire range available; nor would the number of teachers in each category be sufficient for making comparisons.

Teachers of Psychology and teachers of Medicine

With regard to the percentages of response to the first part of the questionnaire, Table 1 indicates that favourable opinion increases when items refer specifically to Clinical Psychology and not to Psychology, and to clinical psychologists rather than to psychologists in general, for both groups of teachers, though in the majority of items opinions are more favourable in the case of the Psychology teachers.

As regards the second part of the questionnaire, referring to perceived affinity between pairs of disciplines, Figure 1 shows how greater affinity is perceived by the Psychology teachers, though their opinions do not differ greatly from those of the Medicine teachers. It is noteworthy how for fields such as those of Public Health and Psychology of Health, Gerontology and Psychogerontology, Neurology and Psychoneurology and Immunology and Psychoneuroimmunology, the difference between the two groups is greater than that perceived, for example, between Medicine and Psychology, Psychiatry and Psychology, or Health Education and Education for Health, where perceived affinity is practically equivalent between the two groups of teachers.

Table 2 shows the total scores for both the first and second parts of the questionnaire. These were obtained by summing the scores given to each one of the items. It should be pointed out that for the case of the first subscale, and given that five items were clearly identified that emphasize the distinction between Psychology and Clinical Psychology (and this could lead to biases in the opinion), we obtained two total scores, one for these items and another for the remaining items. The results are analyzed indicating the difference in this characteristic.

The data presented in Table 2 reveal how the favourable opinion about Psychology as a health profes-

sion and the perceived affinity between pairs of disciplines are more pronounced among the Psychology teachers than among the Medicine teachers. However, it was not calculated whether the differences found in the total mean scores were significant, since the number of Medicine teachers was not considered comparable to the number of Psychology teachers.

Academic fields of Psychology

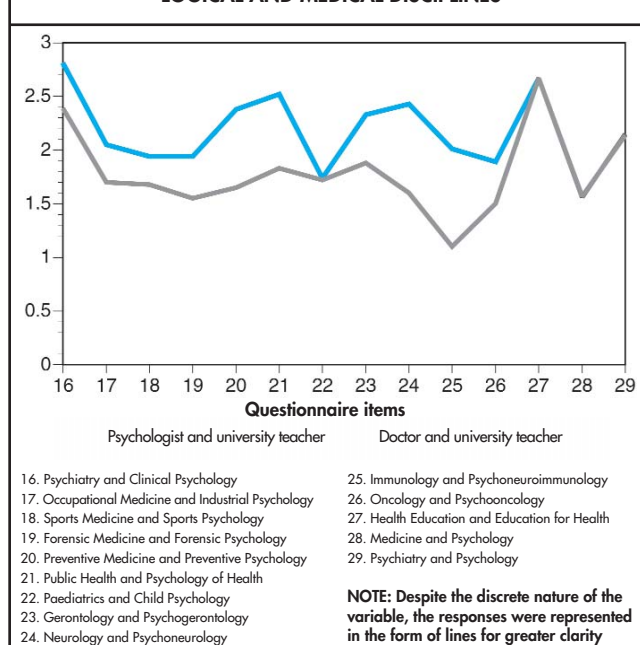
As far as the percentages of response to the first subscale

TABLE 2
TOTAL SCORES OF PSYCHOLOGY AND MEDICINE TEACHERS FOR THE OPINION QUESTIONNAIRE

Profession	First subscale, no clinical items		First subscale, only clinical items		Second subscale	
	Mean	SD	Mean	SD	Mean	SD
Psychology teachers	6.17	1.68	4.49	0.72	30.43	9.78
Medicine teachers	5.13	1.71	3.26	1.50	24.99	11.43

SD: Standard Deviation

FIGURE 1
COMPARISON OF MEANS OF RESPONSE FROM PSYCHOLOGY AND MEDICINE TEACHERS ABOUT AFFINITY BETWEEN PSYCHOLOGICAL AND MEDICAL DISCIPLINES



are concerned, it is important to point out that, as Table 3 shows, the opinion of the Psychology teachers, by academic field, is divided with regard to whether Psychology and Medicine belong to the same field of knowledge. However, the opinion becomes clearer and more consensual when the items distinguish between Psychology and Clinical Psychology, the latter case being that in which the percentages show greater perceived proximity between the tasks and competencies of the Psychologist and those of the Doctor-Psychiatrist.

Figure 2 shows the mean scores for the second subscale. As it can be seen, perceived affinity between the disciplines is fairly similar across the different specialized fields of the Psychology teachers.

Table 4 presents the total scores obtained by the Psy-

chology teachers for the first and second subscales, distinguishing in the former case between score on the “clinical” items and score on the rest of the items. It is important to note that for the first subscale of the questionnaire, positions favourable to Psychology as a health profession (YES) were assigned a value of 1, while unfavourable positions (NO) were assigned 0; the response option DON’T KNOW was not considered in the calculation of the mean scores, given the difficulty of interpreting its meaning in accordance with the intention of the scale, which indicates that the higher the score, the more favourable the opinion on Psychology as a health profession.

From the data it can be seen that for both the “clinical” items and the others, scores are higher for teachers from

TABLE 3
PERCENTAGES* OF FAVOURABLE AND UNFAVOURABLE RESPONSES FROM TEACHERS OF PSYCHOLOGY TOWARDS PSYCHOLOGY AS A HEALTH PROFESSION, BY ACADEMIC FIELD

Items	Clinical Psychology(%)		Psychonomics(%)		Methodology(%)		Social(%)		Psychobiology(%)		Developmental(%)	
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
1. Psychologists can help to prevent health problems	98.4	0.8	100	0	98.1	0	100	0	100	0	10	0
2. Psychology and Medicine are sciences that belong to the same field of knowledge	30.2	66.7	26.2	58.3	40.7	53.7	35.4	61.5	46.3	51.2	24.7	68.0
3. Clinical Psychology and Medicine are sciences that belong to the same field of knowledge	70.5	27.1	79.8	17.9	75.9	20.4	64.6	30.2	78.0	28.0	66.0	29.9
4. Any type of psychologist is qualified to diagnose mental problems	12.4	84.5	13.1	81.0	18.5	81.5	13.5	84.4	14.6	82.9	10.3	85.6
5. Clinical psychologists are qualified to diagnose mental problems	99.2	0	92.9	3.6	87.0	5.6	94.8	2.1	95.1	0	93.8	4.1
6. Psychology is closer to Medicine than to other fields of knowledge	52.7	43.4	41.7	47.6	51.9	35.2	35.4	60.4	56.1	39.0	36.1	49.5
7. Any type of psychologist is qualified to treat emotional and mental problems that affect health	12.4	84.5	25.0	66.7	20.4	74.1	19.8	77.1	17.1	78.0	12.4	85.6
8. Clinical psychologists are qualified to treat emotional and mental problems that affect health	98.4	1.6	90.5	6.0	92.6	1.9	94.8	2.1	100	0	95.9	4.1
9. Psychology can help to improve people’s health	99.2	0.8	98.8	0	96.3	3.7	100	0	100	0	99.0	1.00
10. The work of the psychiatrist and the psychologist is very similar	34.9	62.0	34.5	58.3	40.7	50.0	35.4	57.3	41.5	53.7	32.0	67.0
11. The work of the psychiatrist and the clinical psychologist is very similar	74.2	22.6	80.9	14.3	61.5	23.1	73.7	21.0	61.5	38.5	59.3	40.7
12. Psychologists should form part of professional teams in hospitals	63.6	31.8	77.4	19.0	66.7	22.2	80.2	14.6	82.9	9.8	73.2	19.6
13. Clinical psychologists should form part of professional teams in hospitals	99.2	0.8	98.8	0	100	0	97.9	0	100	0	99.0	0
14. One of the central aspects of Psychology is to promote healthy behaviours	93.8	5.4	88.1	4.8	87.0	5.6	93.8	5.2	87.8	7.3	96.9	2.1
15. Psychologists are as qualified as psychiatrists for making expert assessment in the legal context	87.6	8.5	88.1	2.4	81.5	5.6	83.3	4.2	95.1	2.4	84.5	10.3

Clinical Psychology: Personality, Assessment and Psychological Treatment; Psychonomics: Basic Psychological Processes; Methodology: Methodology for Behavioural Sciences; Social: Social Psychology; Developmental: Developmental and Educational Psychology.

* The shortfall for 100% corresponds to the option DON’T KNOW.

the fields of Methodology for Behavioural Sciences, and Psychobiology. In the second subscale, greater affinity between pairs of disciplines is perceived by teachers from the areas of Psychobiology, Developmental Psychology, and Personality, Assessment and Psychological Treatment. The differences were not found to be significant.

Teaching status

Table 5 presents the percentages of response to the items of the first subscale by teaching status, showing that, in general, the scores were quite similar across the groups.

As regards the level of affinity perceived between pairs of disciplines across the different teaching status categories, it is worthy of note that for the majority of items it is the university Professors who present the lowest mean scores, and who thus perceive the least affinity between the disciplines in question.

As far as total scores are concerned, for both the subscales, it can be seen from Table 6 that the score is lower for the university Professors than for the other groups, but slightly higher in the case of contract staff. The differences were not significant.

Below we discuss the principal results obtained and draw some conclusions.

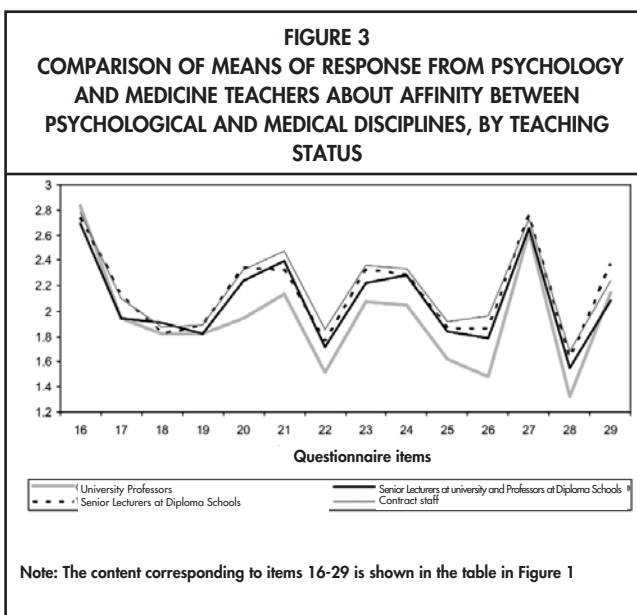
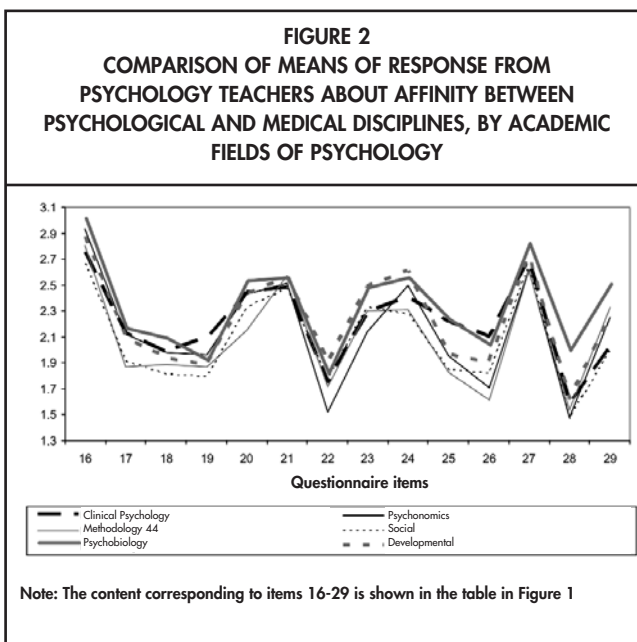
Professional Profile	First subscale, no clinical items		First subscale, only clinical items		Second subscale	
	Mean	SD	Mean	SD	Mean	SD
Clinical Psychology	5.94	1.69	4.52	0.63	30.93	8.68
Psychonomics	6.30	1.69	4.79	0.42	30.11	9.54
Methodology	6.67	2.00	4.40	0.70	29.41	10.17
Social	6.23	1.71	4.61	0.70	29.13	11.14
Psychobiology	6.55	1.58	4.23	0.73	32.49	10.72
Developmental	5.88	1.40	4.20	0.96	31.23	9.69
Value of F	1.88		1.94		1.02	

Clinical Psychology: Personality, Assessment and Psychological Treatment; Psychonomics: Basic Psychological Processes; Methodology: Methodology for Behavioural Sciences; Social: Social Psychology; Developmental: Developmental and Educational Psychology.

SD: Standard deviation. F: Statistic

CONCLUSIONS

In the review of previous work it was pointed out that research in Spain in the field of Clinical and Health Psychology has grown considerably in recent years, which also corresponds to the increased activity of professional psychologists in this area; this has undoubtedly led to closer links with medical professionals, and hence, greater mutual awareness and knowledge. This knowledge and doctors' opinion of psychologists have been the object of diverse studies which, in general, have re-



vealed opinions that can be considered positive.

The results obtained in the present study should be

viewed with considerable caution, given that the level of representativeness of the samples is different, and that the sample of Medicine teachers cannot be considered as representative either with regard to its size or its distribution by fields of knowledge – though the sample of Psychology teachers is indeed representative. Thus, the results in relation to doctors should be considered as no more than a tentative indication. With this caveat, it is nevertheless noteworthy – as shown by the tables – that the teachers of Medicine have a more favourable opinion than those of Psychology in relation to the question of whether Psychology and Medicine belong to the same field; this difference can be appreciated more clearly in the form of percentages (64.4% for the Medicine teachers, compared to 44.8% for those of Psychology). As regards the items referring to Clinical Psychology, both samples give much more favourable opinions about a

TABLE 6
TOTAL SCORES OF PSYCHOLOGY AND MEDICINE TEACHERS FOR THE OPINION QUESTIONNAIRE, BY TEACHING STATUS

Teaching status	First subscale, no clinical items		First subscale, only clinical items		Second subscale	
	Mean	SD	Mean	SD	Mean	SD
Univ. Professors	5.79	1.99	4.43	1.09	27.34	9.14
Senior Lecturer & Diploma School Profs.	6.03	1.32	3.91	0.94	29.14	10.40
Diploma School Profs.	6.02	1.76	4.25	0.97	30.11	10.60
Contract staff	6.21	1.61	4.31	1.04	30.53	10.75
Value of F	0.72		0.61		1.70	

SD: Standard deviation. F: Statistic.

TABLE 5
PERCENTAGES* OF FAVOURABLE AND UNFAVOURABLE RESPONSES FROM TEACHERS OF PSYCHOLOGY AND MEDICINE TOWARDS PSYCHOLOGY AS A HEALTH PROFESSION, BY TEACHING STATUS

Items	UP (%)		SL/PDS (%)		SLDS (%)		CS (%)	
	YES	NO	YES	NO	YES	NO	YES	NO
1. Psychologists can help to prevent health problems	95.4	4.6	96.8	1.5	100	0	98.4	1.1
2. Psychology and Medicine are sciences that belong to the same field of knowledge	29.2	67.7	30.4	61.1	36.8	57.9	36.4	56.5
3. Clinical Psychology and Medicine are sciences that belong to the same field of knowledge	75.4	21.5	69.9	24.2	71.1	28.9	75.5	22.8
4. Any type of psychologist is qualified to diagnose mental problems	13.8	75.4	12.1	82.9	10.5	86.8	9.2	85.9
5. Clinical psychologists are qualified to diagnose mental problems	80.0	12.3	87.6	5.9	84.2	10.5	88.6	6.5
6. Psychology is closer to Medicine than to other fields of knowledge	38.5	49.2	46.3	43.7	50.0	44.7	54.9	37.5
7. Any type of psychologist is qualified to treat emotional and mental problems that affect health	12.3	78.5	14.7	80.8	13.2	84.2	14.1	78.8
8. Clinical psychologists are qualified to treat emotional and mental problems that affect health	83.1	9.2	88.8	6.8	89.5	10.5	91.3	4.3
9. Psychology can help to improve people's health	95.4	1.5	98.2	0.9	100	0	98.4	1.6
10. The work of the psychiatrist and the psychologist is very similar	35.4	60.0	34.2	58.7	36.8	57.9	28.8	66.8
11. The work of the psychiatrist and the clinical psychologist is very similar	66.7	22.2	63.9	31.3	45.5	54.5	53.3	37.8
12. Psychologists should form part of professional teams in hospitals	52.3	35.4	65.5	27.1	68.4	23.7	70.7	20.7
13. Clinical psychologists should form part of professional teams in hospitals	100	0	97.3	1.5	100	0	98.9	1.1
14. One of the central aspects of Psychology is to promote healthy behaviours	90.8	6.2	91.7	3.8	94.7	0	90.8	5.4
15. Psychologists are as qualified as psychiatrists for making expert assessment in the legal context	66.2	18.5	75.2	11.5	73.7	21.1	71.7	11.4

UP: University Professors; SL/PDS: Senior Lecturers at university and Professors at Diploma Schools; SLDS: Senior Lecturers at Diploma Schools; CS: Contract staff.

* The shortfall for 100% corresponds to the option DON'T KNOW.

common field of knowledge, and the opinion of the Psychology teachers is actually even better. As far as the affinity between different psychological and medical disciplines is concerned, it can be concluded that while the Psychology teachers' scores are higher than the mean affinity scores, those of the Medicine teachers approach the mean values of the affinity scores.

With regard to the opinion of the Psychology teachers according to their academic field, the sample can be considered as fairly representative, in terms of both size and the distribution of teachers among the different fields. Among the most relevant conclusions is that the responses are quite similar for both scales across the teachers from different fields, though it is clear that those from Developmental and Educational Psychology are the least likely to consider Psychology as a health discipline, followed – surprisingly – by those from the area of Personality, Assessment and Psychological Treatment.

The analysis of opinions according to teaching status did not reveal important differences in responses. Nevertheless, a trend was observed, according to which university Professors had a slightly less favourable opinion towards Psychology as a health profession, while contract staff were the group showing the trend for the most favourable opinion.

Finally, it should be stressed that these results are to be interpreted with caution, and taking into account some important limitations, such as the point in time at which the study was carried out – a time of conflict and a continuous flow of information on the issue, which undoubtedly affected the opinion of many respondents. Another limitation is the brevity of the questionnaire, a necessary condition for obtaining such a large number of responses – though in the case of Medicine teachers even this was not sufficient to properly achieve our goal in this respect. Nevertheless, we feel that the results can be of use for improving knowledge on the opinion of university Psychology teachers about this important issue.

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THE IMAGE OF PSYCHOLOGY AS A HEALTH PROFESSION AMONG SPANISH PSYCHOLOGISTS

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The aim of this study is to discover the opinion of the members of professional psychological associations about Psychology as a health profession. The sample was made up of 1206 professionals, who filled out the Opinion Questionnaire on Psychology as a Health Profession, which they accessed via the website of the Spanish Psychological Association. Data were analyzed according to professional profile and employment sector. The findings indicate, in general, a favourable opinion about Psychology as a health profession, and even more so in the case of Clinical Psychology. These data contribute important knowledge about the Psychology profession and the functions of the psychologist in the context of the Health Sciences.

Este estudio pretende conocer la opinión que tienen los psicólogos colegiados españoles acerca del carácter sanitario de sus funciones. La muestra se compuso por 1.206 profesionales colegiados a los que se les administró un Cuestionario de Opinión sobre la Psicología como Profesión Sanitaria, COPPS) a través de los servidores de correo electrónico del Colegio Oficial de Psicólogos. Se analizaron los datos según perfil profesional e institución en la que trabajaban. Los resultados encontrados reflejan una posición general muy favorable al carácter sanitario de la Psicología y más acentuada para el caso de la Psicología Clínica. Estos datos son muy útiles para el conocimiento sobre la profesión del Psicólogo y sus funciones en el marco de las Ciencias de la Salud.

In Spain, some 30,000 psychologists are members of official associations, despite the fact that not all members practice the profession, nor all practising psychologists are members. The majority of those who do belong to the professional associations work in the clinical field (Santolaya Ochando, Berdullas Temes & Fernández Hermida, 2002), though the recently passed *Ley de Ordenación de las Profesiones Sanitarias (LOPS*; Law for the Organization of the Health Professions) recognizes only the Clinical Psychology specialization as a health profession. This law has markedly increased concern and uncertainty over the present and future of the profession of psychologist among association members (Spanish Psychological Association, 2004a, b), among Psychology graduates and students, and among academics within the discipline. It would seem important, therefore to learn the opinion of Spanish psychologists about their profession and analyze in some detail their perception of their professional activity, with particular reference to the field of health.

Given that the profession of psychologist has a rela-

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tively short history in Spain, there are few studies that describe in any detail the professional activity of this group and their perception and opinion of it. In one of the few published works on the issue, Díaz and Quintanilla (1992) analyzed multiple sociodemographic variables in a sample of 606 psychologists. As regards the professional profile of the sample, the fields most well represented were found to be Educational Psychology (38.5%) and Clinical Psychology (29.9%), and among the ten commonest types of work carried out, seven were related to Clinical and Health Psychology, namely, treatment of patients with psychological problems, follow-up of treated cases, patient diagnosis, clinical diagnosis interviews, diagnosis and/or treatment of anxiety-related problems in children, adolescents and adults, diagnosis and/or treatment of depression in children, adolescents and adults, and diagnosis and/or treatment of learning difficulties in children and adolescents (maturation, verbal comprehension, psychometricity, etc.) – even though, clearly, many of these tasks are similar, and their categorization is somewhat confused. The authors of this survey found, furthermore, that tasks of assessment and treatment were not exclusive to the clinical field, but were also reported by psychologists working in the areas of Educational

Psychology, Work and Organizational Psychology or Social Services – a result of considerable relevance for the issue under examination here.

More recently, Santolaya Ochando et al. (2002), analyzing the professional profile of more than 7000 members of psychologists' associations, found that the majority (68.36%) reported working in Clinical Psychology, with only 12.28% reporting that their work was in the area of Educational Psychology. Comparing these data with those of Díaz and Quintanilla (1992), it would appear that Clinical and Health Psychology has gained ground on the other areas of activity of the professional psychologist in Spain. This same study also revealed that the theoretical orientation with which psychologists (of all specializations) most commonly identify is the cognitive-behavioural approach, preferred by 49.08% of the sample. Once more, as reported in the study by Díaz and Quintanilla (1992), it emerges that the tasks of assessment and treatment are not exclusive to the clinical psychologist, but are also carried out by educational psychologists, industrial psychologists, and psychologists specializing in social intervention or road safety, even though these data require more detailed analysis in relation to what is understood by "assessment" and "treatment", and to the actual application contexts involved.

In sum, these studies reveal the considerable increase in the number of practising professionals, as well as indicating that the activities whose regulation is intended by the LOPS (assessment, diagnosis or treatment) may be being carried out by psychologists from different specialized fields, and not exclusively from Clinical Psychology, the only specialization covered by this Law.

The aim of the present study is to discover the opinion of members of Spanish psychologists' associations about the health-related nature of the psychologist's professional functions, and to examine whether this opinion differs depending on the professional profiles proposed by the Spanish Psychological Association (Colegio Oficial de Psicólogos, 1998) to which the psychologists participating in this study ascribe themselves.

METHOD

Participants

The sample was made up of 1206 members of professional psychologists' associations. Of these, 58.7% were women and 41.3% were men. Mean age was 41.22 years and standard deviation was 8.95. The sample selection process is described in the Procedure section.

Instruments

On the basis of a questionnaire created by the researchers for application to university teachers of Medicine and Psychology, we designed the Opinion Questionnaire on Psychology as a Health Profession (*Cuestionario de Opinión sobre la Psicología como Profesión Sanitaria, COPPS*), whose objective was to assess the perception of Psychology as a health profession and the estimated degree of affinity between different areas of Psychology and Medicine. In order to adapt it to the aims of the present study, we made some modifications to the original questionnaire in relation to sociodemographic data, specifically the inclusion of sections on professional profile, place of work and province of residence. The questionnaire is made up of two subscales, one with 15 items and another with 14. The first subscale assesses aspects related to the proximity of Medicine and Psychology and the status of the latter as a health profession, offering three response options (yes, no, don't know), drawn up so that the higher the score, the more favourable the opinion about Psychology as a health profession. The second subscale is designed to rate the degree of affinity between pairs of medical and psychological disciplines. Response format is a scale with five alternatives, and the higher the score, the greater the perceived affinity. Analyses carried out with the sample of professional psychologists on the internal consistency of the instrument indicate a value for the first subscale of 0.67, while the value for the second subscale is 0.94.

Factor analysis revealed 3 factors for the first subscale. The first factor includes the items with content related to Psychology in general, the second the items related to Clinical Psychology, and the third the items with health content. In the case of the second subscale, which assessed the affinity between psychological and medical disciplines, there emerged a single factor in which all the items saturated. These results demonstrate a satisfactory factor structure in line with the assessment objectives for which the scales were created (Bretón-López et al., 2005).

We used a computer program in *Visual Basic* which, by means of a website, gave access to the questionnaire through a link from an e-mail message. The program allows the responses to be stored in an SQL database. Automatic recording of the responses reduces to zero the possibility of errors in the computation of data.

Design

This is a study of populations by means of questionnaires according to the classification proposed by Montero and León (2005). In writing the article we have followed, as closely as possible, the norms drawn up by Ramos-Álvarez and Catena (2004).

Procedure

For application of the questionnaire we took advantage of the e-mail servers of the Spanish Psychological Association. A message was sent to the 10,380 association members with e-mail addresses, requesting their collaboration with the study. Of these potential participants, 1826 belonged to the Catalan association. A total of 1206 completed questionnaires were returned. Access to the questionnaire was made by means of a link directly from the message. Once the questionnaire had been filled out and returned, the responses were stored in an SQL database, and the respondent no longer had access to the questionnaire, so as to avoid the same person responding twice (or more) or changing their original answers. If those to whom the initial message was sent did not respond within 15 days, they were sent a reminder via e-mail with a new link to the ques-

tionnaire. Finally, we proceeded to the analysis of the responses.

RESULTS

Here we present the results obtained in relation to the health nature of Psychology in the opinion of members of Spanish psychologists' associations. Statistical analysis was carried out using version 12.0 of the program *Statistical Package for Social Sciences* (SPSS 12.0).

As regards the descriptive aspects of the sample, Table 1 presents data on the number of members and percentages for each of the professional profiles considered; also shown are the number of members and percentages for those working in public institutions, private institutions and universities, and for those who are unemployed, all highly relevant data for the present study.

As can be seen, it is those that report a professional profile of Clinical Psychology (648, or 53.7% of the total sample) and those that report working in the private sector (58.4% of the total sample) who predominate, as against those with other profiles and those who work in other types of institution or are unemployed.

Table 2 shows the percentages of favourable and unfavourable responses to each of the questions on the health-related nature of Psychology in general and the Clinical Psychology specialization. The results obtained reflect a position generally favourable to the consideration of Psychology as a health profession in the majority of the questions. Only in questions 4, 7 and 10 ("Any type of psychologist is qualified to diagnose mental problems", "Any type of psychologist is qualified to treat emotional and mental problems that affect health" and "The work of the psychiatrist and the psychologist is very similar") do the percentages of unfavourable responses (73.3%, 71% and 74%, respectively) strongly outweigh those of favourable responses (21.9%, 23.6% and 20.8%, respectively). These data are in sharp contrast to those for questions 5, 8 and 11, which refer to the Clinical Psychology specialization, and for which there is a clear predominance of favourable responses (96.2% versus 1.5% for question 5; 96.2% versus 1.1% for question 8; and 64.1% versus 33.2% for question 11).

Figure 1 shows the mean scores for the questions about the affinity between psychological and medical disciplines. As it can be seen, the means are generally high, the closest affinity being found for the pairs Psychiatry-Clinical Psychology and Health Education-Education for Health.

Professional profile	N	Employment sector	N
Clinical Psychology	648 (53.7%)	Private institution	704 (58.4%)
Educational Psychology	147 (12.2%)		
Social Intervention	128 (10.6%)	Public institution	368 (30.5%)
Organizational Psychology	123 (10.2%)		
Psychology of Health	67 (5.6%)	Unemployed	89 (7.4%)
Psychology of Drug-Dependence	38 (3.2%)		
Forensic Psychology	32 (2.7%)	University (teacher)	45 (3.7%)
Psychology of Traffic and Road Safety	15 (1.2%)		
Psychology of Physical Activity and Sport	8 (0.7%)		
Total: 1206			

For the sake of clarity, and in accordance with the aims of the study, we shall now present the data separately for each of the subscales making up the questionnaire, following the criteria: (a) comparison according to the professional profile reported by the participants; (b) comparison according to participants' employment sector, including the category "unemployed".

Participants' opinion about Psychology as a health profession according to professional profile reported.

Table 3 shows the results expressed in percentages of affirmative and negative responses to each one of the 15 questions assessing participants' perception of Psychology as a health profession. A fairly consistent pattern can be observed with regard to the favourable position towards the health-related nature of Psychology across the different professional profiles of the respondents (namely, Social Intervention, Clinical Psychology, Educational Psychology, Psychology of Traffic and Road Safety, Psychology of Drug-dependence, Psychology of Health, Psychology of Organizations, Forensic Psychology and Psychology of Physical Activity and Sport).

However, we find once again some questions in which

the situation is reversed – exactly the same ones as for the case of Table 2 –, showing higher percentages of unfavourable positions (number of negative responses obtained). It is interesting to note the content of these questions, which permits a contrast between Psychology and Clinical Psychology, for the implications it may have insofar as these responses reflect a tendency throughout the sample of association members to perceive the role of psychologists according to their specialization.

Given the richness and abundance of the data obtained, it is worth carrying out a more detailed analysis according to professional profile and the percentages of favourable and unfavourable responses about Psychology as a health discipline. This is achieved through a descriptive analysis of the data presented in Table 3.

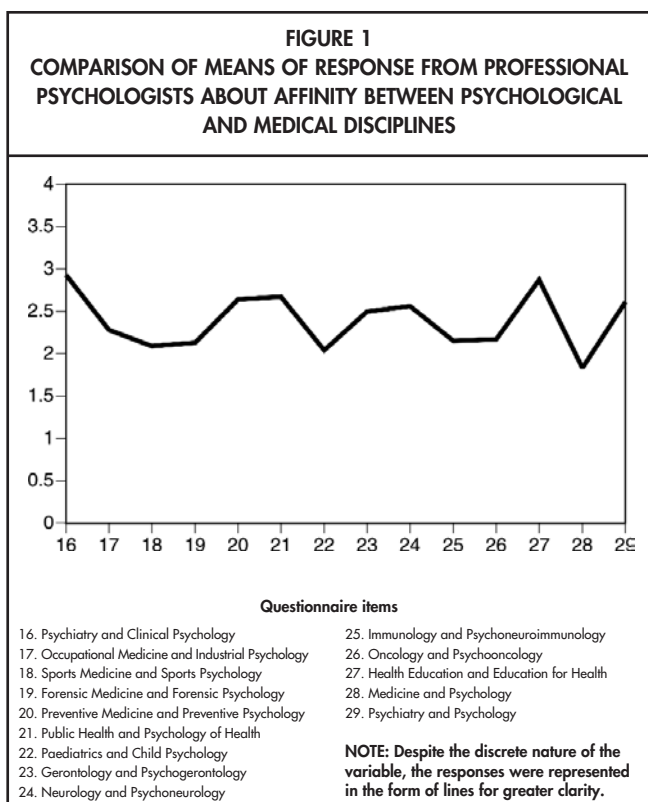


TABLE 2
PERCENTAGES* OF FAVOURABLE AND UNFAVOURABLE RESPONSES FROM PSYCHOLOGICAL ASSOCIATION MEMBERS TOWARDS PSYCHOLOGY AS A HEALTH PROFESSION

Items	YES	NO
1. Psychologists can help to prevent health problems	99.2	0.5
2. Psychology and Medicine are sciences that belong to the same field of knowledge	51.6	40.7
3. Clinical Psychology and Medicine are sciences that belong to the same field of knowledge	79.4	16.3
4. Any type of psychologist is qualified to diagnose mental problems	21.9	73.3
5. Clinical psychologists are qualified to diagnose mental problems	96.2	1.5
6. Psychology is closer to Medicine than to other fields of knowledge	61.9	27.7
7. Any type of psychologist is qualified to treat emotional and mental problems that affect health	23.6	71.0
8. Clinical psychologists are qualified to treat emotional and mental problems that affect health	96.2	1.1
9. Psychology can help to improve people's health	98.8	0.6
10. The work of the psychiatrist and the psychologist is very similar	20.8	74.0
11. The work of the psychiatrist and the clinical psychologist is very similar	64.1	33.2
12. Psychologists should form part of professional teams in hospitals	76.6	17.5
13. Clinical psychologists should form part of professional teams in hospitals	98.6	0.6
14. One of the central aspects of Psychology is to promote healthy behaviours	94.0	4.6
15. Psychologists are as qualified as psychiatrists for making expert assessment in the legal context	84.8	6.1

* The shortfall for 100% corresponds to the option DON'T KNOW.

Figure 2 shows the opinions, by professional profile, on the similarity between certain psychological and medical disciplines. The results show that in this case, it is the profile of Traffic Psychology and Road Safety that presents the most extreme positions in a large part of the subscale questions, and with greatest distinction from the rest. More detailed analysis of each one of the profiles permits their comparison across the questions in the instrument, but in general they are found to follow a similar pattern in the responses.

To determine whether the data presented are statistically significant or not, and as Table 4 shows, we compared the total scores obtained on the questionnaire by professional profile. For the case of part one of the questionnaire, given the response format, answers favourable to Psychology as a health profession (YES) were assigned a 1, and unfavourable responses (NO) a

0, with the aim of calculating the total mean scores. The response option DON'T KNOW was excluded from this calculation because of the limitations involved in interpreting its meaning. It should be pointed out here that, given the characteristics of the questionnaire and of the study objectives, it was deemed necessary for the analysis of these total scores to distinguish between the total scores for the instrument without considering the items related to Clinical Psychology and for those items that referred exclusively to the field of Clinical Psychology. The second subscale, which asked about the affinity between disciplines, was not affected by this situation. Furthermore, it is important to mention that we did not take into account the profiles of Psychology of Traffic and Road Safety or Psychology of Physical Activity and Sport, since, as can be seen in Table 1, the numbers of professional psychologists for these profiles are not com-

TABLE 3
PERCENTAGES* OF FAVOURABLE AND UNFAVOURABLE RESPONSES FROM ASSOCIATION MEMBERS TOWARDS PSYCHOLOGY AS A HEALTH PROFESSION, BY PROFESSIONAL PROFILE

Items	Soc Int		Clin Psy		Educ Psy		Psy TRS		Psy Drug		Psy Health		Org Psy		For Psy		Psy Sport	
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
1. Psychologists can help to prevent health problems	99.2	0	98.6	0.9	100	0	100	0	100	0	100	0	100	0	100	0	100	0
2. Psychology and Medicine are sciences that belong to the same field of knowledge	49.2	42.2	49.5	42.7	57.8	32.7	53.3	46.7	60.5	31.6	56.7	41.8	48.8	41.5	56.3	37.5	75.1	24.9
3. Clinical Psychology and Medicine are sciences that belong to the same field of knowledge	77.3	12.5	78.5	18.2	83.1	10.2	60.1	39.9	89.5	10.5	82.1	16.4	78.1	18.6	84.4	12.5	87.5	0
4. Any type of psychologist is qualified to diagnose mental problems	23.4	73.4	19.1	75.6	21.8	74.8	40.1	46.7	21.1	73.7	28.4	67.2	24.4	69.9	43.8	56.3	12.4	75.1
5. Clinical psychologists are qualified to diagnose mental problems	96.1	1.6	97.1	1.5	94.6	0.7	100	0	97.4	0	94.0	1.5	93.5	3.3	96.9	0	100	0
6. Psychology is closer to Medicine than to other fields of knowledge	61.7	31.3	65.6	25.3	52.4	32.1	33.3	53.3	60.5	15.8	59.7	29.9	53.7	34.1	84.4	12.5	62.5	37.5
7. Any type of psychologist is qualified to treat emotional and mental problems that affect health	27.3	67.2	19.9	74.7	27.9	68.1	40.1	59.9	23.7	65.8	29.9	61.2	25.2	69.9	40.6	59.4	12.4	75.1
8. Clinical psychologists are qualified to treat emotional and mental problems that affect health 96.1	0	97.2	0.9	92.5	2.1	93.3	0	100	0	94.0	3.0	95.1	1.6	96.9	0	100	0	
9. Psychology can help to improve people's health	99.2	0.8	98.1	0.6	100	0	100	0	100	0	98.5	1.5	99.2	0.8	100	0	100	0
10. The work of the psychiatrist and the psychologist is very similar	21.9	74.2	17.1	77.5	29.3	65.3	20.1	66.7	23.7	68.4	22.4	76.1	22.8	71.5	40.6	56.3	24.9	75.1
11. The work of the psychiatrist and the clinical psychologist is very similar	64.8	32.8	60.8	36.7	67.3	28.6	66.7	26.7	60.5	36.8	62.7	34.3	78.9	18.7	71.9	25.0	24.9	75.1
12. Psychologists should form part of professional teams in hospitals	82.8	12.5	72.4	20.8	76.2	16.3	73.3	20.1	73.7	13.2	88.1	10.4	83.7	14.6	87.5	9.4	100	0
13. Clinical psychologists should form part of professional teams in hospitals	98.4	0	93.3	0.8	99.3	0	93.3	6.7	100	0	98.5	1.5	99.2	0.8	100	0	100	0
14. One of the central aspects of Psychology is to promote healthy behaviours	93.8	3.9	92.7	5.9	95.9	2.1	100	0	100	0	94.0	6.0	95.9	3.3	93.8	3.1	100	0
15. Psychologists are as qualified as psychiatrists for making expert assessment in the legal context	85.9	5.5	86.1	6.5	78.9	7.5	73.3	6.7	89.5	0	85.1	6.0	81.3	6.5	93.8	0	100	0

Soc Int: Social Intervention; Clin Psy: Clinical Psychology; Educ Psy: Educational Psychology; Psy TRS: Psychology of Traffic and Road Safety; Psy Drug: Psychology of Drug-Dependence; Psy Health: Psychology of Health; Org Psy: Organizational Psychology; For Psy: Forensic Psychology; Psy Sport: Psychology of Physical Activity and Sport.

* The shortfall for 100% corresponds to the option DON'T KNOW.

parable to the rest. Having made the above distinction, it can be seen in Table 4 that the differences found between the responses of those with different profiles to the questions of the first subscale were significant for both the case of items with Clinical Psychology content and those without such content.

It is interesting, finally, to consider the profile that presents the highest score and the most favourable attitude towards Psychology in general and Clinical Psychology as health professions. For the case of the "Psychology in general" items, the profile in question is that of Forensic Psychology, while for the "Clinical Psychology" items, it is Educational Psychology and, once again, Forensic Psychology. For the second subscale, in which respondents were asked about the affinity between different medical and psychological disciplines, no statistically significant differences were obtained.

Participants' opinion about Psychology as a health profession according to employment sector

With regard to opinions about the health-related nature of Psychology by type of institution or employment sector, Table 5 shows the percentages of favourable and unfavourable responses for each of the questions from the first part of the questionnaire. In general, higher percentages are obtained for the consideration of Psychology as a health discipline than for its consideration as a non-health discipline. Even so, there are once more cases in which this tendency is clearly inverted; thus, in questions 4 and 7 ("Any type of psychologist is qualified to diagnose mental problems" and "Any type of psychologist is qualified to treat emotional and mental problems that affect health"), higher percentages of unfavourable responses are obtained, and which, moreover, remain constant across the different employment sectors, including that of "unemployed". It is worthy of note that these two questions (4 and 7) are those which also presented the higher percentages of unfavourable positions in the case of the analysis by professional profile.

Figure 3 shows the means for the second subscale, classified according to participants' employment sector. Similar positions are observed, even though we find once again that it is those working in universities who present the most favourable opinions on affinity between disciplines.

Finally, as Table 6 shows, although we have described some differences by employment sector for the two subscales of the questionnaire, the results for the total scores

on the first subscale (considering once again the "Clinical Psychology" questions and the rest separately) and the second subscale are not significantly different as regards their means.

CONCLUSIONS

The present study was carried out with a sample of over 1200 psychologists from the various regional professional

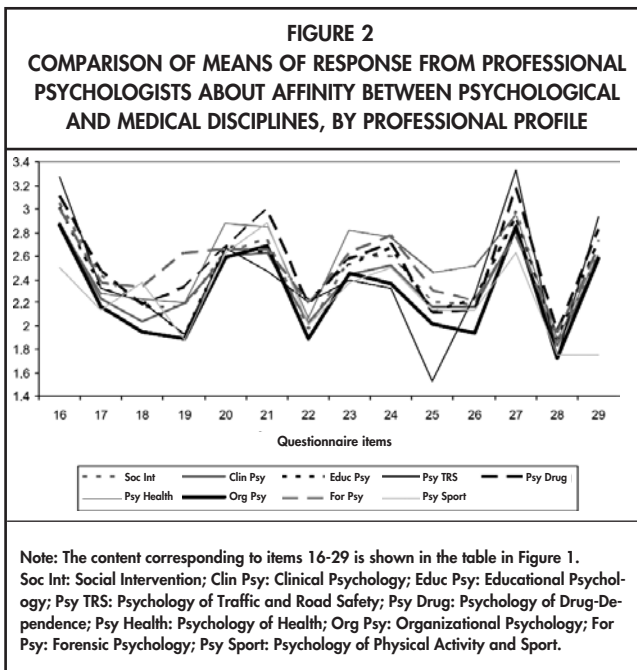


TABLE 4
TOTAL SCORES OF ASSOCIATION MEMBERS FOR THE OPINION QUESTIONNAIRE, BY PROFESSIONAL PROFILE

Professional profile	First subscale, no clinical items		First subscale, only clinical items		Second subscale	
	Mean	SD	Mean	SD	Mean	SD
Social Intervention	6.88	1.75	4.57	0.62	34.18	10.97
Clinical Psychology	6.54	1.80	4.41	0.75	33.08	11.27
Educational Psychology	7.02	1.76	4.62	0.64	34.14	9.63
Psychology of Drug-Dependence	7.17	1.92	4.56	0.50	35.45	9.74
Psychology of Health	6.90	1.81	4.48	0.85	35.22	10.52
Organizational Psychology	6.71	1.80	4.55	0.65	31.94	10.80
Forensic Psychology	7.56	1.74	4.62	0.56	35.16	11.37
Value of F	2.56*		2.57*		1.34	

SD: Standard deviation.
* p < 0.05.

associations of Spain, making it a sufficiently representative sample of this population. Hence, the results obtained can be extremely useful for revealing the opinion of professional psychologists about the issues in question.

We used the same instrument as in a very similar study on the opinion of Psychology and Medicine teachers (published in this issue of the journal). Even so, for the present work we also calculated reliability indices for the instrument, obtaining results similar to those of the previous study, so that we can speak of good stability across the different samples. This means we can make compar-

isons between the two studies, comparing the teachers' opinion with that of the professional psychologists.

The results show that, in general, our participants – members of psychologists' associations – have a quite favourable opinion about Psychology as a health discipline, and that they find considerable affinity between psychological and medical disciplines, particularly in the specific case of Clinical Psychology.

In the first subscale the mean score is close to eight, the upper limit being ten; in the case of Clinical Psychology the result is even clearer, since the mean is over four, out of a maximum five. The findings are similar for the case of the second scale, which compares medical and psychological disciplines. Nevertheless, it is noteworthy that

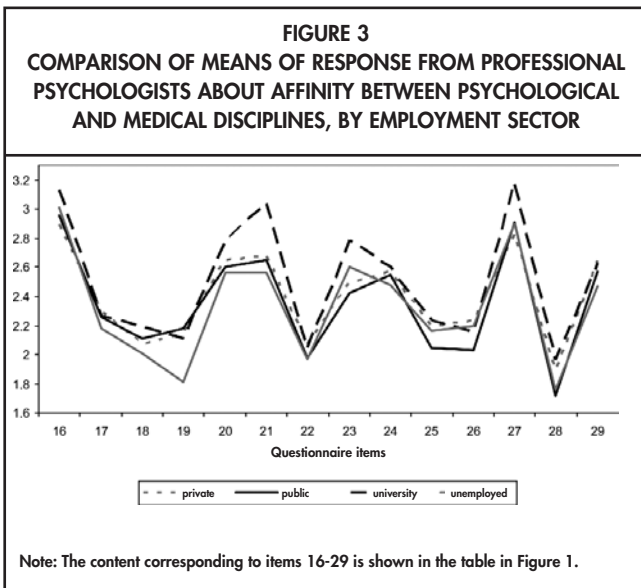


TABLE 6
TOTAL SCORES OF ASSOCIATION MEMBERS FOR THE OPINION QUESTIONNAIRE, BY EMPLOYMENT SECTOR

Employment sector	First subscale, no clinical items		First subscale, only clinical items		Second subscale	
	Mean	SD	Mean	SD	Mean	SD
Private Institution	6.77	1.72	4.46	0.73	33.69	11.07
Public Institution	6.56	1.87	4.47	0.72	32.99	10.50
University (teacher)	7.01	1.93	4.63	0.63	35.11	10.89
Unemployed	6.97	1.99	4.55	0.55	32.69	11.57
Value of F	1.36		0.98		0.82	

SD: Standard deviation

TABLE 5
PERCENTAGES* OF FAVOURABLE AND UNFAVOURABLE RESPONSES FROM ASSOCIATION MEMBERS TOWARDS PSYCHOLOGY AS A HEALTH PROFESSION. BY EMPLOYMENT SECTOR

Items	Private (%)		Public (%)		University (%)		Unemployed (%)	
	YES	NO	YES	NO	YES	NO	YES	NO
1. Psychologists can help to prevent health problems	99.4	0.3	98.6	0.8	100	0	98.9	1.1
2. Psychology and Medicine are sciences that belong to the same field of knowledge	54.1	38.9	48.6	43.5	46.7	42.2	46.1	42.7
3. Clinical Psychology and Medicine are sciences that belong to the same field of knowledge	81.8	15.6	76.4	17.4	80.1	13.3	73.1	19.1
4. Any type of psychologist is qualified to diagnose mental problems	21.1	73.9	19.1	76.9	31.1	66.7	36.1	57.3
5. Clinical psychologists are qualified to diagnose mental problems	95.7	1.7	97.6	1.4	95.6	2.2	94.4	0
6. Psychology is closer to Medicine than to other fields of knowledge	64.2	26.3	62.8	28.3	53.3	22.2	44.9	39.3
7. Any type of psychologist is qualified to treat emotional and mental problems that affect health	22.3	72.3	22.6	71.7	33.3	64.4	33.7	60.7
8. Clinical psychologists are qualified to treat emotional and mental problems that affect health	95.9	1.1	96.2	0.8	97.8	2.2	97.8	1.1
9. Psychology can help to improve people's health	99.4	0.1	97.6	1.4	97.8	0	98.9	1.1
10. The work of the psychiatrist and the psychologist is very similar	20.5	75.1	19.1	75.3	31.1	60.1	25.8	67.4
11. The work of the psychiatrist and the clinical psychologist is very similar	62.4	34.7	64.7	32.9	77.8	20.1	68.5	29.2
12. Psychologists should form part of professional teams in hospitals	78.1	16.2	72.1	22.1	68.9	20.1	87.6	7.9
13. Clinical psychologists should form part of professional teams in hospitals	98.3	0.7	98.9	0.5	97.8	0	100	0
14. One of the central aspects of Psychology is to promote healthy behaviours	94.2	4.7	92.9	4.9	97.8	0	95.5	4.5
15. Psychologists are as qualified as psychiatrists for making expert assessment in the legal context	85.7	5.8	83.7	6.3	84.4	6.7	83.1	6.7

* The shortfall for 100% corresponds to the option DON'T KNOW.

in all three cases the psychologists who identify with the profile of Clinical Psychology are those that score lowest.

By participants' employment sector, we obtained similar results to those found by professional profile. In general, opinions are favourable with respect to Psychology as a health discipline, and highly favourable in the case of Clinical Psychology. Those most likely to consider Psychology as a health profession are those working in universities, while those least likely to do so are psychologists employed in public institutions.

Thus, it can be concluded that, in general terms, members of psychological associations have a favourable attitude towards Psychology as a health discipline, and particularly so in the case of Clinical Psychology.

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THE IMAGE OF PSYCHOLOGY AS A HEALTH PROFESSION AMONG STUDENTS OF PSYCHOLOGY

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The aim of this work is to explore the opinion of Psychology students about Psychology as a health profession. In a study based on a descriptive survey, the Opinion Questionnaire on Psychology as a Health Profession was applied to a sample of 1571 fourth- and fifth-year Psychology undergraduates from 14 Spanish universities. The results show that Psychology students consider Psychology to be a health profession. They perceive a high affinity between medical disciplines and psychological disciplines, which is not restricted to Clinical Psychology. This supports the contention that other psychological disciplines, and not just Clinical Psychology, should be considered as belonging to the health field. The implications for the social perception of the psychologist as a health professional are discussed.

Con el objetivo de conocer la opinión de los estudiantes de Psicología acerca del carácter sanitario de la misma, se realiza un estudio de poblaciones mediante encuestas en una amplia muestra de estudiantes de segundo ciclo de Psicología (N = 1.571) de 14 facultades españolas de Psicología. Se aplica el Cuestionario de Opinión sobre la Psicología como Profesión Sanitaria, COPPS). Los resultados muestran que los estudiantes sitúan claramente la Psicología dentro del ámbito sanitario. Otros datos de interés muestran que los estudiantes perciben una alta afinidad entre disciplinas médicas y disciplinas psicológicas, afinidad que no se limita a la Psicología Clínica, lo que respalda la propuesta de que otras disciplinas psicológicas además de la Psicología Clínica deberían ser consideradas sanitarias. Se discuten las implicaciones de estos datos en la percepción social del psicólogo como profesional sanitario.

The image of a discipline held by its students is of crucial importance to its development, since they represent the continuation of professional exercise in all its various fields. In Spain today, a total of 31 universities (29 attended and 2 providing distance learning) offer courses in Psychology, followed by some 60,000 students (Hernández Gordillo, 2003). The recent passing of the *Ley de Ordenación de las Profesiones Sanitarias* (LOPS; Law for the Organization of the Health Professions) means that the possibilities for new graduates to become health professionals will be scarce, and their career options severely reduced, as recognized by students themselves (Consejo General de Colegios Oficiales de Psicólogos, 2005b). Therefore, and especially in view of their awareness of the situation, Psychology students have been and continue to be one of the most active groups opposing this Law (see Consejo General de Colegios Oficiales de Psicólogos, 2005a). Given the important role of this sector in the future development of Psychology in Spain, it is essential to assess in a systematic way their opinions and perceptions in relation to

Psychology as a health discipline and profession, as has been done with professional psychologists, university teachers and the general population.

Psychology students' image and perception of diverse aspects of the discipline have been the object of study in several countries, including: Argentina (Erasquin, Btsh, Lerman, Basualdo & Bolasina, 2002; Sans de Uhlandt, Rovella & Barbenza, 1997), Brazil (Morales, Abramson, Nain, Aleixo & Bartoszeck, 2005; Noronha, Baldo, Barbin & Freitas, 2003), the United States (Bram, 1997; Janda, England, Lovejoy & Drury, 1998; Oliver, Bernstein, Anderson, Blashfield & Roberts, 2004; Turner & Quinn, 1999), Arab countries (Yousef, 1992) and Turkey (Eker, 1985). In general, these studies show that students change their perceptions of Psychology as their degree course progresses (Erasquin et al., 2002; Noronha et al., 2003), that the majority consider it as within the field of science (Morales et al., 2005) and report an interest in behaviour modification (Yousef, 1992), and that in many cases Psychology is identified with Clinical Psychology (Janda et al., 1998; Sans de Uhlandt et al., 1997).

This type of study is not new to the Spanish context: the early 1990s saw some research on the image of Psychology with samples of students of the discipline. Among these studies was that of Sierra and Freixa (1993), using

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a sample of 224 students at different stages of degree and PhD courses, which showed how their image of Psychology evolved in a positive way as their studies progressed, or that of Sierra, Pal-Hegedüs, Alvarez-Castro and Freixa i Baqué (1995), who compared the image held by Spanish students with that of students from Costa Rica. The authors concluded that despite a high degree of similarity between the two groups (such as the predilection for Clinical Psychology compared to other specializations), the influence of Psychoanalysis was much greater among the Costa Ricans. Another study carried out with Psychology students in the 1990s – notable, above all, for its large sample size – is that of Buela-Casal, Alvarez-Castro and Sierra (1993). These researchers applied a survey to 765 final-year undergraduates at 15 Spanish universities, finding a marked preference for Clinical Psychology versus other disciplines, such as Social Psychology or Developmental Psychology; they also found that, although the majority orientation was behavioural, there are students who identify with Psychoanalysis, depending on the university at which they study. This association between Psychology and the behavioural model among Psychology students also emerges in the study by Sierra, Alvarez-Castro and Buela-Casal (1994), who conclude that final-year students do not perceive Psychoanalysis as a part of scientific Psychology, or that of Alvarez-Castro, Buela-Casal and Sierra (1994), which clearly reveals the identification of Spanish Psychology students with the behavioural model.

More recently, García, Pérez, Gutiérrez, Gómez and Bohórquez (2004) assessed Psychology's image in students of the discipline and of other subjects. Among the conclusions drawn in relation to the Psychology students was that they did not have a systematic and congruent picture of the discipline. However, perhaps the most interesting findings concerned the sample of students on other degree courses: the majority considered Psychology to be an applied human science, but were unclear or in disagreement about its object of study, which they perceived to be closely related to those of Psychiatry and Education; moreover, they did not consider Psychology as particularly "scientific", they situated its work context in the field of Education (especially those with little knowledge about Psychology) and mental health, and identified it with Psychoanalysis – Freud and "The interpretation of dreams" being the author and work most frequently referred to. Finally, it is relevant to men-

tion the confusion in the responses given by those doing the Education degree course, who could not agree on whether psychologists worked in primary education.

Other studies carried out in Spain with samples of Psychology students have focused on more specific aspects of the psychology profession. For example, Navarro, Maldonado, Pedraza and Cavas (2001) report that students of Psychology consider research with animals as highly important for the progress of science. In their analysis of Psychology students' views on the ethics of some psychotherapeutic practices, Del Río, Borda and Torres (2003) found that the vast majority of the sample had adequate ethical knowledge; however, given that their participants had doubts over the ethics of nearly 25% of the behaviours assessed, the authors suggest the inclusion of courses on professional ethics in the curricula of Psychology degrees (Borda, Del Río, Pérez San Gregorio & Martín, 2002).

Bearing in mind these precedents, the aim of the present study is to throw some light on Spanish Psychology students' image and perception of Psychology as a health discipline, with a view to finding out where they stand with regard to the LOPS Law.

METHOD

Participants

The sample was made up of 1571 fourth- and fifth-year Psychology students from 14 public Spanish universities. Of these, 1191 were women (75.9%) and 380 were men (24.1%). Age range was 18 to 40 years, mean age was 22.65 and standard deviation was 2.31.

Instruments

- Opinion Questionnaire on Psychology as a Health Profession (*Cuestionario de Opinión sobre la Psicología como Profesión Sanitaria, COPPS*). This opinion questionnaire was originally designed by the authors of the present study for assessing the image of Psychology as a health profession and the estimated degree of affinity between disciplines of Psychology and Medicine in university teachers of Medicine and Psychology. Some changes were made to the sections on sociodemographic data, as it was necessary to delete the questions on teaching status, field of knowledge and whether the respondent was a teacher, professional psychologist or research assistant; likewise, we included a question on whether the respondent was in the fourth or fifth year of the de-

gree course. The questionnaire was made up of two subscales, the first of which included 15 items referring to matters of the proximity between Medicine and Psychology and the role of the latter as a health profession. This subscale offers three response options (yes, no, don't know), drawn up so that the higher the score, the more favourable the opinion about Psychology as a health profession. The second subscale, composed of 14 items, was designed to rate the degree of affinity between pairs of medical and psychological specializations. Response format is a scale with five alternatives, and the higher the score, the greater the perceived affinity. As regards the internal consistency of the instrument, the analyses carried out with the sample of Psychology students gave α values of 0.65 for the first subscale and 0.91 for the second subscale.

Factor analysis carried out on the questionnaire gave a three-factor structure for the first subscale, the first factor including the items with content related to Psychology in general, the second the items related to Clinical Psychology, and the third the items with health content. In the case of the second subscale there emerged a single factor in which all the items saturated. These results demonstrate a satisfactory factor structure in line with the assessment objectives for which the scales were created (Bretón-López et al., 2005).

Design

This is a study of populations by means of questionnaires according to the classification proposed by Montero and León (2005). In writing the article we have followed, as closely as possible, the norms drawn up by Ramos-Álvarez and Catena (2004).

Procedure

First of all we made telephone contact with the students' representatives, student's associations, students' delegations or students' vice-deans at 19 of the 21 Psychology faculties in Spain to explain the objectives of the study and request their collaboration. The Psychology faculties of the UNED (distance learning) and the University of Huelva were discarded, due to the difficulties involved in contacting UNED students and the fact that the faculty in Huelva was only just starting up. A total of 17 faculties committed themselves to participating in the study, and each was sent a quantity of questionnaires, accompanied by stamped addressed envelopes, proportional to the

number of students registered for the fourth- and fifth-year degree courses. The questionnaires were given out during lectures, and the study objectives were explained to the students. A requirement for those wishing to participate was that they had passed all the courses in "phase one" (years 1 to 3) of the degree and were registered for "phase two", since, in the Spanish system, it is possible for students to be enrolled in phase two courses before having successfully completed phase one. Once the questionnaires had been sent to the faculties by regular mail, those responsible for applying the questionnaire were contacted once more and asked to confirm receipt of the questionnaires by e-mail. In those cases in which no confirmatory e-mail was received, the corresponding persons were telephoned again. Two weeks after confirmation of receipt of the materials, they were called once more to request information on the application of the questionnaires. Two months passed between the initial contact with the faculties and receipt of the completed questionnaires (April 2005 to June 2005). We eventually obtained data from 14 of the 17 faculties who had in principle agreed to participate.

RESULTS

Analysis of the data on students' opinions about Psychology as a health discipline and profession was made using version 12.0 of the "Statistical Package for Social Sciences" (SPSS 12.0) program.

Given the objectives of the research, we first of all analyzed the percentage of favourable and unfavourable responses about Psychology as a health discipline. In accordance with the design of the questionnaire as described in the Method section, a positive response (YES) indicated a favourable position as regards Psychology as a health profession, while a "NO" indicated an unfavourable position. Table 1 shows the percentages for the two types of response to the first part of the questionnaire. As it can be seen, in the majority of items there is a clear tendency to place Psychology within the health professions. Only for the cases of question 2 (*"Psychology and Medicine are sciences that belong to the same field of knowledge"*), question 4 (*"Any type of psychologist is qualified to diagnose mental problems"*) and question 10 (*"The work of the psychiatrist and the psychologist is very similar"*) are lower percentages found, with questions 4 and 10 yielding higher percentages of unfavourable responses.

The results referring to the opinion of Psychology stu-

dents about the affinity between medical and psychological disciplines appear in Figure 1, which presents the mean scores for the questions making up the second subscale of the questionnaire. As it can be seen, scores are clearly favourable to the affinity between disciplines.

We also considered it of interest to compare the results of the two subscales, that is, the responses on Psychology as a health discipline and those referring to the affinity between disciplines. As Table 1 shows, for the first subscale there emerges a pattern of responses generally favourable towards Psychology as a health discipline. Nevertheless, for certain questions (2, 4 and 10) the scores are less favourable. As for the affinity between medical and psychological disciplines, as Figure 1 shows, in the majority of cases the students tend to consider it as high. Thus, as regards the basic concept in question – the degree to which Psychology is a health discipline –, the results of this comparison would suggest that the favourable position reflected through perceived affinity between disciplines is clearer when the issues are considered by means of the content of the first subscale.

CONCLUSIONS

The image of Psychology held by students of the discipline is fundamental for its future development, since it is they who represent the continuation of its professional exercise; consequently, and as referred to in the Introduction, numerous studies have examined students' im-

age and perception of Psychology. Given the situation created by the recent passing of the *LOPS* Law it is now more important than ever to discover the perception held by students about Psychology as a health discipline. In the present study we carried out a survey designed to reveal this perception with a large sample of Psychology students (1571) from the Psychology faculties of 14

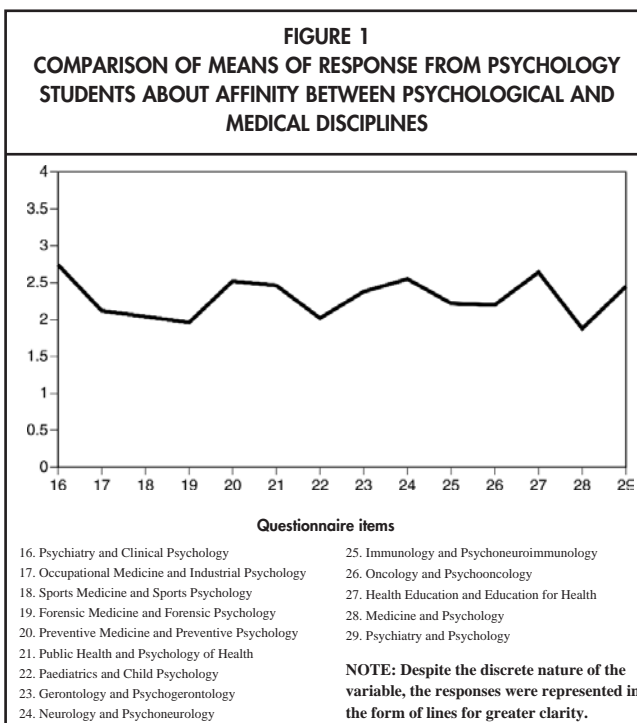


TABLE 1
PERCENTAGES* OF FAVOURABLE AND UNFAVOURABLE RESPONSES FROM PSYCHOLOGY STUDENTS TOWARDS PSYCHOLOGY AS A HEALTH PROFESSION

Items	YES	NO
1. Psychologists can help to prevent health problems	98.9	0.3
2. Psychology and Medicine are sciences that belong to the same field of knowledge	45.3	44.3
3. Clinical Psychology and Medicine are sciences that belong to the same field of knowledge	61.6	30.2
4. Any type of psychologist is qualified to diagnose mental problems	43.2	48.7
5. Clinical psychologists are qualified to diagnose mental problems	93.4	3.2
6. Psychology is closer to Medicine than to other fields of knowledge	54.7	31.8
7. Any type of psychologist is qualified to treat emotional and mental problems that affect health	53.1	41.1
8. Clinical psychologists are qualified to treat emotional and mental problems that affect health	92.7	5.0
9. Psychology can help to improve people's health	97.7	1.5
10. The work of the psychiatrist and the psychologist is very similar	34.0	60.5
11. The work of the psychiatrist and the clinical psychologist is very similar	58.2	36.2
12. Psychologists should form part of professional teams in hospitals	88.5	9.2
13. Clinical psychologists should form part of professional teams in hospitals	98.5	0.7
14. One of the central aspects of Psychology is to promote healthy behaviours	95.0	2.9
15. Psychologists are as qualified as psychiatrists for making expert assessment in the legal context	83.1	5.9

* The shortfall for 100% corresponds to the option DON'T KNOW.

Spanish universities. The results clearly indicate that students of Psychology situate their discipline within the health field. For example, 98.90% state that psychologists can help prevent health problems, while 95% consider one of the central aspects of Psychology to be the promotion of healthy behaviours. Another relevant finding is that the majority of students perceive Psychology as a health discipline, but independent of more established disciplines, such as Psychiatry, with only 34% considering the work of the psychiatrist and the psychologist to be very similar. This is not the first time research has revealed an identification of Psychology with health, as previous studies found a similar association (Buela-Casal et al., 1993; Janda et al., 1998; Sans de Uhlant et al., 1997; Sierra et al., 1995). Nevertheless, it is interesting to note that although the majority of students consider Psychology to be a health discipline, the majority also believe that not all psychologists are qualified to diagnose and treat emotional or mental problems.

The consideration of Psychology within the health context by students of the discipline can be appreciated with clarity if we consider their perceptions of the affinity between psychological and medical disciplines. Thus, on a scale of 0 (low affinity) to 4 (total affinity), the only pairs with a value under 2 (and even then only slightly) are those of Forensic Medicine-Forensic Psychology and Medicine-Psychology. The highest value for affinity between a medical and a psychological discipline corresponds to the pair Psychiatry-Clinical Psychology, and this is coherent with the recent official recognition of Clinical Psychology as a health discipline; nevertheless, the rest of the affinities perceived by Psychology students between medical and psychological disciplines would support the proposal of Buela-Casal (2004) that other psychological specializations, apart from Clinical Psychology, should be acknowledged as within the health field. This recognition by Psychology students of their discipline as health-related is obviously related to the position of university teachers on the question, as appreciated in the article by Buela-Casal et al. (2005) in this same issue, and indeed, the influence of teachers' opinions and position on those of their students has already been highlighted in other studies of a similar nature (Buela-Casal et al., 1993; Sierra et al., 1995). Even so, it is noteworthy that students' position in relation to Psychology as a health discipline is much more favourable than that of teachers.

Finally, we should mention that despite the sample be-

ing representative of Psychology students in Spain, it was not possible to make comparisons between universities, since the proportion of students from each institution was not representative; nevertheless, the sample size permits us to affirm that, in general, students of Psychology perceive their discipline as falling within the context of health.

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THE IMAGE OF PSYCHOLOGY AS A HEALTH PROFESSION AMONG THE GENERAL POPULATION

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This study explores the perception among the general population about psychologists as health professionals. Telephone surveys were used to assess opinions in a sample of 1562 people from all over Spain. An opinion questionnaire was employed to evaluate respondents' perceptions of the psychologist's competencies, as well as the attention received from mental health professionals and the utility of the services they offer. The data were analyzed by sex, occupation and age. The results reflect a favourable view in relation to Psychology as a health profession, with a clear preference for psychologists over psychiatrists to deal with emotional problems and disaster or emergency situations in all the variables. These data represent a valuable contribution to knowledge about perceptions of the psychologist as a health professional.

En este estudio se evalúa la percepción de la población general sobre el psicólogo como profesional vinculado a la salud. Se trata de un estudio de poblaciones mediante encuestas telefónicas a una muestra de 1.562 personas de las diferentes provincias españolas. Se empleó un cuestionario de opinión para evaluar la percepción de las competencias del psicólogo y las asistencias y demanda de los profesionales de la salud mental. Los resultados, analizados según las variables de sexo, profesión y edad, reflejaron una posición muy favorable al carácter sanitario de la profesión del psicólogo. Se manifestó una clara preferencia por los psicólogos para abordar situaciones emocionales, catástrofes o emergencias en todas las variables mencionadas. Los datos suponen una aportación útil y valiosa acerca de la percepción del Psicólogo como profesional sanitario.

The progress made by Spanish Psychology in the last thirty years has been considerable. Among the most important developments have been the incorporation of psychologists in different work contexts, especially that of healthcare (Seoane, 2005), and the increased importance of their role in society in general. Today, no-one is surprised to find the psychologist involved in a wide range of settings: private practices, hospitals, schools, companies, disaster situations, and so on; thus, for example, the important work carried out by teams of psychologists in the wake of the March 11th terrorist attacks in Madrid in 2004 did not seem at all out of place to the general public (Lillo de la Cruz et al., 2004). However, studies focusing on the public image of psychologists are few in number, at least in Spain, probably due to the relative youth of the discipline. Moreover, the majority of such studies use biased samples, and many concentrate on the clinical dimension of Psychology, comparing it with other health disciplines (Cabrero, Richard & Sancho, 1988; Dollinger & Thelen, 1978; Hidalgo, Nicolás & Yllá

1991; Murray, 1962; Nunnally & Kittross, 1958; Small & Gault, 1975; Tallent & Reiss, 1959; Thumin & Zebelman, 1962; Webb, 1985; Wood, Jones & Benjamin, 1986). Over the last 20 years, studies on the image of Psychology among the general population have been carried out in many countries, including the United States (Faberman, 1997; Janda, England, Lovejoy & Drury, 1998; Rose, 2003; Schindler, Berren, Mo, Beigel & Santiago, 1987; Wood et al., 1986), Austria (Friedlmayer & Rössler, 1995), Finland (Montin, 1995), France (Freixa i Baqué, 1984, 1985), Norway (Christiansen, 1986), Israel (Raviv & Weiner, 1995), Australia (Hartwig & Delin, 2003), Argentina (Sans de Uhandt, Rovella & Barbenza, 1997) and South Africa (Stones, 1996).

Among the studies on attitudes and opinions of the general public towards Psychology in English-speaking populations, one of the most important is the meta-analysis of 60 studies published between 1948 and 1995 by Von Sydow and Reimer (1998), which analyzes attitudes towards psychotherapists. Some relevant conclusions can be drawn from this comprehensive review. Thus, it emerges that, in general, mental health professionals are held in fairly high esteem, but to a lesser extent than medical professionals, and that recognition of different

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types of psychotherapists differs between cultural contexts. For example, while in the United States in the 1970s clinical psychologists were attributed a high status, in Germany and Australia psychiatrists had more prestige. Likewise, the differences perceived between the activities of these two types of professional were not very clear in early studies on public opinion, though this has changed over the years, with most respondents in later surveys perceiving that the psychologist deals with non-serious psychological problems and applies tests, whilst the psychiatrist's job involves the treatment of serious mental disorders using psychoactive drugs; even so, in the most recent studies there is a tendency to view the psychologist as also equipped to deal with the latter type of disorder. Although in general no correlations are found between gender and attitudes towards psychologists, some of the reviewed studies suggest that women have a more positive image of these professionals than men. Finally, among children and young people the image of health professionals has improved over the years, though the elderly remain more sceptical.

Given that the objective of the present study is to analyze the image of the Spanish psychologist, it makes sense to begin with a review of studies of this type carried out in Spain. The most comprehensive of the works published to date on the image of the psychologist among the Spanish general population is that of Berenguer and Quintanilla (1994), which we shall describe in some detail. However, it is also worth mentioning some studies published prior to that report, in the 1980s and early 90s. Thus, Berenguer, Díaz and Quintanilla (1982) assessed data from the general population on their opinion of Psychology in a sample of 94 people, while some years later Hidalgo et al. (1991) carried out a similar study, extending their research to cover the image of both Psychology and the psychologist, in a sample of 400 residents in the Basque province of Vizcaya. A different approach was taken by Cabrero et al. (1988), who analyzed the comparison between Psychology, Medicine and Nursing made by a sample of 19 nurses. As it can be seen, these works display the common problem of small number of participants and specificity of sample.

Among the first serious studies of the image of Psychology among the general population in Spain, notable for its sample size, is that of Seisdedos (1983), who analyzed the utility attributed to Psychology by the general

population in a sample of 1076 people (military, professionals and schoolchildren). The results revealed that just 8.45% of those in the survey showed some degree of disagreement with the utility of Psychology, and that almost half thought it useful. As regards different sectors of the population, support for the utility of psychological science was found to be lower among older respondents, those of lower professional or employment status and those with poorer education, while women showed a more favourable attitude towards the utility of Psychology than men. Nevertheless, it was also found in this survey that positive opinion towards the utility of Psychology showed some association with belief in occult sciences.

As mentioned above, the most complete survey up to now on Psychology's image among the general population was carried out by Berenguer and Quintanilla (1994), who studied a representative sample of 1523 participants (795 women and 728 men) aged between 19 and 69. Although in general their knowledge about Psychology and psychologists was adequate, the survey showed their ignorance of certain areas of Psychology, as well as some confusion between Psychology and related disciplines, such as Psychiatry (for example, 37% thought psychologists could prescribe drugs), Sociology (83.5% thought it necessary for psychologists to have some knowledge of this discipline) or Education Science (74.3% considered it relevant to a psychologist's training). It is also noteworthy that 16.8% of those in the survey thought it possible to be a practising psychologist without a university degree in the discipline.

An apparent improvement in the public perception of psychologists, with respect to the findings of Seisdedos (1983) a decade earlier, is that very few respondents associated them with "unscientific" activities, such as drawing up astral charts or reading palms. Nevertheless, surprisingly, more than a third of the sample still thought parapsychology and graphology were necessary areas of knowledge for a practising psychologist. As regards the activities of these professionals, the majority of the sample identified psychologists with the diagnosis of emotional problems (87.1%), the application of tests (85.3%), psychotherapy (71.9%) and relaxation (66.2%), establishing an eminently clinical profile for them. The second major area of activity for psychologists, in the opinion of those surveyed, would be in the school context, with 73.2% of respondents associating them with vocational and career interviewing. The third major pro-



file identified was that of the “work and organizational” psychologist (more than 50% cited among psychologists’ tasks those of personnel selection, consultancy for companies and the organization of training courses); finally, respondents recognized the psychologist’s role in the field of road safety (43.6%). Also assessed in the 1994 study were possible similarities and differences between the social recognition of psychologists and comparable professionals, namely, social workers, economists, schoolteachers, doctors, education workers, psychiatrists and priests. Of these professionals, doctors were assigned the highest prestige and social recognition, and social workers the lowest, the psychologist being situated in an intermediate position, similar to that of the psychiatrist.

As regards participants’ personal experience with psychologists, 21% had had some kind of contact with a member of the profession, the majority of such contact occurring within a clinical and/or educational context, underlining once more that these are the two areas with most social relevance. In 63.7% of cases the duration of the professional relationship was less than six months. Among those that had had direct experience with a psychologist, level of satisfaction with their work was high, and rating of their personal characteristics (language, intelligence and appearance) quite positive. In sum, since the consolidation of Psychology as a university discipline during the 1980s, its image and that of psychologists among the general population has improved over time, though there are still important biases and considerable ignorance of many of the tasks these professionals are qualified to carry out (Berenguer & Quintanilla, 1994).

Among the research in this area carried out since 1994, one of the most important studies is that of Yllá and Hidalgo (2003), who analyzed the differences perceived by the general population between psychologists and psychiatrists, using a sample of 400 participants aged 16 to 65. Despite the fact that the entire sample was recruited in the province of Vizcaya, the conclusions drawn from this work are interesting in that they provide an up-to-date idea of the psychologist’s image among the public in general. The results suggest that, in case of need, people with lower social status are more likely to consult a psychologist than those from higher social classes. As far as age is concerned, younger people identify more readily with the work of the psychologist than with that of the psychiatrist, and by gender, women

show more preference than men for psychological treatment over medical treatment. In general, the psychiatrist is attributed a medical role (treatment of mental disorders and possibility of prescribing drugs), while the psychologist is associated with behavioural disorders and everyday life problems. Another important finding is that those who report having used the services of a psychologist consider their work to be of great value, indicating that these professionals are obtaining social recognition. The authors conclude that knowledge about psychologists and acceptance of their role have both increased significantly, and that they are in fact gaining ground on psychiatrists.

The present study, taking into account previous findings, aims to provide a more comprehensive picture of Psychology’s image among the general population in Spain, with a large sample of participants from all parts of the country, and using a data-collection instrument that will enable us to considerably improve upon current knowledge in this field, particularly in relation to the general public’s perception of the psychologist as a health-related professional.

METHOD

Participants

The 1562 people (70% women and 30% men) participating in the study came from a variety of Spanish provinces. Age range of the sample was 18 to 94, with a mean of 47.13 and a standard deviation of 17.31. Participants were recruited from among the general population, in accordance with the protocol described in the Procedure section.

Instruments

Data for this study was collected by means of an *Opinion questionnaire on the competencies of the psychologist*, designed by the authors specifically for this research, and which comprised four parts. The first part evaluates the opinion of the general public on the psychologist’s capacity for preventing, diagnosing and treating clinical problems of an emotional and “mental” nature and providing legal and forensic advice and assessment. Participants are also asked in this part about the degree of similarity between the work of the psychologist and the psychiatrist, whether there should be psychologists in all hospitals, and whether Psychology can help to improve people’s health. Response format for this first part is: yes,



no, don't know. The second part of the questionnaire refers to whether the person has ever seen a psychologist and/or psychiatrist, and whether this helped them to resolve their problem. Answer format is yes or no. In the third part, respondents are asked about their predilection for seeing a psychologist and/or psychiatrist for an emotional problem. They are also asked about the utility of psychologists and psychiatrists in disaster or emergency situations. Response options are: psychologist, psychiatrist, both, neither, and don't know. The question in the fourth part concerns whether the psychologist should be considered as a health professional. Finally, the questionnaire requests data on age, sex, occupation and place of residence. As regards the internal consistency of the instrument, the α value is 0.65.

Design

This is a study of populations by means of questionnaires according to the classification proposed by Montero and León (2005). In writing the article we have followed, as closely as possible, the norms drawn up by Ramos-Álvarez and Catena (2004).

Procedure

First of all we collected information on population figures for all Spanish provinces. The figures refer to 1st January 2003, and were obtained from the website of the National Institute of Statistics (2004). The number of surveys per province to be obtained was calculated from the population data. Telephone numbers were taken from the website of *Telefónica* (the Spanish national telephone company). In order to show telephone numbers it was necessary to enter at least a first name and a province. We therefore selected a series of first names at random, entering each one with the name of a province. On doing so, the website provided the first 50 numbers corresponding to this data, so that after each 50 numbers it was necessary to input a new first name until the quota of interviews for that province was completed. We made a note of the names used for each province so as to avoid the risk of calling the same number twice. When a call was answered, the person was asked to participate in the study and given some brief information about the research and how to reply to the questionnaire items. All those who answered the phone were given the same information and instructions. If the person agreed to collaborate, the interviewer read each item from the

questionnaire and entered the responses in a computerized database.

Data collection took place during the months of May and June 2005. Calls were made from a laboratory at the Psychology Faculty in the University of Granada, where the researchers were able to use the computers to select the telephone numbers from the *Telefónica* website and enter participants' responses to the questionnaire in the database. Interviewers were four researchers specially trained in telephone interviewing, working in shifts. Calls were made from Monday to Friday between 9 am and 2 pm and from 4 pm to 10 pm, in order to reach as wide a variety as possible in terms of age, sex and occupation. Finally, it should be mentioned that it was impossible to make calls to the province of Lérida, as these numbers were unavailable on the *Telefónica* website. An eventual total of 1562 completed questionnaires was obtained.

Results and Conclusions

The results obtained both for opinions about Psychology as a health profession and for the other aspects relevant to the study objectives are presented below in accordance with sex, occupation and age range of the participants. Tables 1 and 2 show the principal descriptive data for the sample of the general public employed.

As regards the opinion of the sample about Psychology as a health profession by sex, Table 3 shows the percentages of favourable and unfavourable responses to the items on the opinion questionnaire. As it can be seen, for all the questions, and for both men and women, the percentages are highly favourable to the consideration of Psychology as a health profession, with a general consensus between the two sexes. The only question where the result was markedly less favourable was number 6 (*Do you think the work of the psychiatrist and the psychologist is similar?*), this being the case for both women and men (see Table 3).

However, while the differences by gender, according to the data in Table 3, do not appear to be great, an analysis of participants' total scores reveals that the differences are indeed significant (see Table 10), the women's mean scores being higher (7.24, as against 6.95 for men).

Furthermore, we collected data on participants' visits to psychologists and psychiatrists, also recording the figures for each sex separately (see Table 4). It was found, first of all, that both men and women visit psychologists more

than psychiatrists, and that perception of the problem having been solved was higher in the case of attention from a psychologist than in that of attention from a psychiatrist, also for both women and men.

Finally, both men and women clearly prefer to visit a

TABLE 1
DISTRIBUTION OF THE SAMPLE OF GENERAL POPULATION BY PROVINCE

Province	Frequency	Percentage	Province	Frequency	Percentage
La Coruña	42	2.7	La Rioja	13	0.8
Álava	12	0.8	Las Palmas	38	2.4
Albacete	17	1.1	León	20	1.3
Alicante	59	3.8	Lugo	16	1.0
Almería	22	1.4	Madrid	184	11.7
Asturias	40	2.5	Málaga	48	3.1
Ávila	11	0.7	Melilla	3	0.2
Badajoz	13	0.8	Murcia	47	3.0
Baleares	36	2.3	Navarra	23	1.5
Barcelona	180	11.5	Orense	16	1.0
Burgos	16	1.0	Palencia	8	0.5
Cáceres	16	1.0	Pontevedra	34	2.2
Cádiz	43	2.7	Salamanca	14	0.9
Cantabria	22	1.4	Segovia	7	0.4
Castellón	18	1.1	Sevilla	60	3.8
Ceuta	3	0.2	Soria	4	0.3
Ciudad Real	19	1.2	Tarragona	26	1.7
Córdoba	29	1.8	Tenerife	34	2.2
Cuenca	9	0.6	Teruel	6	0.4
Girona	27	1.7	Toledo	21	1.3
Granada	31	2.0	Valencia	74	4.7
Guadalajara	10	0.6	Valladolid	20	1.3
Guipúzcoa	32	2.0	Vizcaya	43	2.7
Huelva	19	1.2	Zamora	9	0.6
Huesca	10	0.6	Zaragoza	34	2.2
Jaén	24	1.5	Total	1562	100

NOTE: It was not possible to make calls to Lérida as the numbers for this province were not available on the Telefónica website.

TABLE 2
DISTRIBUTION OF THE GENERAL POPULATION SAMPLE BY SEX, OCCUPATION AND AGE

Sex	N	Occupation	N	Age range	N
Women	1.094	Professionals/Employees	768	18-37 years	534
		Homemakers	453	8-56 years	517
Men	468	Retired people	190	57-75 years	418
		Students	120	76-94 years	91
		Unemployed	28		

NOTE: The shortfall in cases from the total of 1562 participants in the occupation and age range variables is due to the omission of this data by respondents.

psychologist than a psychiatrist for the case of an emotional problem, and consider the former more useful than the latter in disaster or emergency situations, as the figures in Table 5 show.

With regard to the analysis by occupation, in all five groups considered (homemakers [“housewives”], retired people, unemployed, professionals/employees and students), scores showed favourable opinions about Psychology as a health profession, and this is the case for all the questionnaire items (see Table 6). Only in the case of question 6 (*Do you think the work of the psychiatrist and the psychologist is similar?*) were the percentages of favourable responses markedly lower, and this was the case across all five occupation groups examined.

The differences found by occupation in the responses to these questions were analyzed to reveal whether they were significant. For calculation of the total mean scores, a 0 was assigned to unfavourable responses about the health-related nature of Psychology (NO) and a 1 to favourable responses (YES). The response option DON’T KNOW was excluded due to the difficulty of correctly interpreting its meaning. In Table 10 it can be seen how, for the case of occupation, the differences between total mean scores are indeed significant, the highest scores (and therefore those most favourable to Psychology as a health profession) being found in the “homemakers” group, and the lowest in the “unemployed” group.

Table 7 shows interesting data on participants’ visits to psychologists and psychiatrists by occupation. Analysis of the data reveals that attention is sought from psychologists and psychiatrists in fairly equal measure among retired people and homemakers/housewives. For the case of professionals/employees, and even more so for that of students, there are considerable differences, with a marked preference in favour of psychologists.

As regards the preference for one type of professional or another in the case of a personal emotional problem and in that of a disaster situation (questions 13 and 14, see Table 8), percentages in favour of psychologists are clearly higher in all cases.

As far as the different age groups are concerned, percentages of responses favourable to Psychology as a health profession (see Table 9) are higher in all the groups, compared to an unfavourable position, and markedly so. It is only in questions 6 and 7 where more

moderate scores are found (*“Do you think the work of the psychiatrist and the psychologist is similar?”* and *“In your opinion, can a psychologist make expert assessment in the legal and forensic contexts?”*).

Analysis of the differences in total mean scores by age groups confirmed the absence of significant differences (see Table 10).

With regard to visits to a psychologist or psychiatrist by age group, in all cases more participants had seen psychologists than psychiatrists, the 38 to 56 group being that which had most sought psychological attention (30.2%). It is also important to note the results for the

item about solution to the problem in question, in which high percentages of affirmative responses were obtained – over 50% in all cases, for both psychologists and psychiatrists (see Table 11).

Finally, with regard to the preference for one type of professional or another in cases of personal emotional problems and disaster or emergency situations (questions 13 and 14, see Table 12), by age group, for both situations preferences were clearly on the side of psychologists, with figures of over 50% in all cases (except the 76-94 group) in favour of the use of psychological rather than psychiatric services.

TABLE 3
PERCENTAGES* OF FAVOURABLE AND UNFAVOURABLE RESPONSES FROM PARTICIPANTS TOWARDS PSYCHOLOGY AS A HEALTH PROFESSION, BY SEX

Items	Women (%)		Men (%)	
	YES	NO	YES	NO
1. In your opinion, can psychologists help to prevent health problems?	84.7	6.8	85.2	7.5
2. From your point of view, are psychologists qualified to diagnose mental problems?	73.0	10.7	74.5	11.3
3. Do you think the psychologist is a professional who should be present in all hospitals?	95.9	1.6	92.3	5.1
4. In your opinion, are psychologists qualified to treat emotional and mental problems that affect health?	86.0	5.7	83.9	7.1
5. Do you think Psychology can help to improve people's health?	91.3	3.4	90.8	4.1
6. Do you think the work of the psychiatrist and the psychologist is similar?	57.5	28.8	55.0	32.3
7. In your opinion, can a psychologist make expert assessment in the legal and forensic contexts?	67.1	10.9	68.7	13.9
8. Finally, do you think psychologists should be considered as health professionals?	93.7	3.6	89.5	5.8

* The shortfall for 100% corresponds to the option DON'T KNOW.

TABLE 4
PERCENTAGES OF VISITS TO PSYCHOLOGIST AND PSYCHIATRIST, BY SEX

Items	Women (%)		Men (%)	
	YES	NO	YES	NO
9. Have you ever been to see a psychologist?	27.3	72.7	22.9	77.1
10. Did they help you to solve your problem?	78.8	21.2	78.1	21.9
11. Have you ever been to see a psychiatrist?	16.5	83.5	13.3	86.7
12. Did they help you to solve your problem?	66.1	33.9	72.3	27.7

TABLE 5
PERCENTAGES* OF RESPONSES ON PREFERENCE FOR PROFESSIONALS IN GIVEN SITUATIONS, BY SEX

Items	Women (%)				Men (%)			
	Psychologist	Psychiatrist	Both	Neither	Psychologist	Psychiatrist	Both	Neither
13. If you had an emotional problem, who would you go to, a psychologist or a psychiatrist?	64.3	9.1	17.1	3.8	60.3	9.4	18.0	6.9
14. In disaster or emergency situations, who do you think is more useful: a psychologist or a psychiatrist?	55.4	9.9	29.0	1.8	58.9	9.4	24.8	2.4

* The shortfall for 100% corresponds to the option DON'T KNOW.

TABLE 6
PERCENTAGES* OF RESPONSES ON PSYCHOLOGY AS A HEALTH PROFESSION, BY OCCUPATION

Items	Homemakers (%)		Retired people (%)		Unemployed (%)		Professionals/Employees (%)		Students (%)	
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
1. In your opinion, can psychologists help to prevent health problems?	85.9	4.4	84.2	5.3	82.1	3.6	84.4	8.9	85.8	8.3
2. From your point of view, are psychologists qualified to diagnose mental problems?	72.2	9.5	70.0	10.5	78.6	17.9	74.0	11.3	80.8	10.8
3. Do you think the psychologist is a professional who should be present in all hospitals?	97.1	0.0	93.2	3.2	92.9	7.1	94.7	3.4	90.0	6.7
4. In your opinion, are psychologists qualified to treat emotional and mental problems that affect health?	83.4	4.4	83.7	5.8	85.7	7.1	87.0	6.9	86.7	5.8
5. Do you think Psychology can help to improve people's health?	91.6	2.2	88.4	4.7	96.4	3.6	91.9	3.9	87.5	5.0
6. Do you think the work of the psychiatrist and the psychologist is similar?	67.1	16.6	66.3	24.2	50.0	35.7	50.9	37.2	42.5	40.0
7. In your opinion, can a psychologist make expert assessment in the legal and forensic contexts?	63.4	8.2	55.8	15.8	57.1	21.4	73.8	11.7	65.8	15.8
8. Finally, do you think psychologists should be considered as health professionals?	95.8	2.2	93.2	4.7	96.4	3.6	91.0	5.1	86.7	5.8

* The shortfall for 100% corresponds to the option DON'T KNOW

TABLE 7
PERCENTAGES OF VISITS TO PSYCHOLOGIST AND PSYCHIATRIST, BY OCCUPATION

Items	Homemakers (%)		Retired people (%)		Unemployed (%)		Professionals/Employees (%)		Students (%)	
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
9. Have you ever been to see a psychologist?	24.8	75.2	17.4	82.6	28.6	71.4	29.1	70.9	24.2	75.8
10. Did they help you to solve your problem?	79.3	20.7	78.8	21.2	75.0	25.0	76.5	23.5	93.1	6.9
11. Have you ever been to see a psychiatrist?	19.0	81.0	16.8	83.2	21.4	78.6	14.6	85.4	4.2	95.8
12. Did they help you to solve your problem?	69.3	30.7	78.8	21.2	50.0	50.0	64.1	35.9	66.7	33.3

TABLE 8
PERCENTAGES* OF RESPONSES ON PREFERENCE FOR PROFESSIONALS IN GIVEN SITUATIONS, BY OCCUPATION

Items	Homemakers (%)				Retired people (%)				Unemployed (%)				Professionals/Employees (%)				Students (%)			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
13. If you had an emotional problem, who would you go to, a psychologist or a psychiatrist?	58.7	10.2	21.2	2.6	48.4	14.7	21.1	8.9	75.0	0	7.1	14.3	66.7	8.2	15.4	5.1	77.5	5.0	12.5	0.8
14. In disaster or emergency situations, who do you think is more useful: a psychologist or a psychiatrist?	56.3	9.9	25.8	1.8	51.6	14.2	26.8	4.2	53.6	17.9	25.0	0	59.4	7.0	28.9	1.8	46.7	17.5	29.2	0.8

1= Psychologist; 2= Psychiatrist; 3= Both; 4= Neither.
* The shortfall for 100% corresponds to the option DON'T KNOW.

TABLE 9
PERCENTAGES* OF FAVOURABLE AND UNFAVOURABLE RESPONSES TOWARDS PSYCHOLOGY AS A HEALTH PROFESSION, BY AGE GROUP

Items	18-37 years (%)		38-56 years (%)		57-75 years (%)		76-94 years (%)	
	YES	NO	YES	NO	YES	NO	YES	NO
1. In your opinion, can psychologists help to prevent health problems?	86.0	8.4	85.1	7.0	83.5	6.0	83.5	3.3
2. From your point of view, are psychologists qualified to diagnose mental problems?	78.5	10.1	72.9	9.7	69.4	14.6	65.9	5.5
3. Do you think the psychologist is a professional who should be present in all hospitals?	94.4	3.7	96.3	1.9	93.8	2.6	93.4	1.1
4. In your opinion, are psychologists qualified to treat emotional and mental problems that affect health?	87.1	6.2	86.3	5.6	83.0	6.9	81.3	4.4
5. Do you think Psychology can help to improve people's health?	91.0	3.9	93.4	2.9	89.0	4.5	89.0	1.1
6. Do you think the work of the psychiatrist and the psychologist is similar?	48.3	35.8	55.7	32.5	67.0	23.2	64.8	11.0
7. In your opinion, can a psychologist make expert assessment in the legal and forensic contexts?	69.9	12.5	75.4	9.3	58.4	14.6	51.6	8.8
8. Por último, ¿cree usted que el psicólogo debe ser considerado profesional sanitario?	89.3	6.0	95.4	2.3	93.3	4.3	90.1	4.4

* The shortfall for 100% corresponds to the option DON'T KNOW.

TABLE 10
TOTAL SCORES FOR PSYCHOLOGY AS A HEALTH PROFESSION, BY SEX,
OCCUPATION AND AGE GROUP

Sex (F=8,87)*				Occupation (F=4,77)**										Age range (F= 2,24)							
Women		Men		Homemakers		Retired people		Unemployed /Employees		Professionals		Students		1		2		3		4	
Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
7.24	1.13	6.95	1.50	7.44	0.97	7.25	1.33	6.60	2.06	7.03	1.31	7.05	1.20	7.02	1.23	7.22	1.25	7.17	1.36	7.54	0.84

*p<0.01; **p<0.001
SD = Standard deviation
Retd.: Retired people
Unempld. = Unemployed
1= 18-37 years; 2= 38-56 years; 3= 57-75 years; 4= 76-94 years.

TABLE 11
PERCENTAGES OF VISITS TO PSYCHOLOGIST AND PSYCHIATRIST,
BY AGE GROUP

Items	18-37 years (%)		38-56 years (%)		57-75 years (%)		76-94 years (%)	
	YES	NO	YES	NO	YES	NO	YES	NO
9. Have you ever been to see a psychologist?	26.8	73.2	30.2	69.8	22.8	77.2	11.0	89.0
10. Did they help you to solve your problem?	78.7	21.3	77.1	22.9	79.8	20.2	88.9	11.1
11. Have you ever been to see a psychiatrist?	9.4	90.6	20.1	79.9	19.6	80.4	5.5	94.5
12. Did they help you to solve your problem?	52.8	47.2	67.3	32.7	76.8	23.2	100	0

TABLE 12
PERCENTAGES* OF RESPONSES ON PREFERENCE FOR PROFESSIONALS
IN GIVEN SITUATIONS, BY AGE GROUP

Items	18-37 years (%)				38-56 years (%)				57-75 years (%)				76-94 years (%)			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
13. If you had an emotional problem, who would you go to, a psychologist or a psychiatrist?	75.9	4.9	11.3	4.9	61.3	9.9	19.5	3.7	54.5	12.2	20.1	6.9	37.4	17.6	28.6	6.6
14. In disaster or emergency situations, who do you think is more useful: a psychologist or a psychiatrist?	55.6	13.1	26.0	1.1	60.0	5.6	29.8	1.7	56.9	10.8	24.2	3.1	38.5	8.8	4	

1= Psychologist; 2= Psychiatrist; 3= Both; 4= Neither.
* The shortfall for 100% corresponds to the option DON'T KNOW.

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THE DEVELOPMENT OF A FIELD: EXAMINING THE GROWTH AND ACCEPTANCE OF CLINICAL HEALTH PSYCHOLOGY

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Clinical health psychology has traveled a long road in becoming a respected field in both psychology as well as the medical field as a whole. This paper examines the growth of clinical health psychology in the United States and throughout the world and it explores the current contributions clinical health psychology has made to facilitate a better understanding of the role of behavior and psychological processes in medical health and individual well being. Current empirically supported interventions such as smoking cessation interventions and chronic pain interventions are examined.

La Psicología clínica de la salud ha recorrido un largo camino hasta convertirse en un campo respetado tanto en la psicología como en todo el ámbito médico. Este trabajo examina el desarrollo de la psicología clínica de la salud en los Estados Unidos y en el mundo, y explora las actuales contribuciones que la psicología ha realizado para facilitar una mejor comprensión del papel que tiene la conducta y los procesos psicológicos en la salud física y en el bienestar individual. Se examinan las intervenciones actuales, con base empírica, tales como el abandono del tabaco y el dolor crónico.

Peptic ulcers, inflammatory bowel disease, colitis, migraine headaches, chronic pain, essential hypertension, asthmatic wheezing, coronary heart disease, obesity—in the past few decades, research has shown that each of these medical disorders have psychological correlates. The field of clinical health psychology has developed to advance the understanding of the role that emotional well-being and mental health plays in physical health. More specifically, as defined by one of the pioneers in the field of clinical health psychology, Joseph Matarazzo, clinical health psychology is the “aggregate of the specific educational, scientific, and professional contributions of the discipline of psychology to the promotion and maintenance of health, the prevention and treatment of illness, and the identification of etiologic and diagnostic correlates of health, illness, and related dysfunctions” (Matarazzo, 1980, p. 815).

In the United States the field of clinical health psychology developed to address the commonly held misconception that permeated the medical field, that the mind and body were unrelated entities. For many years, the field of medicine viewed the mind and body as mutually exclusive, and the correspondence and mutual dependency of mental and physical health was largely overlooked. This

mind-body dualism was fueled both by the medical field and the field of psychology. While the role of the medical field had been well established for centuries, psychology was still earning its role as an independent discipline. Thus, the onus was on the field of psychology to demonstrate its value for influencing emotional and physical well-being.

The emphasis on mental health heightened after World War II when the presence of psychologists in the medical field became concentrated on treatment and prevention of post-war psychiatric conditions, including Post-Traumatic Stress Disorder (PTSD). The role of psychological factors and stress on medical health was not emphasized at this point (DeAngelis, 1992). Post World War II a strict separation of phenomenon that were assumed to be related to the mind and those attributed to the body was maintained, with medicine focusing on physical health and psychology specializing in mental health. Despite the continually fueled misconception of a dualism between mind and body, since its development as a separate field of study, North American psychology has played a central role in efforts to understand medical and physical health.

HISTORY OF CLINICAL HEALTH PSYCHOLOGY IN THE UNITED STATES

Since the early twentieth century, psychologists have been involved in behavioral research related to physical health, the application of psychological concepts to

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health problems, and teaching principles of psychology to medical health providers. The first acknowledged contribution of psychology to the physical health field was in the teaching at medical schools. Psychologists taught courses in Behavioral Science to medical students, emphasizing ways of understanding “illness” behavior. While the number of pioneering psychologists was small in the early medical school setting, they contributed to a growing recognition that psychological factors played a vital role in physical health (Stone, 1979).

Despite the important role psychology held in providing instruction regarding behavioral influences in health care, for many the interplay between psychology and medical health remained unclear. Initially, the field of physiological psychology was given some credence when the interaction of psychology and medical health was considered, with little regard given to lifestyle factors and behavior (Belar, 1995). Several factors, however, have led to a greater appreciation of psychology and medical health. Many of the factors surround the growth of behavioral medicine and an awareness of the shortcomings of the biomedical model, which resulted in an effort to combine biomedical and behavioral knowledge to provide a better understanding of disease.

Clinical health psychology, as a branch of psychology, has had to evolve into an independent discipline in its own right, with a defined area of study and particular methods of both research and intervention. As clinical psychology became more and better defined as a discipline, however, it began to branch out into increasingly specific sub-disciplines. Clinical psychology initially spawned the field of behavioral medicine, which developed ties with the medical fields of psychosomatic medicine, neurology, and family practice. Subsequently, Clinical Neuropsychology evolved into a separate and independent field of study and finally, Clinical Health Psychology has become identified as a specialized sub-field of clinical psychology. With this growth has evolved an increasingly precise terminology to describe relationships between the physical and the psychosocial, and the scope of the practice has evolved to support the work of health psychologists, neuropsychologists, and specialists in behavioral medicine within medical health and medical school settings. Each of these fields lends perspective and expertise to the understanding of the interaction between mind and body, yet each has had a distinct meaning.

Clinical Health Psychology has evolved as a separate field within applied psychology, beginning with a semi-

nal article by William Schofield in 1969. The article, entitled “The Role of Psychology in the Delivery of Health Care”, presented the idea that mental health should not be a separate entity from physical health, but that both must be conceptualized under the vast rubric of the health field. Schofield analyzed psychological abstracts from the years 1966-1967 to determine how much research was done in the health fields. He confirmed that psychology focused on primarily three things: psychotherapy, schizophrenia, and mental retardation. Schofield encouraged psychologists to expand their vision to include more physical health related venues. He emphasized the necessity for psychologists to get more involved with physical illnesses since psychological factors played a major role in the etiology of illness, cooperation with treatment, and response to treatment.

After Schofield’s article, the field of clinical health psychology continued to expand. His paper prompted the American Psychological Association to develop a Task Force on Health Research in 1973. Schofield headed this Task Force which focused on the role of psychology on health issues outside of mental health (Weiss, 2000). The task force determined that the field of psychology could contribute to the understanding of the interface between behavioral variables and physical illness (Weiss, 2000).

Another landmark in the history of health psychology are to be found in the work of Neal Miller. Miller introduced the use of biofeedback, a set of procedures that neatly demonstrated the interaction between the mind and the body. Miller described biofeedback as: “Feedback provided by a device that provides prompt measurement of a biological function,” (Miller, 1978). Biofeedback is a form of self-regulation in which a person is given insight regarding how they can control certain visceral responses such as blood pressure, skeletal responses, and heart rate. In addition to physical ailments, biofeedback is used to treat psychological disorders such as attention deficit and hyperactivity, autism, posttraumatic stress, sexual dysfunctions, and panic disorder to name a few. Biofeedback illustrates how insight into somatic activities can influence one’s ability to control those activities which then gives one control over both physical and mental health problems.

As interest in the psychological and psychosocial aspects of health grew, the medical field was growing increasingly dissatisfied with the biomedical approach to understanding health and illness (Belar, 1995). Medical professionals recognized that social, behavioral, environmental and bio-



logical factors all played a role in the etiology of medical diseases. In examining the medical issues that were affecting the population, researchers noted that behavior played a large role in the manifestation and perpetuation of certain illnesses. Recognizing the role that behavior plays in society's most significant health problems, "...challenges the traditional medical model, which views disease as a purely biological phenomenon, that is, the product of specific agents or pathogens and bodily dysfunction" (Krantz, Grunberg, & Gaum, 1985, p. 351). Concurrently, in this atmosphere of change, Joseph Matarazzo, the first president of the division of health psychology offered his vision of health psychology.

BEHAVIORAL INFLUENCES ON HEALTH

How behavior influences health and disease "...can be grouped into three broad categories: direct psychophysiological effects, health impairing habits and lifestyles, and reaction to illness and the sick role" (Krantz, Grunberg, & Gaum, 1985, p. 352). The direct psychophysiological effects involve biological changes that occur as a result of psychosocial issues. An example of this would be stress-induced illnesses. Another way that the behavior-illness interface can be examined is through the impact of health impairing habits and behaviors. Cigarette smoking, poor diets, and lack of exercise are all behaviors and habits that lead to health impairment. Finally, how an individual reacts to illness and their view of the sick role is the final category. Many individuals may delay seeking treatment for certain symptoms, in effect, they exacerbate the symptoms. Part of their hesitance may be a function of what health psychologists term "illness behavior" or how a person reacts to physical illness as well as to being sick (Krantz, et al., 1985).

Several other factors also influenced the development of clinical health psychology as a field. Included in this process were the growing interest in quality of life; a shift in focus onto chronic disease rather than infectious diseases; and a change in psychology that reflected an interest in disease and its correlates to behavior (Belar, 1995).

In 1978, the American Psychological Association (APA) recognized Health Psychology as a field under Division 38. Along with the formation of Division 38, a number of journals related to health psychology have emerged. Health Psychology, Psychology and Health, the Journal of Health Psychology, the Journal of Behavioral Medicine, and the International Journal of Behavioral Medicine

were among the journals that provided avenues for communication and channels for research (Weiss, 2000). In the mid 1980's, the American Board of Health Psychology was founded to provide board certification to health psychologists. Then in 1993, health psychologists gained full affiliation status with the American Board of Professional Psychology (ABPP), the oldest national credentialing body for professional psychologists (Belar, 1995). Health psychology has begun to gain acceptance throughout the world. In 1993 the first International Association of Health Psychology was established and their inaugural meeting was held in Tokyo in that same year (Weiss, 2000).

Table 1
The History of Clinical Health Psychology

YEAR	Historical Events in Clinical Health Psychology in the United States
Early 1900s	Psychologists provide instruction at medical schools on human behavior
1969	William Schofield writes article discussing the relationship between mental health and physical health
Late 1960s	Dissatisfaction with the medical model explanations of disease and illness
1973	Schofield's article prompts the American Psychological Association to develop the Health Research Task Force
1978	Neal Miller introduces the concept of biofeedback
1978	American Psychological Association (APA) recognizes Health Psychology as a field and develops Division 38
1980	Joseph Matarazzo defines the scope of clinical health psychology
Middle 1980s	American Board of Health Psychology founded to provide board certification to health psychologists
1993	Clinical health psychologists gained full affiliation status with the oldest national credentialing body for professional psychologists, the American Board of Professional Psychology (ABPP)
1993	First International Association of Health Psychology was established and the inaugural meeting held in Tokyo
2002	Council of representatives of the American Psychological Association Division of Health Psychology expands mission statement



CURRENT ROLE OF CLINICAL HEALTH PSYCHOLOGY IN THE UNITED STATES

Today the concepts of health psychology are based on the biopsychosocial model. This model bases its theoretical foundation on the premise that physical health, illness and disease results from the interaction of biological characteristics, behavioral factors, and social conditions (APA Health Psychology website; Suls & Ruthman, 2004). Moreover, disease can be viewed as having multiple causes and each of these causes must be inspected in the context of determining a correct diagnosis; consequently, treatment and intervention must take into account all the contributing factors of the disease. The biopsychosocial model has effectively replaced the biomedical view of disease which states that disease is primarily a result of biological factors. The model provides a more holistic view of disease by integrating various aspects of a person's life into the understanding and treatment of illness. Health psychology interventions work towards facilitating an individual's understanding of how behavior and mental health play a role in medical well being.

TYPES OF INTERVENTIONS

Interventions in clinical health psychology serve several different roles. They have been designed to help individuals decrease risky behaviors, for example interventions that help individuals decrease substance abuse and quit smoking; they serve to increase behaviors that maintain healthy living and maintain a higher quality of life. Health psychologists have played an integral in developing smoking cessation programs and programs that help people lose weight and maintain a healthier lifestyle.

Interventions in clinical health psychology have also been designed to provide services to patients and the families of patients that have chronic illnesses such as cancer, HIV, AIDS, diabetes, stroke survivors, Alzheimer's disease, and Crohn's disease. The interventions also teaches patients skills that can help them cope with chronic pain, such as headaches, spinal cord injuries, and back pain. Additionally, health psychologists provide interventions to cardiovascular patients to help them develop skills that would allow them to live a better quality of life. Health psychology interventions have also been designed to help individuals suffering from problems associated with health that can be found in both the Diagnostic and Statistical Manual of Mental Disorders 4th edition, Text Revision and the International Classifica-

tion of Diseases, 10th edition. Disorders such as bulimia nervosa and anorexia nervosa fit this category (Compas, Haaga, Keefe, Leitenberg, & Williams, 1998).

Health psychology interventions have been shown to improve individuals' symptoms and quality of life (Keefe & Blumenthal, 2004), additionally they have improved the ability to help patients develop the coping skills that are needed to deal with traumatic surgeries and medical interventions (Nicassio, Meyerowitz, Kerns, 2004). The interventions "...have addressed a range of objectives, including reducing stress, enhancing quality of life, providing support, bolstering immune system functioning, fostering adherence to provider recommendations, reducing disability, and increasing education and awareness" (Nicassio, Meyerowitz, & Kerns, 2004, p. 132).

Efficacy of Health Psychology Interventions

The several fields of applied psychology, as a group, have been increasingly focused on developing psychological treatments and interventions that have been empirically supported. In 1995, the Clinical Psychology Division of the American Psychological Association developed the Task Force on Promotion on Dissemination of Psychological Procedures. Researchers propose that identifying treatments that are empirically supported will serve to advance the field and can further establish psychological interventions as beneficial and effective treatment approached. In light of the current environment, clinicians have been encouraged to determine the best method of treatment for their clients, and have been challenged to find evidenced-based interventions that meet their patients' needs. In a field that must meet the demands of rapid growth and advances in medicine and health care needs, it has been necessary for the field of clinical health psychology to provide evidence that their interventions are effective and evidence-based.

Since the advent of the Task Force on the Identification and Dissemination of Empirically Validated Treatments, initiated by the Division of Clinical Psychology (American Psychological Association), investigators have reconsidered the interventions on which research has been conducted, evaluating them by criteria that may conventionally be considered to be necessary to be considered empirically supported. According to these currently accepted criteria, "Each study must have used random assignment to treatment conditions; be manual guided, or...be very clearly described; standardized and replicated by different investigators" (Compas, Haaga, Keefe, Leitenberg, & Williams, 1998, p. 90). Additional-



ly, interventions must show that they are significantly more effective than designs in which one of the following three conditions were met: no treatment was provided, placebo pills were provided, or an equally established treatment was provided (Chambless, & Ollendick, 2001; Compas, Haaga, Keefe, Leitenberg, & Williams, 1998).

Currently, research designs such as randomized controlled trials (RCTs) have been utilized to demonstrate the advantages of health psychology-based interventions; the field also lends itself to research based on systematic but less tightly controlled observational research. These methods have contributed significantly to providing a basis to demonstrate the effectiveness of health psychology interventions. Using the criteria delineated by Chambless, several different interventions have been shown to be effective. Compas, et al. (1998), reviewed literature spanning several years that examined different health psychology interventions, including cigarette smoking cessation interventions; interventions that address managing chronic pain; interventions that focus on the treatment of individuals with cancer; and eating disorders interventions.

SMOKING CESSATION INTERVENTIONS

Compas et al. (1998), reviewed studies that examined the efficacy of behavioral therapy alone, as well as behavioral therapy and each one of the following as a conjunctive treatment method, nicotine gum and physical exercise. Smoking cessation interventions that used physical exercise alone was also reviewed. The review of the data demonstrated the effectiveness of behavioral approaches to smoking cessation. Review of interventions that teach the management of chronic pain also indicated the effectiveness of psychological interventions. In this review, Compas et al. (1998) found that the psychological interventions that were most effective in the treatment of chronic pain included: biofeedback training, cognitive behavior therapy and operant-behavioral therapy.

CANCER AND CHRONIC PAIN INTERVENTIONS

In the United States and around the world cancer is highly prevalent. Every year in the United States, 1 million new cases are reported and the World Health Organization lists cancer as one of the leading causes of death. Research has also indicated that there are several correlated psychological issues that are diagnosable in patients with cancer, such as depressive disorders and anxiety related disorders (Compas et al., 1998). Conse-

quently, psychological interventions have been found to be useful in helping patients suffering from cancer and the comorbid psychological disorders that these patients experience.

Another area in which Compas et al., (1998) examined the efficacy of health psychology interventions was with patients experiencing chronic pain. From rheumatoid arthritis to migraine headaches to lower back injuries, chronic pain affects a large population of individuals throughout the world. In the United States it accounts for most visits to orthopedic surgeons and neurosurgeons, and in many cases causes such severe disability that an individual is unable to function in the work force. While the biomedical model has long been the guide for the treatment of chronic pain conditions, it has failed to account for several factors that have been observed: "(a) Patients having the same level of underlying disease activity often report very different levels of pain; (b) pain can be present even when there is no clear-cut evidence of tissue damage, and (c) pain may persist long after a reasonable time for healing has passed" (Compas, et al., 1998, p. 93).

The shortcomings in traditional, medical approaches to the treatment of pain has allowed health psychology to successfully insert itself as an accepted supportive or even primary intervention. With the use of operant behavior therapy approaches, and cognitive behavior therapy approaches, patients have learned to successfully cope and manage pain symptoms. One study noted that patients with rheumatoid arthritis reported significant decreases in pain symptoms after using cognitive behavioral techniques to help them cope with their pain symptoms.

Health Psychology Interventions in Pediatric Settings

Health psychology interventions have also been found to effective in pediatric populations. Health psychology interventions have been documented to be effective in a very important aspect of pediatric care, treatment adherence. Adherence is defined as "...the extent to which a person's behavior (in terms of medications, following diets, or executing lifestyle changes) coincides with medical or health advice" (Lemanek, Camps & Chung, 2001, p. 254). In pediatric populations, as well as adult populations, nonadherence to treatment regimens is prevalent. Several factors contribute to nonadherence, including disease characteristics, the individual's view of the sick role, as well as other individual and family characteristics.



Behavioral strategies and organizational strategies have been found to be useful in helping children and families adhere to treatment regimens. Additionally, clinical interventions that are focused towards children and families that address concerns and strategies regarding treatment have been found to be helpful in increasing adherence to treatment (Lemanek, Camps & Chung, 2001).

HEALTH PSYCHOLOGY AND DISASTER

The role of health psychology does not end in medical settings however. The field lends itself to providing public health service, and in a time in which environmental stressors, such as terrorism and disaster are of public interest, health psychology is responsible for meeting the needs of the public. Health psychology is important to address both at the individual and community level. In times of crisis, both at the individual level and at the community level, the need for stability is paramount for the individual in order for them to continue functioning at an appropriate level including physical and emotional needs. Physical needs, such as medical health, clothing, food and shelter are primarily the needs that are met by crisis workers; in recent times however mental health has been recognized as one of the factors that contribute to an individual's overall well being during critical times. More importantly, it was recognized as one of the needs that remained overwhelmingly unmet (Morgan, 1995).

Examining the impact of traumatic stress can illustrate this concept. The effect of crisis and critical incidents on an individual's mental health has been well-publicized. In response to experiencing trauma, an individual may have one of many short term or long term psychopathological reactions. Traumatic stress resulting from events such as car accidents, rape, or terrorist acts puts an enormous strain on the medical system in the United States and the world over.

In any one year, over 5.2 million people suffer from Post Traumatic Stress Disorder (NIMH website). These individuals often utilize the emergency medical system to address concerns stemming from associated symptoms (such as panic attacks) and many are so disabled by the disease that they become unable to work. Traumatic stress disorders therefore do not only result in the suffering of an individual, but result in a strain on a variety of resources within a community.

To address the health of a community, education can be a powerful form of prevention. The Palo Alto Medical Reserve Corps (PAMRC) in California exemplifies how in-

tegral psychological health education can be to a public education program aimed at improving community health. In addition to instructing licensed mental health professionals in empirically derived early trauma interventions, the PAMRC invests considerable effort in working with the local police department, city government, hospitals and universities to educate the public about the causes, symptoms, and available treatment options associated with traumatic stress.

The educated public is then able to identify the signs and symptoms of traumatic stress in their loved ones, co-workers, neighbors and themselves and is able to direct the sufferer towards appropriate treatment. Many hope that this type of education will decrease the strains traumatic stress can put on the community by treating people suffering from traumatic stress earlier and more effectively, thereby decreasing the duration of their suffering and the duration of impact on the medical system and community.

FUTURE DIRECTIONS IN CLINICAL HEALTH PSYCHOLOGY

Psychology now enjoys an important role in the field of physical health. It is an accepted fact today that the etiology of many diseases and illnesses are related to behavior. In fact the leading causes of death in the United States: heart disease, cancer, and stroke, all have behavioral components. Currently the role of psychologists in medical settings has expanded beyond the psychiatric domain and beyond providing explanations of human behavior. Many subspecialties within the medical field, including surgery, internal medicine, pediatrics, obstetrics and gynecology, rehabilitation, cardiology, anesthesiology, and dentistry, recognizes the influence of psychology in the etiology, diagnosis and treatment of medical disease. The most common specialties within health psychology in the medical domain include clinical health psychology, rehabilitation psychology, and neuropsychology. There are an estimated 3,000 psychologists that are currently employed in medical schools (DeAngelis, 1992).

It is now commonly acknowledged that health and behavior are invariably and inextricably linked. Health psychology's contributions have been instrumental in this acknowledgement. This field will continue to grow as the concern and attention of the health care system expands. The era of believing that mind and body are unrelated ships passing in the night has finally met its end. Science



today readily acknowledges that mind and body are equally involved in the prevention, etiology, and treatment of disease.

As the medical field and medical research continues to grow, the onus is on health psychology and health psychology interventions to continue to grow as well. In 2002, the American Psychological Association's Council of Representatives voted to expand the mission statement of the division of health psychology (Division 38). The mission statement now states that advancements in the field of psychology as a whole must include "...promoting health, education, and human welfare" (Smith & Suls, 2004, p. 115).

Currently, psychologists play a large role in determining the best recipients of organ transplants, and as the field of genetic research continues to grow, health psychology can also play an integral role, providing interventions and undertaking research. As an established field in psychology, health psychology must now ensure that the interventions and research performed reaches the populations that are in most need of its interventions. Professional groups and patients alike must be targeted, and the field must ensure that the role of health psychology in the etiology and treatment of disease continues to be understood.

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THE ROLE OF PSYCHOLOGY IN THE DEVELOPMENT OF EMPIRICALLY SUPPORTED TREATMENTS FOR ADULT BEHAVIOR DISORDERS

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The goal of this article was to examine the role of psychologists in the development and evaluation of empirically supported cognitive and social-behavioral treatments for adult behaviour disorders. One hundred seventeen recently published controlled clinical trial studies were identified that evaluated the effectiveness of cognitive-behavioral and psychosocial treatment for major depressive, bipolar, alcohol, schizophrenia, and anxiety disorders. Sixty-two percent of the first authors of these studies were PhDs; twenty-two percent were MDs. Limitations of inferences from this study were noted.

El objetivo de este artículo fue examinar el papel de los psicólogos en el desarrollo y evaluación de tratamientos socio-conductuales y cognitivos apoyados empíricamente para los trastornos conductuales en adultos. Se han identificados 117 estudios recientemente publicados, con ensayos clínicos controlados, que evaluaban la efectividad del tratamiento cognitivo-conductual y psicossocial para los trastornos depresivo mayor, bipolar, por uso de alcohol, esquizofrenia y de ansiedad. El 62% de los primeros autores de estos estudios eran PSD (Doctores en Psicología); el 22% eran MDs (Doctores en Medicina). Se advierten algunas limitaciones a las inferencias que se pueden derivar de este estudio.

Adult behavior disorders, such as alcoholism, depression, anxiety, schizophrenia and bipolar disorders, have serious personal and social consequences. They can be associated with personal distress, impairment of occupational and educational functioning, work absences, financial mismanagement, abuse and neglect of children, medical problems and poor physical health, high mental and medical health-care costs, impaired social and self-care functioning, high demands for behavioral services, frequent hospitalization, marital and family conflict, distress and dissolution, and violence (American Psychiatric Association (APA), 1994; Hersen & Bellack, 2000). Prevalence rates for some adult behavior disorders include 2-12% for Major Depressive Disorders, 14% for Alcohol Dependence and Abuse, and 3-13% for various anxiety disorders (APA, 1994). These data indicate that hundreds of millions of adults worldwide will suffer from mental illness at some point in their lives.

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Because of the impairment and distress associated with these behavior disorders, hundreds of controlled research studies aimed at developing effective treatments have been conducted in the last 20 years. These treatment studies have targeted several sets of causal factors presumed to underlie behavior disorders: (a) biological mechanisms (neurotransmitter production and uptake, genetic factors, brain structure and activity), (b) cognitions (e.g., attributions, beliefs, automatic thoughts) (c) social-behavioral factors (e.g., responses of family members and health-care professionals and environmental events, stressors, and contexts), and (d) learning (reinforcement schedules, conditional emotional responses).

For many adult behavior disorders, controlled treatment studies have led to improved treatment outcomes when treatments are based on biological, cognitive and psychosocial models (for reviews of treatment outcomes, see Arnou and Constantino, 2003; Berglund, Thelander and Jonsson, 2003; Gutierrez and Scott, 2004; Rodebaugh, Holaway and Heimberg, 2004; Tarrier and Wykes, 2004).



Many disciplines, such as social work, rehabilitation, neurology, internal medicine, genetics, education, and basic biological science have made important contributions to the development and implementation of treatments for adult behavior disorders. The goal of this article is to examine the role of psychology in the development of empirically supported cognitive and social-behavioral treatments for adult behavior disorders.

While medically and biologically trained professionals would be expected to play leading roles in the development of pharmacological and other biologically based treatments, psychologists would be expected to play a leading role in the development of empirically supported, evidence-based cognitive-behavioral and psychosocial treatments. The training of psychologists in quantitative methods, research design, psychopathology, clinical assessment, and psychosocial treatments provides a strong foundation for the design and evaluation of empirically supported treatments.

For example, a doctoral degree in clinical psychology accredited by the American Psychological Association requires extensive post-bachelors training in research and practice. A PhD from an APA-accredited program requires course-work in research design, statistics, psychopathology, core areas of psychology (e.g., biological, cognitive, social, developmental, learning bases), and treatment research; conceptual and practical training in psychological assessment; two years of pre-doctoral clinical practicum training; close mentoring and supervision by doctoral-level psychologists; a one-year clinical internship; a doctoral dissertation and often a masters thesis. The median length of time for doctoral training is 6.5 years following an undergraduate degree. Many states require an additional two years of supervised clinical experience in order to obtain a license to practice as a psychologist (see accreditation criteria at apa.org).

METHOD

To estimate the role of psychologists in the development

and evaluation of cognitive-behavioral and psychosocial treatments for adult behavior disorders we examined the authorship of all recently published clinical trial studies that evaluated the effectiveness of nonmedical treatments—cognitive, behavioral, family, or other psychosocial therapies, for five adult behavior disorders: major depressive disorders, anxiety disorders, alcoholism, bipolar disorders, and schizophrenia. Our focus was on recently published studies but because the rate of controlled treatment studies differs across disorders, the time span of published studies included in this review differs across disorders.

INCLUSION CRITERIA

To be included in this report, the treatment study must have: (a) focused on the treatment of one of the adult behavior disorders noted above (major depression, anxiety, alcohol abuse or dependence, schizophrenia, bipolar), (b) included control groups (e.g., placebo, waiting list, standard or comparative treatment), and (c) used pre- and post-treatment assessments.

SEARCH AND AUTHOR IDENTIFICATION METHODS

Articles were located through multiple computer literature searches (e.g., psychlit, medline) using basic terms such as “depression/treatment,” “clinical trial,” “treatment outcome”. All articles identified in this search were then examined to determine if they met inclusion criteria. We excluded single case studies.¹

For articles that met inclusion criteria, we then identified the first author, and conducted additional web-based searches to identify the degree of the author (PhD, MD, or combination MD and PhD). In most cases it was not possible to identify the specific subspecialty (e.g., clinical vs. counseling psychologist) of the author.

RESULTS²

Results are summarized in Table 1 and described below.

¹ Well-controlled single case studies, particularly when they involve systematic manipulations (e.g., ABAB, multiple baseline designs) are valuable research strategies for investigating the effects of interventions with persons with behavior disorders. Thousands have been conducted and almost all have been done with professionals trained in psychology, education, or rehabilitation.

² Lists of the publications included in this article are available from the first author.



Psychosocial Treatments of Adult Anxiety Disorders

We identified 27 controlled clinical trial studies published since 2000. Of the first authors of these studies, 14 (52%) were PhDs, 8 (30%) MDs, 1 (4%) MD & PhD, and 4 (16%) were doctoral students in psychology.

Psychosocial Treatments of Adult Alcohol Dependence and Abuse

We identified 24 controlled clinical trial studies published since 1999. Of the first authors of these studies, 18 (75%) were PhDs, 4 (17%) were MDs, 1 was a “behavioral scientist” and another could not be identified.

Psychosocial Treatments of Adult Schizophrenia

We identified 14 controlled clinical trial studies published since 2000. Of the first authors of these studies 13 (93%) were either PhDs or ClinPsyD (a doctoral degree in Great Britain similar to a PhD), the degree of one author could not be identified.

Psychosocial Treatments of Adult Bipolar Disorders

We identified 24 controlled clinical trial studies published since 1990. Of the first authors of these studies, 12 (50%) were PhDs, 11 (46%) were MDs and 1 was a “research assistant”.

Psychosocial Treatments of Adult Depression

We identified 30 controlled clinical trial studies published since 1995. Of the first author of these studies, 17 (57%) were PhDs, 12 (40%) were MDs and one was a MSW (Masters in Social Work).

**TABLE 1
DEGREES OF FIRST AUTHORS OF CONTROLLED
TREATMENT OUTCOME STUDIES FOR SELECTED ADULT
BEHAVIOR DISORDERS**

Disorder	# of Studies	% PhD	% MD	%Other
Anxiety	37	52	30	18
Alcohol	24	75	17	8
Schizophrenia	14	93	0	7
Bipolar	24	50	46	4
Depression	30	57	40	3
Total/Mean %	119	62 (n=74)	29 (n=35)	8 (n=10)

1= Includes graduate students, social workers, authors with multiple degrees, and authors whose degree or profession could not be identified

SUMMARY AND DISCUSSION

As expected, based on training and background, psychologists have played a major role in the evaluation of psychosocial treatments for this selected set of adult behavior disorders. Sixty two percent of the first authors of 117 controlled clinical trial identified in this review were PhDs. These data are consistent with expectations based on the strong focus on both clinical and research skills of doctoral-level training of psychologists.

Several limitations in inferences from these data should be noted: (a) controlled treatment studies could have been missed in the literature search, (b) we searched only for recently published studies (from the last 5-10 years), (c) there were several studies for which the professional identity of the first author could not be identified, and (d) the subprofession of the PhDs and MDs could not be ascertained.

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