

Back (again) to the future



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ZACHARIOU on what our members think is in store for psychology in the next 25 years

TO mark the centenary of The British Psychological Society, we have conducted a Delphi study (see box below) on behalf of *The Psychologist*. We will make some comparisons with a similar exercise conducted in 1984 by the first author in collaboration with Mark Haggard (Haggard

& Weinreich-Haste, 1986). However, that study was confined to Society Fellows, whereas the present one draws a wider sample.

As a first step in the present study we invited views from a sample of Fellows and members of the Society's committees, people likely to be both well informed about current developments in psychology and strongly identified with the field. We drew from both academic and professional domains (in contrast with the 1984 study, which was skewed to older and more 'academic' psychologists).

The target year was 2025 (in the 1984 study it was 2010). Respondents were invited to write freely on the discipline and application of psychology, and on the future of the Society. Responses varied from several pages of richly considered typescript, to hand-written notes in the margin of the original letter. From this material, we extracted 126 usable 'predictions'. These were narrowed down by three independent raters to 38 representative items – about the future of the discipline, about waxing and waning topics in the application of psychology, about professional groupings and organisations, the role and status of psychology in influencing wider society, and specific issues around the role of the Society.

The next step was to get likelihood ratings on the 38 items. The items were presented with a 5-point Likert scale, from 1 = strongly agree to 5 = strongly disagree, and the rubric was *How likely do you consider that the 'prediction' will be fulfilled by 2025?*

The mailing went to 2200 members,

targeting all Fellows (695), 250 members of the Division of Clinical Psychology, and 100 members from each of the Educational & Child, Occupational, Counselling, and Health Psychology Divisions, and 855 randomly chosen members. A total of 817 were returned, a 37 per cent response rate.

Analysis

First, we identified the five 'most' and five 'least' likely predictions (see boxes opposite). Second, we undertook a factor analysis to organise the material thematically. We conducted a principal components factor analysis of 24 items, reduced from the original 38 after the removal of idiosyncratic outliers. Varimax rotation was used and factors with eigenvalues greater than 1 extracted. This yielded four main themes: *optimism*, *fragmentation*, *reputation* and *biological basis for psychology* (see box on p.33).

Optimism This factor accounted for 10.7 per cent of the variance. It incorporates positive beliefs about the professional role, influence and status of psychologists, and scientific and methodological developments.

The factor reflects a predicted incursion of psychologists into the domain of the medical profession. The increasing influence of psychologists also arises from their improved 'real-world' skills, and there is optimism about the future of psychology as a science (particularly more 'social' domains).

Fragmentation The second factor, in contrast, grouped pessimistic concerns about the fragmentation of the profession

THE DELPHI TECHNIQUE

Exercises in prediction are, of course, not really about forecasting. They capture current preoccupations – or, perhaps cynically, immediate past preoccupations. They reflect the hopes or fears of the predictors. Consensus-identifying methods like Delphi provide a composite of those hopes, fears and preoccupations.

The Delphi technique was originally devised by Helmer and Dalkey of the RAND Corporation thirty years ago (Dalkey, 1972; Helmer, 1972). It elicits open-ended predictions from individuals in a selected subsample, and feeds these back to a larger sample in order to arrive at quantifiable conclusions.

To capture the subtleties of the original responses, quite complex material is selected for evaluation. A Delphi is not formulated like a conventional questionnaire that strips statements to a single concept. We strove to balance the integrity of the original quotes while minimising ambiguity; so some items contained qualifiers, and some retained their original evaluative connotation.

and the Society, and this accounted for 9.4 per cent of the variance.

The prediction that educational psychology will be subsumed under clinical was also part of this factor, and fragmentation was also reflected in the belief that undergraduate courses would become more specialised.

Reputation The third factor (accounting for 9.0 per cent of the variance) also groups pessimistic items, but about the reputation of psychologists and the discipline. This factor forms a cluster of predictions that were largely rejected by the sample; it contained most of the items that were deemed 'least likely', but also three additional items that are of interest in the configuration of psychology's status as a science.

It is of interest that, whereas in the *optimism* factor the increase in social and qualitative approaches was linked to enhancing the scientific status of psychology, in *reputation*, by contrast, the association undermines that status.

Biological basis for psychology The fourth factor, accounting for 8.8 per cent of the variance, related to increasing emphasis on the biological basis of psychology, and its role in defining the 'science' of psychology.

What can we make of these main themes?

These four factors separate out distinct configurations within a general concern for the reputation and effectiveness of psychologists in influencing policy, and about the future nature of psychology as a science. In the *optimism* cluster this takes the form of a significant role for psychologists in public life, especially in relation to fields traditionally occupied by medicine, and goes alongside a greater concern for more naturalistic and qualitative methodologies.

The pessimism reflected in *fragmentation* and *reputation* constitutes two distinct kinds of threat to the discipline and the profession. In *fragmentation* this is about the division between academic and professional worlds – and anxieties about fragmentation of practice. It has implications for the future role of the Society. *Reputation*, in contrast, is about anxieties relating to the discipline both as a profession and as a field of science. This is more in the domain of what it means to be a psychologist and to be a psychological scientist, and of threats to the future credibility of both.

WHAT WILL HAPPEN

The 'most likely' future developments were split between professional and academic domains. The most consensual was that *A doctorate will become the norm for Chartered status* ($M = 1.75$; $SD = 0.94$). While this is in line with current professional developments in some areas, it has enormous implications for future training strategy, especially in view of the declining demand for entry into research doctoral programmes.

The strong prediction that *Psychologists will expect to engage with the media effectively as part of their professional role* ($M = 2.17$; $SD = 0.87$) perhaps reflects the great strides that the profession has made in recent years in heightening awareness of the importance of public understanding of science.

The expectation that *Expert psychological assessment will have again become part of the psychologist's repertoire* ($M = 2.17$; $SD = 0.91$) is especially interesting in contrast with 1984, where the *decline* of psychological testing was predicted.

The two predictions relating to psychology as a science were *There will be an increased research emphasis on everyday life, quality of life and the whole person* ($M = 1.94$; $SD = 0.83$) and *Research will increasingly come out of the artificial world of the laboratory and be conducted in more naturalistic settings* ($M = 2.20$; $SD = 0.96$). These echo very similar sentiments in the 1984 study.

WHAT WON'T HAPPEN

With regard to the 'least likely' developments, those relating to professional life concerned the public image of the term 'psychologist' and its limitations. Respondents were mainly optimistic about this, rejecting both *Calling oneself 'a psychologist' will become a disadvantage as the term has connotations that seem limiting to clients who can gain similar services from other professionals* ($M = 3.54$; $SD = 1.04$) and *As psychologists' public influence increases, their 'priestly' role in defining the 'healthy', 'adjusted' and 'normal' will lead to public backlash and loss of prestige* ($M = 3.51$; $SD = 1.04$).

The respondents also generally dismissed a gloomy prediction that *Educational psychology will die, and learning problems will be dealt with by clinical psychologists* ($M = 3.67$; $SD = 1.12$). There was also little agreement with a pessimistic view that *Psychology will become increasingly sterile as it tries to reduce everything to brain physiology* ($M = 3.69$; $SD = 1.26$).

However, there was a strong sense that psychology is changing and reformulating its boundaries – reflected in disagreement with *There will be very little change in the boundaries of the field of psychology* ($M = 3.68$; $SD = 1.09$).

Biological basis for psychology reflects one dimension of the current debates about what constitutes the cutting edge of 'psychological science'; the other dimension is present in *optimism*. From the first stage of open-ended responses, it was clear that we are in the midst of two parallel strands of major theoretical and methodological development. One is the increasing sophistication, and importance, of qualitative, naturalistic and context-based approaches, the other is the burgeoning of evolutionary psychology and neuropsychology.

These are academic debates: the impetus for the first development comes from the conviction that a proper 'science' of psychology has to take process and context into account; it is not driven just by

pragmatic concern about being more credible in real-world contexts. The impetus for the second development is also not merely a consolidation of the traditional 'science = quantification' or the view that the more based in biology, the more 'scientific' psychology will be. These new developments are transforming how we think about biological, ecological and neurological systems. This debate is not by any means just reworking the old 'nature–nurture' debate.

In fact, arguably there is no *necessary* divide between context-based, qualitative approaches, and approaches that pay attention to evolutionary and biological perspectives. The obstacle to a rapprochement may be that they are still identified as coming from very different,

and incommensurable, traditions in psychology. In this study the two strands emerged as distinct factors.

Who predicted what?

Finally, we explored the effects of the independent variables: sex, date of Society membership, status (member, Chartered, Fellow, etc.), Division membership, primary professional role (researcher, teacher, practitioner or consultant) and how strongly people identified with being 'a psychologist'.

The strongest effects were from the degree of identification with being 'a psychologist'. Those who identified more strongly were more optimistic about the future reputation and role of psychology, both on individual items and on the first factor. An endorsement of the pessimistic *reputation* factor was associated with negative identification with being a psychologist.

Primary professional role was defined as practitioner, researcher, teacher or consultant. (They were not mutually exclusive and the analysis took account of this.) Researchers predicted more naturalistic and real-life research and were generally optimistic. Teachers, in contrast, endorsed the pessimistic *fragmentation* and the move to a *biological basis for psychology*. Consultants rejected the pessimistic view about *reputation*.

In view of the demographic interaction between gender and age (female membership increasing dramatically in later years), care was taken to check statistical interaction effects before drawing any conclusions. The only direct sex-effect was for *optimism*, with women expressing more confidence in the future.

The most distinctive effect of year of membership, a measure of professional rather than chronological age, was for the oldest group – those who joined before 1965. They were more optimistic in general but also the most pessimistic about *reputation*. They also endorsed the *biological basis of psychology*. *Optimism* was also endorsed by the youngest members (post-1995).

Chartered senior psychologists were less likely to predict the fragmentation of psychology than were non-Chartered psychologists, and the *biological basis of psychology* was predicted more by non-Chartered, and by more senior, psychologists.

Division membership affected some factor scores. The 'professional' Divisions were generally more optimistic than the

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What does the future hold for psychology and psychologists?

'academic' Divisions. Occupational and counselling psychologists were pessimistic about *fragmentation*.

Now, and then

How do these findings compare with those of 1984? We must be cautious, for the 1984 study only recruited Fellows, which at the very least skewed the age distribution. It was also a smaller sample ($N = 103$).

In 1984 there was considerable concern about the potential role for psychologists in social change – either in influencing policy or in picking up the pieces. Such change included IT, and the redefinition of the boundaries of 'work' and 'leisure'. A major concern of psychologists at that time was 'giving away' psychology – being effective in 'real-world' issues. However, this was accompanied by anxiety about making too large claims for the expertise of psychologists. The concern that cognitive psychology and neuropsychology might migrate to other domains was also there in 1984. As we noted at the time, most of the predictions were projections of trends that were already in place – the growth of health psychology, for example, and of counselling services. The present predictions are equally reflections of current trends, but different trends have been highlighted.

A major development in the last 15 years has been the increasing professionalisation of psychology through Chartering and training programmes. This is, unsurprisingly, reflected in predictions about professional accreditation. But it has also produced more assertiveness: the

ambivalence of 1984 about the public role of psychologists has been replaced by confidence that inroads can be made into new and high-status professional areas. Such confidence was beginning in younger Fellows in 1984; those people are now in positions of seniority throughout the profession, and a new young generation of psychologists is carrying forward the same optimism.

Knight's moves

It may be a feature of the inherent conservatism of the technique, but the study produced few 'knight's move' predictions. Knight's moves usually occur when there is a major and unexpected transformation in technology – like the development of the computer. There was little even from the open-ended stage of the study, and the quantitative exercise inevitably produced an even more bland picture.

A curious omission is IT development. We are living in a period of exponential IT growth that will transform all our lives, and yet almost no one considered the implications of this for psychology. Further, while major trends already in process in psychological theory were alluded to, there seemed a lack of willingness to step outside traditional trajectories; what will happen, for example, when social psychology takes on connectionism? Or when human-computer interaction research takes rhetoric and metaphor seriously? Both these are beginning to happen, and they reflect rather large shifts in how we think about the boundaries of theories and methods.

The Delphi technique is a broad brush. It also tends to confound *hopes* and *fears* – as some respondents commented. It tells us part of the current picture, but we need to take risks, and tolerate more ‘fuzzy’ boundaries, if we are to break through our current assumptions. A richer method for working seriously on the future is *scenario-building*, widely used by large corporations, where ‘experts’ generate a range of potential future stories and discuss their possible antecedents and consequences (Fahey & Randall, 1996). A key rule of scenario-building is to ‘break set’, to imagine the remote possibility, to envisage the knight’s moves in change, not just ‘more of the same’.

Past predictions of the future look so quaint because we commonly fail to predict such changes (Gosling, 1994). Scenario-building can at least explore such potential alien technological or conceptual invasions. Because the Delphi technique starts from individual responses rather than brainstorming the unexpected, it is inherently conservative – but it is nonetheless a useful pointer to current concerns. Perhaps, as we enter our second century, the Society might consider scenario-building worthwhile.

Acknowledgements

Our thanks to the respondents in the first round, who gave generously of their ideas and reflections, and to the 817 fellow Society members who completed the questionnaire – many with thoughtful comments. Our thanks also to Ghislaine Codner for coding assistance.

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MAIN THEMES

Factor 1: Optimism

Psychologists will have the same status as doctors in primary care, as psychological therapies become available to all through healthcare provision (Factor loading = .702)

Psychologists will increasingly replace the medical profession as advisers to government on social well-being and mental health (.688)

A new profession of medical psychology will arise from a hybrid of psychiatry and clinical psychology (.448)

As psychologists increasingly will be trained in real-world skills they will be effective in influencing policy (.672)

Psychologists will expect to engage with the media effectively as part of their professional role (.377).

Psychology will increase its predictive and scientific status (.448)

There will be an increased research emphasis on everyday life, quality of life and the whole person (.490)

Qualitative methods will become more salient as psychology redefines the scientific method to place less emphasis on what is countable, and more on the processes of human functioning (.362)

Factor 2: Fragmentation

The BPS will become an organisation protecting the interests of professional practitioners, and academic psychologists will leave (.697)

Some traditional domains of professional psychology will increasingly find a more favourable professional home not in the BPS but in non-psychological bodies (.475)

The discipline will fragment and it will no longer make sense to try to unify it under the heading of ‘psychology’; the components of psychology will be part of other disciplines – biology, neuroscience and cultural studies (.547)

There will be an increasing division between academic and professional psychology (.543)

Undergraduates will increasingly expect their initial training to contain more specialisation in applied fields and they will become resistant to abstract areas (.438)

Educational psychology will die, and learning problems will be dealt with by clinical psychologists (.541)

Factor 3: Reputation

Psychology will be seen as a useful intellectual service industry to other sciences and agencies, but not valued as a creative science in its own right (.600)

Psychology will increase its predictive and scientific status (–.384)

Qualitative methods will become more salient as psychology redefines the scientific method to place less emphasis on what is countable, and more on the processes of human functioning (.423)

Psychology will become increasingly sterile as it tries to reduce everything to brain physiology (.567)

As psychologists’ public influence increases, their ‘priestly’ role in defining the ‘healthy’, ‘adjusted’ and ‘normal’ will lead to public backlash and loss of prestige (.500)

Calling oneself ‘a psychologist’ will become a disadvantage as the term has connotations that seem limiting to clients who can gain similar services from other professionals (.478)

Factor 4: Biological basis for psychology

There will be increased emphasis on biological processes in psychological theory and research (.791)

There will be an increased emphasis on brain function and the neuro-psychological basis of behaviour (.762)

An appreciation of the role of evolution will have become central to most theory in psychology (.529)

The whole notion of psychological science will have been revised, with a much more social, and less biological-cognitive, base (–.514)