

## The Study of Empathy

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Approaches to the conceptualisation and measurement of empathy are examined and results of research on empathy critically evaluated. Despite a lack of consensus as to the nature of empathic abilities or processes, the absence of a generally accepted theoretical model, and a diversity of measures, research over the past two decades has produced some consistent findings. From this research it may be concluded that empathic abilities: vary considerably between and probably within individuals; emerge in the course of development, influenced considerably by situational factors; can (at least with regard to certain empathic skills) be learned over a relatively short training period; tend to be negatively related to personality disturbance; and are important in interpersonal communication and probably necessary though not sufficient ingredients in effective psychotherapy. An important and unresolved issue is that of the extent to which empathic abilities and behaviours are situationally specific or relatively stable across time and situations.

### Concepts of Empathy

The concept of "Einfühlung" (feeling oneself into) was introduced into aesthetics by Lipps in 1897 and given the English translation "empathy" about 1909 by Titchener (Allport, 1961; Robinson, 1973; Szalita, 1976). According to Lipps' theory of empathy one projects oneself into a perceived object, thereby establishing an identification between oneself as perceiver and another person or object of aesthetic perception or contemplation. Four types of empathy were distinguished; general apperceptive empathy, empirical empathy, mood empathy, and empathy for the sensible appearance of living beings (Sahakian, 1975). To Lipps, who is often identified with phenomenologists and act psychologists, empathy was an act. As originally used, the term "empathy" referred primarily to a process of motor mimicry. Subsequently it was used in a variety of ways, so much so that an examination of published articles indicates that "empathy" embraces a wide variety of concepts and behaviours. Studies in which

the concept of empathy has been discussed, and its differing shades of meaning and possible mechanisms of operation reviewed, are numerous, and frequently repetitive (Bachrach, 1968, 1976; Beres & Arlow, 1974; Berlo, 1960; Buchheimer, 1963; Greenson, 1960; Hoffman, 1975; Iannotti, 1975; Janis, Mahl, Kagan, & Holt, 1969; Katz, 1963; Kohut, 1959; Lewis, 1974; Robinson 1963, 1973; Rogers, 1957, 1959, 1975; Sarbin, Taft, & Bailey, 1960; Schafer, 1959; Stotland, 1969; Szalita, 1976; Walstedt, 1968; Wexler, 1974.) Surveying this definitional dilemma Hogan (1975) concluded that a common denominator or agreed-on operational definition is unlikely. He stated, "It is difficult to define empathy in a way that will meet with general approval because the word has several different phenomenological referents that are hard to encompass with one concept" (p.14). Bachrach (1976) was more optimistic in observing that "Almost irrespective of theoretical orientation, the concept of empathy ... refers to the ability of one person to experientially 'know' what another is experiencing at any given moment, from the latter's frame of reference, through the latter's eyes" (p.35).

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Whether a common definition is possible or not, it is clear that various conceptualizations of empathy differ in a number of important ways. Perhaps the most common, and possibly most basic difference, is whether the conceptualization of empathy emphasises cognitive or affective aspects, the former generally implying accurate perception, the latter shared affect (Feshbach, 1975; Lewis, 1974; Shantz, 1975). Feshbach (1975) considered the cognitive-affective dichotomy or dimension a non-productive one for the reason that both cognitive and affective components of empathy become incorporated into a feedback system. Similarly, Hoffman (1975) has argued that, as with any emotion, cognitive aspects determine how affective aspects are experienced and interpreted.

A second way in which conceptualizations of empathy may differ is in the emphasis placed on attitudinal, intra-psychic, or covert aspects as distinct from observable, behavioural, and overt ones. For example, the importance of the former has been emphasised by Greenson (1960), and Rogers (1975), while Stotland (1969), Truax and Carkhuff (1967), and Wexler (1974) have emphasised the latter.

Thirdly, conceptualizations of empathy may differ in the emphasis they place on verbal factors. Operational definitions of empathy by Truax and Carkhuff (1967) and Carkhuff (1969), emanating from the client-centered tradition, have emphasised the therapist's verbal behaviour, whereas Szalita (1976), citing also Sullivan and Fromm-Reichmann, has asserted that verbal communication plays a secondary role in the expression of empathy.

Fourthly, conceptualizations of empathy differ according to whether the emphasis is on empathy as a trait, with possible innate determinants, or on state, or process empathy, dependent on situational and learning factors (Hoffman, 1975; Hogan, 1975).

Fifthly, conceptualizations of empathy differ according to their theoretical origins. Following Freud (1921) most psychoanalytic writers have linked empathy with processes of identification, and also adaptive regression (Bachrach, 1968; Beres & Arlow, 1974; Greenson, 1960; Kohut, 1959;

Schafer, 1959; Shapiro, 1974; Szalita, 1976). Fordham (1972), from a Jungian perspective, considered that the analyst's capacity to empathise is based on his effective knowledge of the archetypal experience in the patients' material. A recent conceptualization of empathy from a client-centered viewpoint (Wexler, 1974) retained the traditional Rogerian emphasis on accurate understanding, but reformulated this in terms of an information processing model. From a social psychological perspective Hogan (1969, 1973, 1975) defined empathy in terms of role-taking ability and associated it with maturity of moral judgement. Noting the existence of different theoretical approaches to the conceptualization of empathy Walstedt (1968) has suggested that these reflect differing emphases on conscious, pre-conscious, or unconscious mental activity.

It may be concluded from the above that there are many widely different conceptualizations of empathy and that there is no agreed-on theoretical or operational definition of empathy. Published articles discussing the nature of empathy are numerous. However, overall the literature is characterised by divergence and isolation rather than convergence and integration of viewpoints. To the extent that theoretical work stimulates and influences empirical research, the effects of such divergence and lack of integrated endeavour will be apparent in later sections, in which empirical studies of empathy will be reviewed.

#### The Measurement of Empathy

The difficulty of defining empathy in operational and behavioural terms has both stimulated and frustrated the empirical investigation of empathic abilities and processes. A wide range of measurement procedures has been used, in as many contexts (Bachrach, 1976), but frequently the results have been equivocal, if not an echo of the investigators' assumptions. Perhaps more than in other areas, the problems are not only technical, but intimately linked to the investigators' perspective, bias, and motivation. Sullivan's (1953) comment is apposite, "I have had a good deal of trouble at times with people of a certain type of educational history; since

they cannot refer empathy to vision, hearing, or some other special sense receptor, and since they do not know whether it is transmitted by the ether waves or whatnot, they find it hard to accept the idea of empathy ... so although empathy may sound mysterious, remember that there is much that sounds mysterious in the universe, only you have got used to it; and perhaps you will get used to empathy" (pp. 41-42).

Attempts to measure empathy have made use of a wide variety of instruments including the Rorschach Test (Allen, 1972; Bachrach, 1968; Pruitt & Spilka, 1964; Symonds & Dudek, 1956), the TAT (Dymond, 1949, 1950), the Role Construct Repertory Test (Cartwright & Lerner, 1963), scales derived from standardized tests such as the MMPI and CPI (Haan, 1965; Hogan, 1969), rating scales (Bachrach, Luborsky, & Mechanick, 1974; Barrett-Lennard, 1962, 1972; Truax, 1961), and multiple-choice responses to videotaped interviews (Campbell, Kagan, & Krathwohl, 1971; Danish & Kagan, 1971).

Attempts have also been made to relate empathy to physiological measures (Gellen, 1970; Stotland, 1969; Vanderpool & Barratt, 1970). Measurement techniques used in empathy studies with children often involve the presentation of pictures or stories to which the children are asked to respond with statements about themselves or the person(s) depicted or described (Iannotti, 1975).

Establishing the validity and reliability of empathy measures is difficult in view of the many problems associated with operational definitions, independent criteria, and non-experimental conditions. Prior to about 1960 there were no well-validated and dependable empathy measures (Buchheimer, 1963). In the early 1960's the Truax (1961) and Barrett-Lennard (1962) empathy scales appeared; both were derived from research into client-centered therapy. A considerable amount of validation data has been reported on these rating scales (Barrett-Lennard, 1972, 1976; Truax & Carkhuff, 1967) both of which have been widely used in the last fifteen years. Recently the Truax scale and its derivatives (Carkhuff, 1969; Truax & Carkhuff, 1967) have been the subject of considerable debate and criticism on

grounds of invalidity and unreliability (Avery & Danish, 1976; Bachrach, 1976; Bozarth & Krauft, 1972; Caracena & Vicory, 1969; Chinsky & Rappaport, 1970; Gortmally & Hill, 1974; Hefele & Hurst, 1972; Rappaport & Chinsky, 1972; Truax, 1972).

In the fifteen years or so since the early studies with the Truax and Barrett-Lennard Scales a number of other empathy measures have been developed. Zytowski and Betz (1972) include in their list of measures used in counselling research since 1961 seven scales designed specifically to measure empathy, in addition to other tests which have sub-scales to measure empathy. Several scales developed in the last ten years represent a move away from rating procedures. Two of these, Hogan's Empathy Scale (Greif & Hogan, 1973; Hogan, 1969) and the Affective Sensitivity Scale (Campbell, et al., 1971; Chapman, 1971; Danish & Kagan, 1971; Kagan, 1973), have been subjected to a considerable amount of validation research.

The Hogan Empathy Scale is a self-report measure consisting of items, drawn mainly from the MMPI and CPI personality inventories, which discriminated between subjects rated high and low on empathy. Scores on the scale correlate positively with measures of extraversion and negatively with measures of personality disturbance (Hekmat, Khajavi, & Mehryar, 1974, 1975; Hogan, 1969; Hornblow, Kidson, Braxenor, & Masterton, 1977). Research by Greif and Hogan (1973) and Foreman and Allen (1976) suggests that the scale may be primarily a measure of interpersonal adequacy and social extraversion. The scale has not yet been established as a measure of empathic ability in a clinical context nor does there appear to be any consistent relationship between Hogan Empathy Scale scores and clinical or experimental training (Gough, Fox, & Hall, 1972; Hornblow, Kidson & Jones, 1977; Khajavi & Hekmat, 1971; Zacker, 1972). Hogan (1975) has stated that this apparently embarrassing finding is probably correct, and that the scale is probably a measure of trait rather than state empathy, as suggested by Haier (1974).

The Affective Sensitivity Scale, designed to measure ability to detect and describe the

immediate affective state of another, is a videotaped situational test in which 41 scenes from actual counselling sessions are presented and responded to using a multiple-choice format. The scale has gone through several revisions to improve reliability and validity. Results are encouraging, and indicate that the scale may be of value in assessing groups (Archer & Kagan, 1973; Saltmarsh, 1973). However, it has not yet been well enough validated against independent criteria to be considered a dependable measure of an individual's affective sensitivity.

One important finding which has emerged from research with empathy scales is that there is either no correlation or, at best, a low positive correlation between them (Caracena & Vicory, 1969; Hansen, Moore, & Carkhuff, 1968; Kurtz & Grummon, 1972; McWhirter, 1973). The lack of correlation between scales purporting to measure empathy may reflect differences in definition and theoretical viewpoint, though Barrett-Lennard (1976) has suggested that relating to another person empathically involves certain distinct phases, and that different empathy scales may tap the process at different points. Others (Bachrach, 1968; Kurtz & Grummon, 1972) have suggested that the lack of correlation between measures reflects a tendency on the part of researchers to apply a common label, "empathy", to different variables and behaviours.

The foregoing discussion of approaches to and issues involved in the conceptualization and measurement of empathy provides a basis from which to review the results of empathy research.

#### Empathy Research Before 1960

The beginnings of empirical investigation of empathic behaviours may be traced back to 1872 when Charles Darwin asked subjects to identify emotions from photographs — though the term "empathy" itself did not appear until after the turn of the century. Following Darwin's work other investigators became interested in the recognition of emotions and in finding out how to identify the sensitive or accurate perceiver of others — the existence of such a general ability being assumed (Hastorf, Schneider, & Polefka, 1970). In the early decades of this century,

practical questions posed by the growth of psychology, especially in applied areas of clinical and vocational assessment, stimulated interest and research into accuracy of interpersonal perception (Sarbin et al., 1960). Studies attempting to identify the characteristics of good judges of others accumulated throughout the 1940's and early 1950's. Taft reviewed over fifty such studies in 1955. In the same year, Cronbach (1955) published an important theoretical paper in which he pointed out that the interpretations of results of many previous empathy studies, which had attempted to measure empathy in terms of accuracy of prediction of another's responses, were not justified. He demonstrated that the results could have been produced by mathematical artefact and a constant mental set, rather than by empathic ability per se. Cronbach's article rendered invalid or uninterpretable most of the previous research on accuracy of perception of others (Hastorf et al., 1970; Cook, 1971). Cronbach himself suggested methods for handling the measurement problems he raised. However, the number of studies into accuracy of person perception declined sharply after 1955. The inconclusiveness of empathy research up to the early 1960's is indicated by Buchheimer (1963), who reviewed different concepts of empathy and suggested a classification of over seventy studies undertaken prior to 1963, nearly all in the 1950's. Buchheimer stated, "There has been much theorizing but not a great deal else. Attempts have been made to link empathy to personality traits by defining specific empathic abilities but efforts beyond this have yielded little ... Empathic processes have been studied from only a limited point of view and as a consequence we still do not have a dependable test for empathy. Empathy is talked about more today than it was ten years ago, but to date there is no measure of empathy that has either social, industrial, educational or therapeutic usefulness" (p.62). It may be noted that Buchheimer's review made no mention of the Barrett-Lennard or Truax empathy scales which appeared about the same time and have been widely used since.

#### Empathy Research Since 1960

An overview of empathy research since

about 1960 is made difficult by the splitting or divergence of theoretical and empirical writings into several streams, with little apparent collaboration between writers and researchers in the various areas, and little apparent recognition of each other's efforts. Psychoanalytic writers, such as Beres and Arlow (1974) and Shapiro (1974), generally review only their own writings, noting a lack of scientific data while disregarding research undertaken outside their own area. Similarly, researchers in the client-centered tradition (Barrett-Lennard, 1976; Carkhuff, 1969; Truax & Carkhuff, 1967) generally disregard the writings of psychoanalysts and workers in the area of person perception. Reviewers of research in the area of person perception (Cook, 1971; Hastorf et al., 1970; Tagiuri, 1969; Warr & Knapper, 1968) discuss the issue of accuracy of perception, and pre-1955 studies, also empathy in relation to the inference versus intuition controversy, but seem unaware of post-1955 empathy research, for example the large number of studies using the Barrett-Lennard and Truax and Carkhuff scales for rating perceived empathy. The theoretical formulations of those in the person perception field, such as the work on inference rules, are of considerable significance to an understanding of empathic processes and behaviours, but empathy per se appears to be more an historical than a current issue in person perception. Yet another area of research into empathy, the investigation of developmental aspects, has been characterised by conceptual and methodological divergence from other approaches to empathy research. Attempts have been made to identify stages and influences in the emergence of empathic behaviours (Feshbach, 1975; Iannotti, 1975). These have necessitated the use of research procedures and scales appropriate for children, and the linking of development-of-empathy research to related work on cognitive and moral development.

Research undertaken in the above-mentioned areas will now be examined in more detail, after which a theoretically and empirically important issue, that of the stability/instability of empathic behaviours, will be discussed.

#### *Research on Empathy in Relation to Psychotherapeutic Outcome and Process*

Empathy has long been considered a foundation of psychotherapy by writers of diverse orientations (Bachrach, 1976; Kurtz & Grummon, 1972; Lewis, 1974). However it is only in the last fifteen years or so that the relation between empathy and psychotherapeutic outcome and process has been investigated empirically. Using a variety of measures of empathy and outcome these studies have shown therapists' empathic qualities to be associated with successful outcome of psychotherapy. This extensive literature has been reviewed by Luborsky, Chandler, Auerback, Cohen, and Bachrach, (1971), Shapiro (1976), Truax and Carkhuff (1967), and Truax and Mitchell (1971), among others. Empathy has also been shown to be consistently correlated with other therapist qualities associated with effective psychotherapy (Bachrach et al., 1974; Barrett-Lennard, 1962; Mintz & Luborsky, 1971; Mintz, Luborsky, & Auerbach, 1971; Muehlberg, Pierce, & Dragow, 1969), a finding made possible primarily as a result of the application of multivariate statistical procedures to the study of the psychotherapeutic process. Much of the research into the relation of empathy to the process and outcome of psychotherapy assumes that the therapists' empathic qualities maintain a fairly constant level of expression within sessions and across clients. Two recent studies (Gurman, 1973 a; Heck & Davis, 1973) indicate that this may not be so.

#### *Empathy and Person Perception Research*

Research on accuracy of person perception undertaken since Cronbach's (1955) paper has made use of improved measures of accuracy and multivariate forms of analysis. Such research supports the view that person perception is highly complex and does not depend on a general ability or skill (Takiuri, 1969). Studies of clinical assessment of others indicate that diagnostic judgements are often inaccurate (Cook, 1971). Recently, person perception research has moved away from the accuracy question to a study of the processes involved in perceiving others. Comprehensive reviews by

Cook (1971), Hastorf et al. (1970), Tagiuri (1969), and Warr and Knapper (1968) indicate that the process of knowing others can be influenced by the context, by cognitive and affective characteristics of the perceiver, by the relationship between the perceiver and the perceived, and by developmental and cultural factors. However, while noting the existence and probable importance of such influences, these reviewers tend to emphasise research design and measurement difficulties, the lack of consistency between results of different studies, and the need for further research, rather than draw from their reviews firm conclusions about person perception. While there is considerable interest in discovering inferential and association rules which might govern perception it appears that there is as yet no consensus as to what the nature of these rules might be, and no generally accepted theoretical model for person perception. Nor is there agreement as to whether person perception is primarily an intuitive or an inferential process, or both, or whether it is appropriate to see person perception as developing out of, and essentially the same as, object perception. A recent collaborative work edited by Mischel (1974), containing theoretical and review articles by philosophers and psychologists, presents strongly the argument that person perception is essentially different from object perception, and therefore, that the assumptions of much previous research are to be questioned. This viewpoint is shared by Glouberman (1973) but explicitly opposed in reviews by Cook (1971), Hastorf et al. (1970), and Warr and Knapper (1968). While the study of person perception and empathy are interrelated activities, current research in these two areas appears to overlap less than in the past.

#### *Research on the Development of Empathy*

Both cognitive and affective components of empathy are subject to development and modification through childhood learning experiences (Feshbach, 1975). That the nature of early learning is important in the expression of empathy is shown by the results of several studies indicating that, "The likelihood of an empathic response (cognitive and/or affective) increases as the similarity between the child and who he is judging increases, and as the familiarity of the other's situation increases" (Shantz, 1975, p. 19). Hoffman (1975), on the basis

of wider research on development, postulates stages in the emergence of capacities to respond empathically: recognition of the other as a separate physical entity, awareness that the other has inner states independent of the observer, and an awareness that others have an identity outside the immediate situation. Empathic ability and maturity of moral reasoning of young adults have been linked in studies by Haan, Smith, and Block (1968), and Hogan and Dickstein (1972).

That empathic skills can be learned in adulthood has been shown by Archer and Kagan (1973), Carkhuff (1969), Carkhuff and Truax (1965), Dalton, Sundblad, and Hylbert (1973), Payne, Weiss, and Kapp (1972), and Saltmarsh (1973). These studies report programmes of training in interpersonal communication skills, usually of one hundred hours or less, which led to significant improvement on such measures as the Truax and Carkhuff Empathy Scales or the Affective Sensitivity Scale. Arising out of this research a number of texts have now been produced outlining programmes for teaching empathic skills (Bullmer, 1975; Carkhuff, 1969; Egan, 1975a, 1975b; Truax & Carkhuff, 1967).

A finding from several studies which is of relevance to psychotherapeutic, person perception, and developmental fields of empathy research is that empathy and personality disturbance appear to be negatively correlated (Bergin & Jasper, 1969; Bergin & Solosmon, 1970; Bush, 1972; Hekmat et al., 1974; Hogan, 1969; Hornblow et al., 1977a).

A crucial issue in the investigation of empathic abilities from a developmental perspective is that of whether empathy is conceptualized by the researcher as a personal characteristic or skill having relative stability across time and situations, or whether empathy is seen as relatively situationally specific, possibly showing marked fluctuation from one situation to another. As the issue is a basic one in all empathy research it will be discussed separately, and in a broader context than that of research into the developmental aspects of empathy.

#### The Stability/Instability of Empathic Behaviour

The question of whether human behaviour is relatively stable or unstable is a fundamental one for the whole of

psychology and one to which different answers have been given, generally implicitly in the assumptions of different research traditions. Clinical psychologists have tended to focus on invariance in human behaviour, and have extensively investigated stable intellectual abilities and personality traits. Social psychologists on the other hand have tended to focus on the extent to which the individual's behaviour is situationally determined, and the extent to which he can be persuaded or influenced to change. The stability/instability issue has been comprehensively reviewed by Endler and Magnusson (1974), Magnusson (1975), and Mischel (1968, 1969). Conclusions from these reviews are that behaviour is often perceived to be more stable than it really is, that interactions between situational and personal variables account for more variance than either situational or personal variables alone, and that affective aspects of behaviour have less stability than cognitive ones. Mischel (1969) has stated that "the observed inconsistency so regularly found in studies of non-cognitive personality dimensions often reflects the state of nature and not merely the noise of measurement" (p.1014).

With regard to empathy research, one might infer from the above that situational factors would be a significant source of variance, and also that the more a measure of empathy tapped non-cognitive components of empathic behaviour the less stability one might expect in the response obtained. There is little direct evidence on these points. However, it is noteworthy that all the better validated and more widely used "empathy" scales measure empathy as a quality or characteristic of the empathiser, tend to disregard or attempt to eliminate situational variability, and generally fail to have statistically significant inter-correlations. That empathy researchers may be ready to take situational variables more seriously is suggested by the current widespread criticism of empathy rating scales, and also by several recent studies indicating that empathic abilities may not be as stable as previously assumed and that situational factors can determine whether or not an individual is likely to respond to another empathically. Interaction between individuals may be more or less empathic depending on their sex, set, level of cognitive complexity, mood, on the setting in which

they are interacting, and on the length of time they have been together (Aderman, Brehm & Katz, 1974; Gurman, 1973a, 1973b; Heck & Davis, 1973; Mehrabian & Epstein, 1972; Olesker & Balter, 1972).

The importance of nonverbal cues in empathic communication (Haase & Tepper, 1972; Hargrove, 1974) indicates that the extent or expression of empathy may depend on the availability of such cues. From the results of these studies, and from research on the development of empathy cited earlier, it is clear that future empathy research should take account of both situational and personal variables.

#### Conclusions

A review of the extensive literature on empathic abilities indicates clearly that there is no agreed-on definition of 'empathy', nor is there any generally accepted theoretical model for understanding empathic processes. Given this lack of consensus among empathy researchers as to the precise nature of empathic abilities it would appear advantageous, at this stage, to adopt a broad definition of empathy and, of course, one which provides a basis for formulating testable hypotheses. It would appear advantageous also to avoid any definition which emphasises certain aspects of empathic abilities or processes in the absence of strong theoretical or empirical justification for doing so. While the term 'empathy' as generally used refers to a cluster of personal characteristics, it is possible that such characteristics may be more closely related conceptually than empirically. There is as yet no convincing evidence for the existence of an 'e' factor, i.e. empathy as a general ability or unitary trait, though the existence of fairly specific empathic abilities, skills, or processes has been amply demonstrated. Empathic behaviour may be determined by specific skills, interacting with situational factors, rather than by a general ability. Accordingly, empathic abilities may be best defined at present as those skills by which one person apprehends the state of mind of another.

Empathy measures which are currently widely used differ as to their theoretical origins, the operational definitions on which they are based, and the measurement procedures employed. Perhaps not surprisingly, the correlation between these scales is consistently low, a fact which may reflect both conceptual and empirical

confusion, and the likelihood that these scales tap different empathic skills. Despite this, research with these scales has demonstrated clearly that empathic abilities: (a) vary considerably between and probably within individuals; (b) emerge in the course of development, influenced considerably by situational factors; (c) can (at least with regard to certain empathic skills) be learned over a relatively short training period; (d) tend to be negatively related to personality disturbance; and (e) are important in interpersonal communication and probably necessary though not sufficient ingredients in effective psychotherapy.

A major theoretical and empirical problem in empathy research at present is that of clarifying in what ways empathic abilities or behaviours are situationally specific and in what ways relatively stable across time and situations. To resolve this issue empathy researchers will need to place less emphasis than in the past on empathy as a global personal attribute and give more attention to its situational determinants. Specific empathic skills will need to be defined and the relationship between them, sequential or otherwise, established. Similarly, it will be necessary to identify ways in which contextual factors facilitate or inhibit empathic interaction.

#### References

- Adlerman, D., Brehm, S. S., & Katz, L. B. Empathic observation of an innocent victim: the just world revisited. *Journal of Personality and Social Psychology*, 1974, 29, 342-347.
- Allen, T. W. Psychological openness and counselor effectiveness: a further investigation. *Journal of Personality Assessment*, 1972, 36, 13-18.
- Allport, G. W. *Pattern and growth in personality*. New York: Holt, Rinehart and Winston, 1961.
- Archer, J., & Kagan, N. Teaching interpersonal relationship skills on campus. *Journal of Counseling Psychology*, 1973, 20, 535-540.
- Avery, A. W., & Danish, S. J. Assessing intertrainer effects on the Empathic Understanding Scale: training the trainer. *Journal of Clinical Psychology*, 1976, 32, 404-407.
- Bachrach, H. Adaptive regression, empathy and psychotherapy: theory and research study. *Psychotherapy*, 1968, 5, 203-209.
- Bachrach, H. M. Empathy: we know what we mean, but what do we measure? *Archives of General Psychiatry*, 1976, 33, 35-38.
- Bachrach, H., Luborsky, L. & Mechanick, P. The correspondence between judgements of empathy from brief samples of psychotherapy, supervisors' judgements and sensitivity tests. *British Journal of Medical Psychology*, 1974, 47, 337-340.
- Barrett-Lennard, G. T. Dimensions of therapist response as causal factors in therapeutic change. *Psychological Monographs*, 1962, 76, (43, Whole No.562).
- Barrett-Lennard, G. T. Resource bibliography of reported studies using the Relationship Inventory. Part A: reference list. Unpublished manuscript, University of Waterloo, 1972.
- Barrett-Lennard, G. T. Empathy in human relationships: Significance, nature and measurement. *Australian Psychologist*, 1976, 11, 173-184.
- Beres, D., & Arlow, J. A. Fantasy and identification in empathy. *Psychoanalytic Quarterly*, 1974, 43, 26-50.
- Bergin, A. E., & Jasper, L. G. Correlates of empathy in psychotherapy: a replication. *Journal of Abnormal Psychology*, 1969, 74, 477-481.
- Bergin, A. E., & Solomon, S. Personality and performance correlates of empathic understanding in psychotherapy. In Hart, J. T., & Tomlinson, T. M. (Eds), *New directions in client-centered therapy*. Boston: Houghton Mifflin, 1970, Pp. 223-236.
- Berlo, D. K. *The process of communication: an introduction to theory and practice*. New York: Holt, Rinehart & Winston, 1960.
- Bozarth, J. D., & Krauft, C. C. Accurate empathy ratings: some methodological considerations. *Journal of Clinical Psychology*, 1972, 28, 408-410.
- Buchheimer, A. The development of ideas about empathy. *Journal of Counseling Psychology*, 1963, 10, 61-70.
- Bullmer, K. *The art of empathy: a manual for improving accuracy of interpersonal perception*. New York: Behavioural Publications, 1975.
- Bush, H. Adolescents' personality correlates of self-ratings and group ratings of empathy. *Dissertation Abstracts International*, 1972, 33B, 1282.
- Cambell, R. J., Kagan, N., & Krathwohl, D. R. The development and validation of a scale to measure affective sensitivity (empathy). *Journal of Counseling Psychology*, 1971, 18, 407-412.
- Caracena, P. F., & Vicory, J. R. Correlates of phenomenological and judged empathy. *Journal of Counseling Psychology*, 1969, 16, 510-515.
- Carkhuff, R. R. *Helping and human relations* (2 vols.). New York: Holt, Rinehart & Winston, 1969.
- Carkhuff, R. R., & Truax, C. B. Training in counseling and psychotherapy: an evaluation of an integrated didactic and experiential approach. *Journal of Consulting Psychology*, 1965, 29, 333-336.
- Cartwright, R. D., & Lerner, B. Empathy, need to change, and improvement with psychotherapy. *Journal of Consulting Psychology*, 1963, 27, 138-144.
- Chapman, J. L. Development and validation of a scale to measure empathy. *Journal of Counseling Psychology*, 1971, 18, 281-282.
- Chinsky, J. M. & Rappaport, J. Brief critique of the meaning and reliability of "accurate empathy" ratings. *Psychological Bulletin*, 1970, 73, 379-382.
- Cook, M. *Interpersonal perception*. Harmondsworth: Penguin, 1971.
- Cronbach, L. J. Processes affecting scores on "understanding of others" and "assumed similarity" *Psychological Bulletin*, 1955, 52, 177-193.
- Dalton, R. F., Sunbdlad, L. M., & Hylbert, K.W. An application of principals of social learning to training in communication of empathy. *Journal of Counseling Psychology*, 1973, 20, 378-383.
- Danish, S. J., & Kagan, N. Measurement of effective sensitivity: toward a valid measure of interpersonal perception. *Journal of Counseling Psychology*, 1971, 18, 51-54.
- Darwin, C. *The expression of the emotions in man and animals*. London: Murray, 1872.



- Dymond, R. F. A scale for the measurement of empathy ability. *Journal of Consulting Psychology*, 1949, 13, 127-133.
- Dymond, R. F. Personality and empathy. *Journal of Consulting Psychology*, 1950, 14, 343-350.
- Egan, G. *The skilled helper: a model for systematic helping and interpersonal relating*. Monterey: Brooks Cole, 1975(a).
- Egan, G. *Exercises in helping skills: a training manual to accompany "The skilled helper"*. Monterey: Brooks Cole, 1975(b).
- Endler, N. S., & Magnusson, D. Interactionism, trait psychology, psychodynamics and situationism. *Reports from the Psychological Laboratories*, The University of Stockholm, 1974, 418, 1-29.
- Feshbach, N. D. Empathy in children: some theoretical and empirical considerations. *Counseling Psychologist*, 1975, 5, 25-30.
- Fordham, M. The interrelation between patient and therapist. *Journal of Analytical Psychology*, 1972, 17, 179-183.
- Foreman, P., & Allen, L. An attempt to develop an empathy scale for a female student population. *Australian Psychologist*, 1976, 11, 236.
- Freud, S. Group psychology and the analysis of the ego. In *The standard edition of the complete psychological works of Sigmund Freud*, Vol. 18. London: Hogarth, 1955, Pp. 69-143 (First published 1921).
- Gellen, M.I. Finger blood volume response of counselors, counselor trainees, and non-counselors to stimuli from an empathy test. *Counselor Education and Supervision*, 1970, 10, 64-74.
- Glouberman, D. Person perception and scientific objectivity. *European Journal of Social Psychology*, 1973, 3, 241-253.
- Gormally, J. & Hill, C. E. Guidelines for research on Carkhuff's training model. *Journal of Counseling Psychology*, 1974, 21, 539-547.
- Gough, H. G., Fox, R.E. & Hall, W.B. Personality inventory assessment of psychiatric residents. *Journal of Counseling Psychology*, 1972, 19, 269-274.
- Greenson, R. Empathy and its vicissitudes. *International Journal of Psychoanalysis*, 1960, 41, 418-424.
- Greif, E.B., & Hogan, R. The theory and measurement of empathy. *Journal of Counseling Psychology*, 1973, 20, 280-284.
- Gurman, A. S. Instability of therapeutic conditions in psychotherapy. *Journal of Counseling Psychology*, 1973, 20, 16-24 (a).
- Gurman, A. S. Effects of therapist and patient mood on the therapeutic functioning of high — and low — facilitative therapists. *Journal of Consulting and Clinical Psychology*, 1973, 40, 48-58. (b).
- Haan, N. Coping and defensive mechanisms related to personality inventories. *Journal of Consulting Psychology*, 1965, 29, 373-378.
- Haan, N., Smith, M. B., & Block, J. Moral reasoning of young adults: political-social behaviour, family background, and personality correlates. *Journal of Personality and Social Psychology*, 1968, 10, 183-201.
- Hasse, R. F., & Tepper, D. T. Non-verbal components of empathic communication. *Journal of Counseling Psychology*, 1972, 19, 417-424.
- Haier, R. Empathy and counselor effectiveness. Paper presented to the Maryland Psychological Association, 1974. Cited in Hogan, R., Empathy: a conceptual and psychometric analysis. *Counseling Psychologist*, 1975, 5, 14-18.
- Hansen, J. C., Moore, G. D., & Carkhuff, R. R. The differential relationships of objective and client perceptions of counseling. *Journal of Clinical Psychology*, 1968, 24, 244-246.
- Hargrove, D. S. Verbal interaction analysis of empathic and non-empathic responses of therapists. *Journal of Counseling and Clinical Psychology*, 1974, 42, 305.
- Hastorf, A. H., Schneider, D. J., & Polefka, J. *Person perception*. Reading: Addison-Wesley, 1970.
- Heck, E. J., & Davis, C. S. Differential expression of empathy in a counseling analogue. *Journal of Counseling Psychology*, 1973, 20, 101-104.
- Hefele, T. J., & Hurst, M. W. Interpersonal skill measurement: precision, validity, and utility. *Counseling Psychologist*, 1972, 3, 62-70.
- Hekmat, H. Khajavi, F., & Mehryar, A. Psychoticism, neuroticism, and extraversion: the personality determinants of empathy. *Journal of Clinical Psychology*, 1974, 30, 559-561.
- Hekmat, H., Khajavi, F., & Mehryar, A. H. Some personality correlates of empathy. *Journal of Consulting and Clinical Psychology*, 1975, 43, 89.
- Hoffman, M. L. Developmental synthesis of affect and cognition and its implications for altruistic motivation. *Developmental Psychology*, 1975, 11, 607-622.
- Hogan, R. Development of an empathy scale. *Journal of Consulting and Clinical Psychology*, 1969, 33, 307-316.
- Hogan, R. Moral conduct and moral character: a psychological perspective. *Psychological Bulletin*, 1973, 79, 217-232.
- Hogan, R. Empathy: a conceptual and psychometric analysis. *Counseling Psychologist*, 1975, 5, 14-18.
- Hogan, R., & Dickstein, E. A measure of moral values. *Journal of Consulting and Clinical Psychology*, 1972, 39, 210-214.
- Hornblow, A. R., Kidson, M. A., Brazenor, G. A. & Masterton, J. P. "Trait empathy" of medical students. Unpublished paper, Monash University, 1977 (a).
- Hornblow, A. R., Kidson, M. A., & Jones, K. V. Measuring medical students' empathy: a validation study. *Medical Education*, 1977, 11, 7-12 (b).
- Iannotti, R. J. The nature and measurement of empathy in children. *Counseling Psychologist*, 1975, 5, 21-25.
- Janis, I. L., Mahl, G. F., Kagan, J., & Holt, R. R. *Personality: dynamics, development and assessment*. New York: Harcourt, Brace and World, 1969.
- Kagan, N. influencing human interaction — eleven years with IPR. Unpublished paper, Michigan State University, 1973.
- Katz, R. L. *Empathy: its nature and uses*. New York: Free Press of Glencoe, 1963.
- Khajavi, F., & Hekmat, H. A comparative study of empathy: the effects of psychiatric training. *Archives of General Psychiatry*, 1971, 25, 490-493.
- Kohut, H. Introspection, empathy, and psychoanalysis: an examination of the relationship between mode of observation and theory. *Journal of the American Psychoanalytic Association*, 1959, 7, 459-483.

- Kurtz, R. R., & Grummon, D. L. Different approaches to the measurement of therapist empathy and their relationship to therapy outcomes. *Journal of Consulting and Clinical Psychology*, 1972, 39, 106-115.
- Lewis, J. M. Practicum in attention to affect: a course for beginning psychotherapists. *Psychiatry*, 1974, 37, 109-113.
- Luborsky, L., Chandler, M., Auerbach, A. H., Cohen, J., & Bachrach, H. M. Factors influencing the outcome of psychotherapy: a review of quantitative research. *Psychological Bulletin*, 1971, 75, 145-185.
- McWhirter, J. J. Two measures of the facilitative conditions: a correlation study. *Journal of Counseling Psychology*, 1973, 20, 317-320.
- Magnusson, D. The individual and the situation in personality research. *Reports from the Department of Psychology, The University of Stockholm*, 1975, Supplement 30, 1-36.
- Mehrabian, A., & Epstein, N. A measure of emotional empathy. *Journal of Personality*, 1972, 40, 525-543.
- Mintz, J., & Luborsky, L. Segments versus whole sessions: which is the better unit for psychotherapy process research? *Journal of Abnormal Psychology*, 1971, 78, 108-191.
- Mintz, J., Luborsky, L., & Auerbach, A. H. Dimensions of psychotherapy: a factor analytic study of ratings of psychotherapy sessions. *Journal of Consulting and Clinical Psychology*, 1971, 36, 106-120.
- Mischel, T. (Ed). *Understanding other persons*. Oxford: Blackwell, 1974.
- Mischel, W. *Personality and assessment*. New York: Wiley, 1968.
- Mischel, W. Continuity and change in personality. *American Psychologist*, 1969, 24, 0112-1018.
- Muehberg, N., Pierce, R., & Drasgow, J. A factor analysis of therapeutically facilitative conditions. *Journal of Clinical Psychology*, 1969, 25, 93-95.
- Olesker, W., & Balter, L. Sex and empathy. *Journal of Counseling Psychology*, 1972, 19, 559-562.
- Payne, P. A., Weiss, S. D., & Kapp, R. A. Didactic, experiential, and modeling factors in the learning of empathy. *Journal of Counseling Psychology*, 1972, 19, 425-429.
- Pruitt, W. A., & Spilka, B. Rorschach Empathy-Object Relationship Scale. *Journal of Projective Techniques and Personality Assessment*, 1964, 28, 331-336.
- Rappaport, J., & Chinsky, J. M. Accurate empathy: confusion of a construct. *Psychological Bulletin*, 1972, 77, 400-404.
- Robinson, G. A new theory of empathy and its relation to identification. *Journal of Asthma Research*, 1963, 1, 49-114.
- Robinson, G. Empathy and identification on the first developmental level. *Journal of Asthma Research*, 1973, 11, 77-92.
- Rogers, C. R. The necessary and sufficient conditions of therapeutic personality change. *Journal of Consulting Psychology*, 1957, 21, 95-103.
- Rogers, C. R. A theory of therapy, personality, and interpersonal relationships, as developed in the client-centered framework. In S. Koch (Ed), *Psychology: a study of a science*, vol. 3. New York: McGraw Hill, 1959. Pp. 184-256.
- Rogers, C. R. Empathic: an unappreciated way of being. *Counseling Psychologist*, 1975, 5, 2-10.
- Sahakian, W. S. *History and systems of psychology*, 1973, 20, 375-377.
- skills through programmed instruction. *Journal of Counseling Psychology*, 1973, 20, 375-377.
- Sarbin, T. R., Taft, R., & Bailey, D. E. *Clinical inference and cognitive theory*. New York: Holt, Rinehart & Winston, 1960.
- Schafer, R. Generative empathy in the treatment situation. *Psychoanalytic Quarterly*, 1959, 28, 342-373.
- Shantz, C. U. Empathy in relation to social cognitive development. *Counseling Psychologist*, 1975, 5, 18-21.
- Shapiro, D. A. The effects of therapeutic conditions: positive results revisited. *British Journal of Medical Psychology*, 1976, 49, 315-323.
- Shapiro, T. The development and distortions of empathy. *Psychoanalytic Quarterly*, 1974, 43, 4-25.
- Stotland, E. Exploratory investigations of empathy. In L. Berkowitz (Ed), *Advances in experimental social psychology*, Vol. 4. New York: Academic, 1969. Pp.271-314.
- Sullivan, H. S. *The interpersonal theory of psychiatry*. New York: Norton, 1953.
- Symonds, P. M. & Dudek, S. Use of the Rorschach in the diagnosis of teacher effectiveness. *Journal of Projective Techniques and Personality Assessment*, 1956, 20, 227-234.
- Szalita, A. B. Some thoughts on empathy. *Psychiatry*, 1976, 39, 142-152.
- Taft, R. The ability to judge people. *Psychological Bulletin*, 1955, 52, 1-23.
- Tagiuri, R. Person perception. In Lindzey, G., & Aronson, E. (Eds.), *Handbook of social psychology* (Second Edition), Vol. 3. Reading (Mass.): Addison-Wesley, 1969. Pp. 395-449.
- Truax, C. B. A scale for the measurement of accurate empathy. *Psychiatric Institute Bulletin*, University of Wisconsin, 1961, 1, 12. Cited in Truax, C. B., & Carkhuff, R. R., *Toward effective counseling and psychotherapy: training and practice*. Chicago: Aldine, 1967.
- Truax, C. B. The meaning and reliability of accurate empathy ratings: a rejoinder. *Psychological Bulletin*, 1972, 77, 397-399.
- Truax, C. B., & Carkhuff, R. R. *Toward effective counseling and psychotherapy: training and practice*. Chicago: Aldine, 1967.
- Truax, C. B., & Mitchell, K. M. Research on certain therapist interpersonal skills in relation to process and outcome. In Bergin, A. E., & Garfield, S. L. (Eds.), *Handbook of psychotherapy and behaviour change: an empirical analysis*. New York: Wiley, 1971. Pp. 299-344.
- Vanderpool, J. P., & Barratt, E. S. Empathy: towards a psycho-physiological definition. *Diseases of the Nervous System*, 1970, 31, 464-467.
- Walstedt, J. J. Teaching empathy. *Mental Hygiene*, 1968, 52, 600-611.
- Warr, P. B., & Knapper, C. *The perception of people and events*. London: Wiley, 1968.
- Wexler, D. A. A cognitive theory of experiencing, self-actualization, and therapeutic process. In Wexler, D. A., & Rice, L. N. (Eds.), *Innovations in client-centered therapy*. New York: Wiley, 1974. Pp. 49-116.
- Zacker, J. Understanding one's clients: an attempt to improve sensitivity and morale in police recruits. *Psychological Reports*, 1972, 31, 999-1008.
- Zytowski, D. G., & Betz, E. L. Measurement in counseling research: a review. *Counseling Psychologist*, 1972, 3, 72-85.