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## Personal construct theory

- Personal construct theory is a comprehensive theory of human action and perceptions, which takes as its central metaphor that man is a scientist, collecting data about the world, and forming and re-forming hypotheses about the nature of the world.
- The repertory grid is both an autonomous measurement instrument and an integral part of personal construct theory. It allows subjects to evaluate systematically a set of ELEMENTS in relation to a set of BIPOLAR CONSTRUCTS.
- Analysis of a repertory grid, by techniques such as cluster analysis, allows the construction of a psychological map which shows the relationship between the various elements and constructs used by the subject.
- Repeated use of repertory grid allows assessment of change, as might occur in therapy.
- Personal construct theory is not only a cognitive theory, describing ways in which the world is perceived, but is also a theory of emotions, which arise when change occurs or is imposed upon the construct system.

Most psychological tests of personality inevitably impose upon the subject the preferences and prejudices of the creator of the test. As a result not only the person taking the test, but also the person administering it, feel the test has missed out the things 'really' defining the person. Could we, for instance, distinguish our friends and relations solely from their standardized extraversion and neuroticism scores? The essence of personality, why Bill is Bill and not Ben, is bypassed by conventional tests. That is not surprising, for the problem of assessing that essence is that it differs in all of us, all having had different experiences, and hence viewing the world in different ways; not a situation that encourages uniformity of testing. Not all psychologists suffer from this problem. Psychoanalysts view each person as a separate individual, assessing their personality by detailed interviews over months or years. But that is hardly a viable alternative to questionnaires for a busy practitioner wanting an assessment of a patient, and it is almost impossible to do statistical analysis of the material from several hundred hours of psychoanalytic sessions.

One method of steering between the Scylla of the standardized questionnaire and the Charybdis of the long, unstructured psychoanalytic interview, which will allow sophisticated and structured testing of an individual, tailored to their special needs and problems, along with formal statistical testing when required is REPERTORY GRID TECHNIQUE.

The repertory grid was invented by the American psychologist George Kelly (1906–1966) as a part of his THEORY OF PERSONAL CONSTRUCTS. Although an integral part of Kelly's theoretical framework, the grid may also be used as an independent, generalized method of assessment. But it is best described along with Kelly's theory.

Kelly saw people as scientists trying to *understand* their world, to *predict* that world, and *control* it. Some people though are bad scientists, produce bad theories, and make wrong predictions. Science, good or bad, is based upon data, which are either valid or invalid. The data of the 'human scientist' are the events occurring around us, particularly people and their social interactions. Kelly accepted, as do philosophers of science such as Popper (see Chapter 5), that no observation is theory-free. We see the world through the spectacles of our prior theories as to how it is organized, and such theories can distort our image of the world. Like the botanist or any other natural historian we also simplify observations by dividing things, and people, into two groups: 'good' or 'bad', 'lucky' or 'unlucky'. Although the world is not of course really just black and white, but a thousand shades of grey, Kelly argued it is convenient, and perhaps psychologically *necessary*, to use CONSTRUCTS which are BIPOLAR.

Not only do individuals have different bipolar constructs, they also differ in *what* and to *whom* they apply those constructs, the combination defining our personalities. In grid technique the things to which constructs are applied are called ELEMENTS. Individuals may differ not only in their constructs but in the elements to which they apply them. Constructs also differ in their inter-relationships; 'good' and 'friendly' may be synonymous to one person, whilst almost independent or orthogonal to another.

Kelly's theory has strictly organized postulates, assumptions and corollaries, so that its theoretical basis is made clear. Here we consider just the FUNDAMENTAL POSTULATE, from which the remaining theory is derived: 'A person's processes are psychologically channelled by the ways in which they anticipate events'. That is, its purpose is *anticipation*, predicting events in the world, and the predictions are special to each particular *person*, the predictions affecting everything else the person does; individuals therefore do not have an infinite repertoire of possible behaviours, but run within certain channels, dependent upon their past, and affecting their future. The channels within which an individual runs are the CONSTRUCT SYSTEM, which differs between individuals, and which is ORGANIZED hierarchically; some constructs, the SUPER-ORDINATE CONSTRUCTS, being at the top, and

implying the truth or falsity of others below them. The constructs not only *are* the individual's personality in some strict sense, but also are chosen by the individual themselves, as being those dichotomies which are most useful *for that person* to predict events in *their world*. Note at this point that the theory is REFLEXIC in that it entails its own origins (in a way that no other psychological theories do: Skinnerian learning theory was not formed in Skinner's mind due to stimulus-response contingencies, and Freudian theory did not develop in Freud's mind due to his own infantile sexual experiences, but Kelly's theory did develop out of his own attempts to construct a model of the world which predicted behaviour). Likewise individuals also build their own future construct systems from their present systems. Construct systems are not fixed, but change continually in response to experience, according to whether particular predictions are useful or wrong, in which case the constructs from which they derive are INVALIDATED.

A construct system is of limited size with a finite number of dichotomous constructs (for it could hardly be infinite). The nature of these constructs depends upon the needs and interests of the particular person. To a cook the construct 'hot-cold' may be more useful in construing saucepans than the construct 'brightly coloured-dull', whereas to an internal designer the converse might be the case. Constructs can only be applied to a limited range of events, their RANGE OF CONVENIENCE. Some constructs, such as 'good-bad' are highly PERMEABLE, applying to many objects, whereas others, such as 'fluorescent-incandescent' are IMPERMEABLE, being really only useful when applied to different types of light-bulb. The range of convenience of the CORE CONSTRUCTS includes the person as they see themselves; thus I might see myself as good rather than bad, but neither fluorescent nor incandescent.

Constructs can be related to one another. I might think that 'fluorescent' means 'economical' and hence 'good' (and of course then 'incandescent' must mean 'not economical' and therefore 'bad'). Such inter-relationships need not be strictly logical, instead displaying only 'psycho-logic': so that I might also believe that 'gives to charity-does not give to charity' implies 'generous-mean' and hence 'not economical-economical', which I construe as 'good-bad'. But note that now 'economical' implies 'bad' whereas earlier, with respect to light-bulbs it implied 'good', a logical but not a psychological inconsistency.

## THE CONSTRUCTION OF A REPERTORY GRID

A repertory grid systematically assesses the relationships between a set of CONSTRUCTS and a set of ELEMENTS (things, objects, ideas, or people). The technique has many variations, and the particular form depends

upon the problem and on the ingenuity of the investigator. Figure 13.1 shows a small, easily comprehensible grid elicited from an adolescent who was describing the books they had read recently, and what they thought about them. In clinical practice the repertory grid is most frequently used for understanding human relationships; Figure 13.2 shows a grid discussed by Kelly, which assessed the perception of people.

The first step is the choice of elements. In Figure 13.2, Kelly has strictly delineated certain choices (self, mother, father, etc.), but allowed some freedom in choosing others (e.g. number 7, pal, 'your closest present friend of the same sex as yourself', or 14, 'the teacher who influenced you most when you were in your teens'), and others are hypothetical or idealized (e.g. 19 'the person known to you personally who appears to meet the highest ethical standards'). The choice of elements could also be broadened, by asking the subject to add other important or relevant people. The important thing is that all the elements should *matter* to the subject.

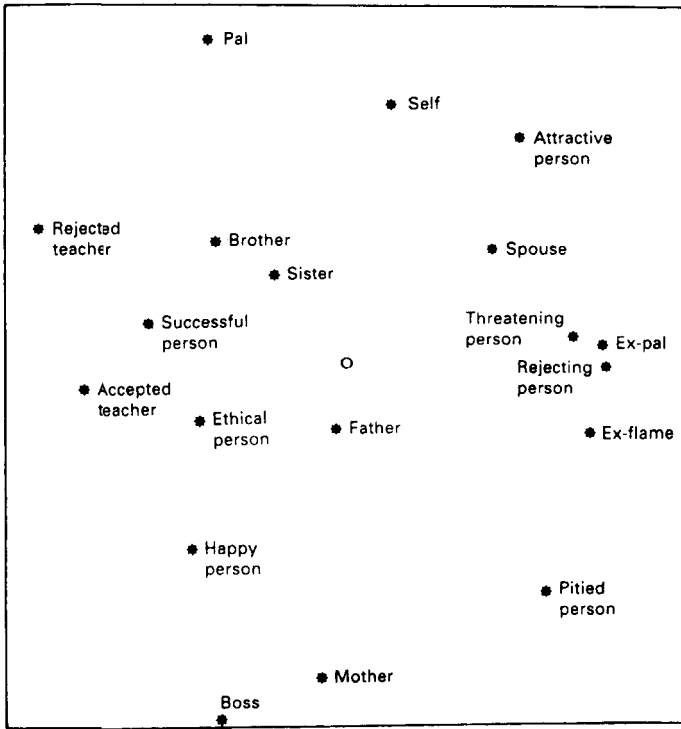
In the second stage the constructs are elicited. Kelly recommends selecting triplets of elements, and asking in what way any two of the elements differ from the third. The choice of three elements may be random, or it may be systematic, as in Kelly's grid, so that relationships of interest are not omitted. In Figure 13.2, the elements included in triplets are shown in circles. Thus construct 1 compared a successful person, a happy person, and an ethical person. The subject thought that the successful and happy person were alike because they didn't believe in God (the *EMERGENT POLE* of the construct, indicated by a cross inside the circle) and are contrasted with the ethical person who does believe in God (the *IMPLICIT POLE*, indicated by the open circle). The choice and labelling of emergent and implicit poles can give valuable information about the subject's feelings. Although some of the constructs in Figure 13.2 have identical names, they are derived from different triplets, and are used in somewhat different ways, and illustrate the poverty of words to describe subtle distinctions which the subject makes with little difficulty.

The repertory *grid* derives its name from the third stage in which each element is systematically construed on each construct, a tick indicating elements to which the emergent pole of the construct applies (and by implication blank cells refer to the construct's implicit pole, although an additional symbol can indicate elements outside a construct's range of convenience).

A repertory grid can be interpreted at several levels. The simplest is 'eye-balling', just looking for relationships. Thus in Figure 13.2 it is apparent that the subject is religious (construct 1), but that rejecting, threatening but also successful and happy people (including his ex-flame) do *not* believe in God, implying a source of conflict and ambivalence between the ethical virtues of religion and worldly



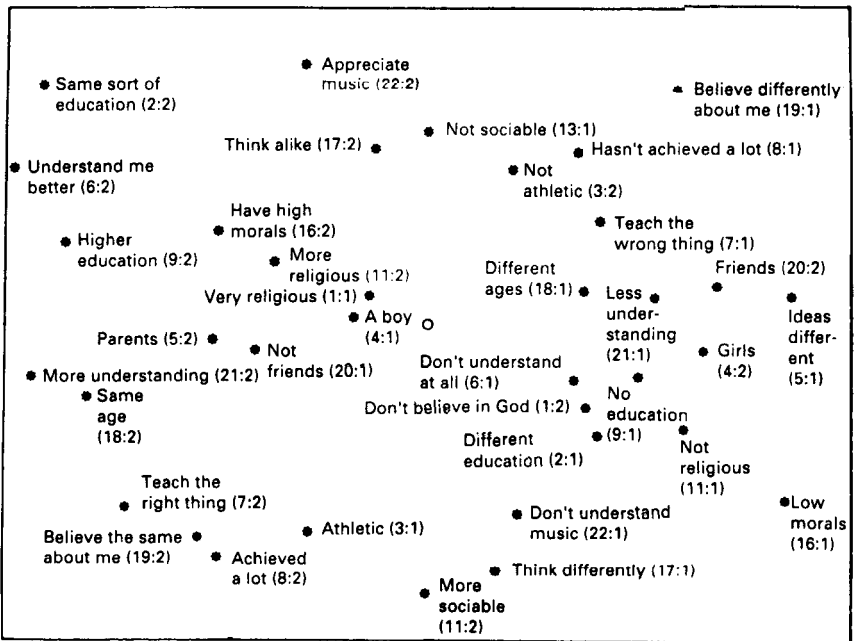




**Fig. 13.3** Statistical analysis of the repertory grid of Figure 13.2 to illustrate the positions of the elements on the two principal dimensions underlying the grid. Reproduced with permission from van der Kloot W A (1981), Multidimensional scaling of repertory grid responses, in Bonarius H, Holland R and Rosenberg S. *Personal Construct Psychology: Recent advances in theory and practice*, London, MacMillan, 177–86.

success. Looking down the columns one can systematically compare individuals. The subject sees himself as more like his father than his mother (5 differences in constructs versus 9), and more similar to his spouse (6 differences) than to his ex-flame (11 differences). The spouse is perceived as more similar to the subject's mother (9 differences) than was the ex-flame (12 differences), and so on. And a similar analysis can be carried out across the rows. Thus having high morals (row 16) is generally associated with being more religious (row 11), although the subject's brother and the spouse are exceptions to that, perhaps deserving further exploration.

More systematic, statistical analysis compares the relationships between all pairs of elements, or all pairs of constructs. Figure 13.3 and Figure 13.4 show the two principal dimensions resulting from cluster analyses. Figure 13.3 shows the positions of the individual elements on these two dimensions, and Figure 13.4 shows the



**Fig. 13.4** Statistical analysis of the repertory grid of Figure 13.2 to illustrate the positions of the construct poles on the two principal dimensions underlying the grid. Reproduced with permission from van der Kloot W A (1981), *Multidimensional scaling of repertory grid responses*, in Bonarius H, Holland R and Rosenberg S, *Personal Construct Psychology: Recent advances in theory and practice*, London, MacMillan, 177–86.

positions of the construct poles on the two dimensions. The horizontal dimension is an evaluative dimension, the left hand end being evaluated positively and the right hand negatively. Teachers are thought of highly, and the ex-flame is disliked intensely. Figure 13.4 shows that highly evaluated means being educated and understanding, whereas poorly evaluated means having different ideas to the patient, being female, and being uneducated. The vertical dimension assesses personal or social proximity, those at the top being close and those at the bottom being distant. Figure 13.3 confirms that the patient feels closer to his mother than to his father, who is very distant; the ex-flame is more distant than the spouse. Being close to the patient means liking music, being religious, not being athletic and not being very sociable (Figure 13.4). This mathematical analysis therefore produces a detailed psychological map of the patient's perceptions of those around him.

An important statistical property of factor analysis, which will be used in Chapters 28, 29 and 30, is an assessment of the number of statistically independent dimensions which are needed to explain the relationships between constructs. Figure 13.2 can be well summarized



by just two construct dimensions, as is seen in Figures 13.3 and 13.4. More complex data may require three, four or more dimensions.

Repertory grid analysis can give a sophisticated description of how a person sees the world, and of what they think is important in that world. It can be applied to almost any topic (social relationships, subjects in a school curriculum, national stereotypes, medical specialties, wines, etc.), and can be applied in different ways. Elements can be RANKED in importance on each construct, or RATED on each construct (say, on a 7-point scale). The same grid can be repeated on different occasions to assess change, as in therapy. Figure 13.5 shows the elements of an obese patient before and after treatment. Component 1 is a measure of social adjustment. Before weight loss the patient sees herself as poorly adjusted, and after treatment as well adjusted. The position of 'self when overweight' varies in relation to weight (Fig. 13.6), and improves only after weight has begun to be lost, and then deteriorates before weight is put on again, suggesting that self-perception is more resistant to change than is weight itself. In IMPGRIDS, the hierarchical relationships between contrasts are assessed by a grid indicating whether constructs imply the truth or falsity of other constructs (e.g. does 'religious-irreligious' imply 'good-bad' or vice-versa, for implications need not be symmetric). Finally 'duo grids' are used in marital therapy, couples completing grids individually and then together, so that the relative dominance of each partner's views can be assessed. For research purposes many individuals may complete grids with identical elements and constructs.

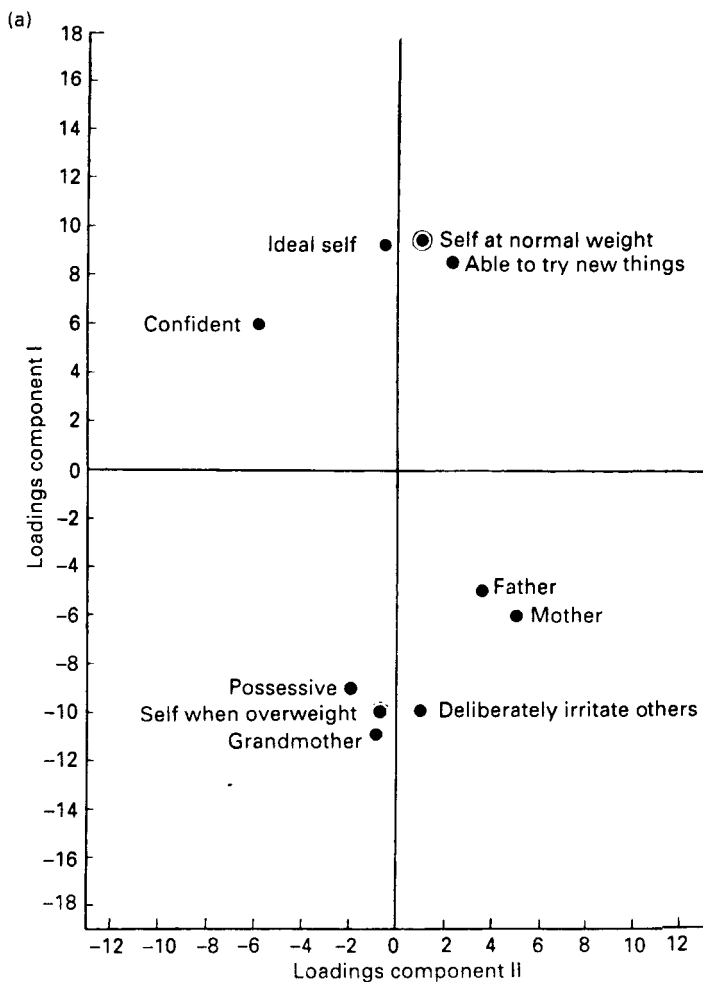
## EMOTION AND CONSTRUCT CHANGE

Personal constructs are dynamic structures, changing continually as constructs are validated (and hence strengthened), or invalidated (and hence rejected). Change also occurs in the relationships between constructs, so that perhaps after a bad experience 'blonde' is no longer construed as parallel to 'fun'. Kelly argues that emotion occurs when constructs change, different emotions resulting from the nature of the change, its origin, and the constructs affected.

ANXIETY is the consequence of recognizing that events are occurring which are outside the range of convenience of the construct system. Events are therefore unknown in their consequences, and their results are beyond prediction.

HOSTILITY occurs when a person perceives that the predictions of their construct system have failed, but they still try to validate the system by forcing other people or events to behave in a manner more consistent with the system.

THREAT and FEAR occur in response to externally imposed changes of the *core* construct system. THREAT occurring when a person becomes



**Fig. 13.5** An example of the change in relationship between the elements and constructs of a repertory grid in an obese woman *a*) at the start of treatment and *b*) after five months of treatment. The first principal component (the vertical axis) is a measure of the patient's social adjustment. Reproduced from Bannister D and Fransella F (1971), *Inquiring Man: the psychology of personal constructs*, Penguin.

aware that some external agency is forcing a change in their construct system, and FEAR occurring when incidental changes, usually without obvious cause and hence inherently unpredictable, force a change in core constructs.

GUILT, SHAME and EMBARRASSMENT relate to the perception of self in the core constructs, GUILT occurring when we become aware that our behaviours are not consistent with our own construction of ourself, SHAME when we realize that our behaviour is inconsistent with someone

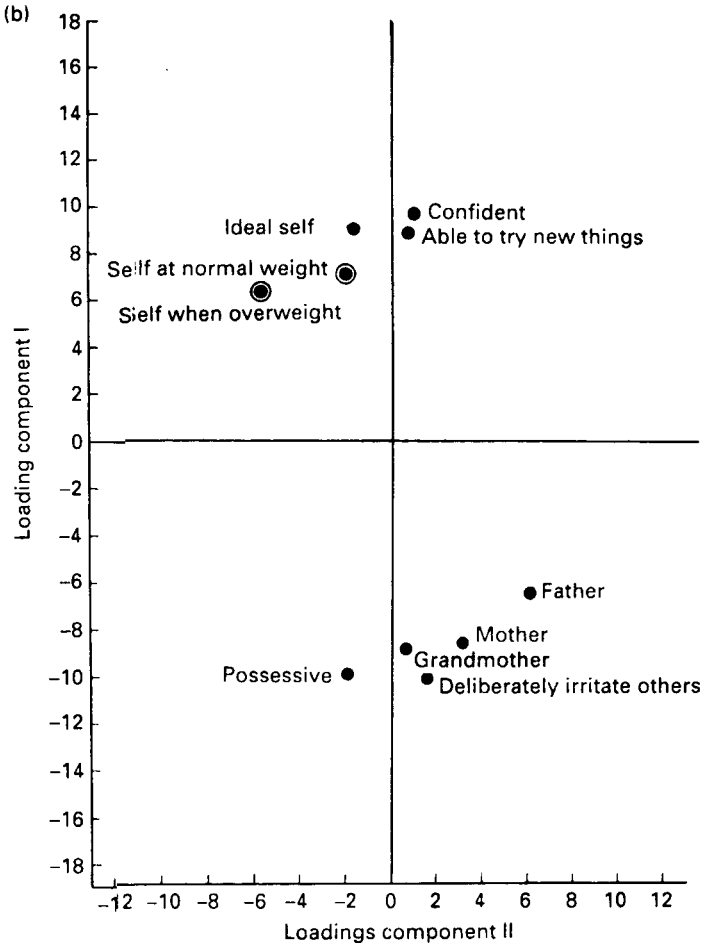
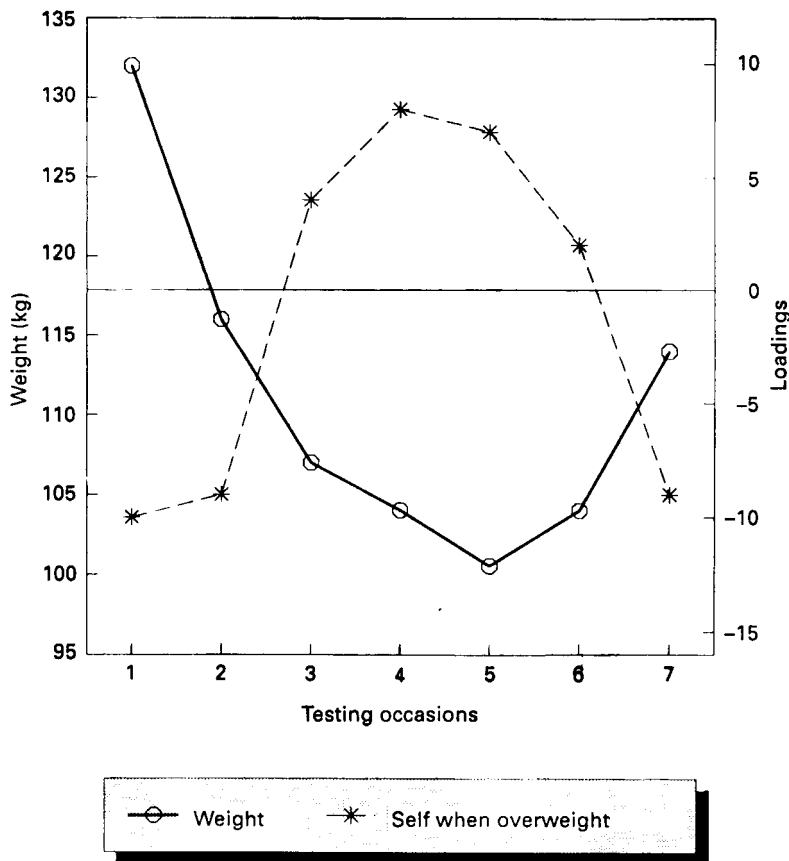


Fig. 13.5 b) continued

else's construction of us, and EMBARRASSMENT being the anticipation of another's perception of us in ways inconsistent with our own core constructs.

Positive emotions, which should not be forgotten, occur when the construct system is changed to make it more effective, to reflect further understanding, wider knowledge, or additional validation. SELF-CONFIDENCE and PRIDE reflect an awareness of the validation of our core constructs, and HUMOUR occurs when we realize that our construct system has several interpretations of the same event, some more plausible than others. LOVE is perhaps an awareness of a concordance between our own construct system and that of another person, with similar ideals, intentions and evaluations.

Personal construct theory and the repertory grid technique therefore provide powerful, general methods of understanding a broad range



**Fig. 13.6** For the same patient as Fig. 13.5, showing the position of the element 'self when overweight' (right-hand axis) in relation to changes in actual weight (left-hand axis) during the course of treatment. Adapted from Bannister D and Fransella F (1971) *Inquiring Man: the psychology of personal constructs*, Penguin.

of psychological processes, and are also readily implemented within the context of ordinary clinical practice, both for assessment of individual patients and as a research tool. In Chapters 28, 29 and 30 we will see how personal construct theory can be applied to understanding neurosis, depression and schizophrenia.