The Encyclopedic Dictionary of Psychology

Rom Harré
& Roger Lamb

The Encyclopedic Dictionary of Psychology

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Rom Harré and Roger Lamb

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PREFACE

The establishment of a science of psychology has been no easy matter. There are still those who hold that the very idea of a science of human thought and action is a misconception. Even if we take the restricted view of psychology as the study of the ways in which human beings create and control their behavior, it still cannot be understood without reference to other fields of specialist learning which psychologists neglect at their peril. It has now become increasingly clear that much of what was once taken to be the province of individual psychology, such as the study of motives, of the emotions and of the genesis of consciousness, cannot be understood without introducing a sociological dimension. In so far as psychologists are becoming increasingly aware that they are not dealing just with the external contingencies of action but with the conceptual systems involved in the interpretation and control of behavior, with the structure of concepts and their interrelations, they are again bringing cognitive studies in various forms into psychology. Finally, the developments that have taken place in neurophysiology have now made it possible to ask sensible questions about the physiological basis of many cognitive processes and to expect to get nonspeculative answers. Human psychic functioning is poised, as it were, between a social and a physiological level and involves conceptual manipulations whose understanding seems to require not only studies closely tied to the information processing model, but philosophical analysis as well.

Almost everything that is claimed to be part of the corpus of psychological knowledge depends on presuppositions that are not, in themselves, psychological. The same multiplicity of connections has led to peculiar difficulties in developing the field. Psychology shows little sign of acquiring an accumulating body of knowledge. The work of previous generations is not so much incorporated in new fashions, as swept away by them.

We have identified three main bases for contemporary psychology – cognitive psychology (concerning the acquisition and processing of information), psycholinguistics (the study of the most specifically human

phenomenon, language), and neuropsychology. (the study of the brain and nervous system as the physical basis of thought, feeling and action). Expanding different dimensions from the core studies introduces developmental, social and personality psychology and the psychology of the emotions. The three main fields of application of psychological knowledge, educational, occupational and clinical psychology complete the basic structure. But psychology today covers the rapidly expanding study of animal behavior as well as human conduct. Finally, there are the dimensions of philosophical analysis of the basic concepts and theories of psychology and of the historical development of our understanding of human thought and behavior.

Other dictionaries of psychology have paid little attention to the ocean of "unofficial" psychology that can be found in the theories and practices of lay folk outside the academic psychological professions. We have thought it important that there should be definitive accounts of the main ideas and schools of fringe psychologies as well as of the established variety. A quite detailed exposition of these matters is a feature of this work.

Sixteen distinguished psychologists, philosophers and physiologists working in the main fields of psychological knowledge, as we saw them, have come together as initiators, advisers and critics, and this book is the consequence of their work. Each suggested fifteen major topics in their area for detailed treatment, plus up to seventy-five minor topics whose understanding was essential to a full grasp of a field.

The articles are arranged in alphabetical order, with cross references to other relevant entries. But in addition, so rich and complex is the field, we have added an index to enable the reader to look up terms which have not merited separate entries but whose sense can be grasped from their occurrence in one or more articles. In this way we hope to have made available as comprehensive a list of items as the exigencies of space allows.

Rom Harré Roger Lamb

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communication: animal

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Cross references to other entries are printed in small capitals in the text. Leads to further additional information can be found from the index.

Technical terms are defined in the index.

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Preface

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Index and Glossary

A

A priori; a posteriori An a priori proposition is one which can be known to be true a priori. Knowledge of the truth of a given proposition is a priori if no more experience is needed for that knowledge than is already required merely to understand the proposition. Some have held that substantial truths about the nature of reality can be known a priori; others that such knowledge is merely based on an understanding of linguistic conventions. An a priori concept is likewise one which has a certain independence of experience, though the best way of characterizing that independence is uncertain.

An a posteriori item is one which is not, in the above ways, a priori.

JMS

able children See gifted children

abnormal behavior: animal Behavior resulting from stress or from a pathological condition. Experimentally induced anxiety was investigated by Pavlov who discovered that well-trained animals subjected to difficult problems often showed extreme signs of emotion. Prolonged exposure to stressful situations can lead to experimental neurosis and to physiological symptoms such as gastric ulcers. Animals subject to stress generally show loss of appetite, increased aggression and stereotyped behavior. These types of abnormal behavior sometimes occur in animals in zoos, especially if their natural behavior patterns are interrupted.

absence from school and truancy "Absence from school" is failure to attend school irrespective of reason whereas "truancy" is unjustifiable absence from school without parental knowledge or consent. In England parents are required by the 1944 Education Act to ensure that their children receive education "suitable to their age, ability and aptitude" between the ages of five and sixteen. In practice, most parents do this by registering their child at a school maintained or aided by the local education authority and ensuring that he or she attends regularly unless prevented by illness or religious observance. Similar laws exist in the United States and most other developed countries although the ages of compulsory schooling vary: children in the United States, for example, are not legally required to attend school before the age of six.

There are remarkable consistencies in rates of school attendance. Cutter and Jones (1971) found a 90 per cent attendance rate in a sample of American elementary schools. Rates in Britain are similar; indeed the proportion of pupils absent has remained stable throughout the twentieth century: 89 per cent attendance at London Board Schools in 1906 (Rubinstein 1969); 89 per cent attendance in the Inner London Education Authority's schools in 1970 (Hill 1971); and a Department of Education and Science survey reported that on a given day

in January 1974 90.1 per cent of all pupils aged twelve or over in England and Wales were present. This survey also showed that absence rates were highest in the final year of compulsory education, and similar trends have been found in the United States.

There has been sharp disagreement about the proportion of absent pupils who are absent illegally. Estimates range from 4 per cent (DES 1967) to 75 per cent (Reynolds and Murgatroyd 1974). A study by Galloway (1982a) showed that from a sample of British schools 4 per cent of pupils were recorded as absent illegally for at least 50 per cent of their final year. The difficulties in establishing the illegality of a pupil's absence are considerable; it is likely that many published figures have given an over-optimistic view.

Traditionally clinical practice has distinguished between SCHOOL PHOBIA, also known as school refusal, and truancy. Children referred to clinics for school phobia tend to be younger (Tyerman 1958; Hersov 1960). While Hersov and Tyerman both noted poor social adjustment, low average IQ and low educational attainments, Cooper (1966) found no evidence of educational retardation relative to IO.

Truancy and school phobia together account for a very small proportion of absences from both primary and secondary schools. By far the most common explanations in Galloway's study (1982a) were "absence with parental knowledge, consent and approval", and "parents unable or unwilling to insist on return". It is clear that parents are aware of their children's absence in a large majority of cases, and in roughly half these cases the parents withhold their children from school. In the remainder, the child insists on remaining at home, with the parents unable or unwilling to insist on return.

Surprisingly little attention has been directed at reasons for parents condoning their children's absence from school. A high positive correlation has been demonstrated in Belfast and Sheffield between parental poverty and persistent absentee rates (Harbison and Caven 1977; Galloway 1982a). Harbison and Caven did not find this association in rural areas of Northern Ireland. It seems probable that absence from school and poverty may both arise from other variables associated with depressed inner city areas. (See also SOCIAL DISADVANTAGE.)

This suggestion received some support in a study of all persistent absentees in one area of Sheffield (Galloway 1982b). Parents of absentees were significantly more likely to be unemployed than parents of good attenders selected from the same class in school and living in the same areas. More important, a health questionnaire revealed a high prevalence of probable psychiatric illness in the mothers of absent pupils. The most common symptoms were those associated with depression. Anxiety about parental health was frequently associated with absence, but social, educational and disciplinary problems at school became increasingly important in the secondary school years.

Several studies have reported poor attenders as being less successful on tests of educational attainment and general intelligence than regular attenders. There is disagreement about whether educational retardation is the cause or the result of poor attendance. May (1975) argued that poor attenders were performing badly at school before their

irregular attendance started. It has also been demonstrated that poor attenders at the age of seven were not educationally retarded at the age of sixteen, compared with their peers, if they were attending regularly at fifteen. On the other hand, continued poor attendance at fifteen was related to poor attainment. This suggests that absentees who miss a considerable amount of schooling at an early age can catch up through subsequent regular attendance, and hence that the poor attainments of the continued absentees whose teachers did not regard them as truants may be causally related to that absence. Tennent (1971) listed twenty studies of juvenile or adult offenders which reported at least 20 per cent of the sample having a history of truancy. May (1975) found that truants were more likely to have criminal records than absentees whose teachers did not regard them as truants. Galloway (1982a) found that over 20 per cent of boys whose parents condoned their absence from school had criminal records; this also applied to 19 per cent of boys whose absence was attributed mainly to illness. The general picture is one of a consistent association between truancy and DELINQUENCY, and of a slightly less consistent association between absenteeism and delinquency. Nevertheless, it should be emphasized that a majority of poor attenders are not known to offend.

There appears to be a substantial overlap between school drop-out and truancy. Many American studies on individuals who leave school without qualifications shows them to end up with low occupational status, higher likelihood of being unemployed, and decreased participation in adult education. Because truancy is associated with early school leaving, it is often difficult to tell whether it is the truancy *per se* or the lack of qualifications that leads directly to the adult outcome.

Robins and Ratcliff (1980) investigated the long-term effects of truancy on the lives of a large sample of black males, all of whom had attended ordinary state schools in St. Louis and had been above average in ability. The men were interviewed at 30–36 years of age while at the same time their records on education, housing, armed forces. police and hospital files were scrutinized. In this large group of men high truancy was found to be associated with school drop-out and later with low earnings and deviant behavior in adulthood. Naturally these poor adult outcomes were in part explained by the truants' dropping out of school and by their adolescent deviance, but the authors stress that the "truancy itself continued to have predictive power even when these intermediary events were taken into account" (p.80). On the basis of their research Robins and Ratcliff urge measures to prevent truancy which, if successful, could be expected not only to affect truancy levels, but "to forestall a variety of related deviant acts that may otherwise appear later" (p.80).

Greater attention has been paid to family and social variables in poor school attenders than to the school's own contribution in promoting regular attendance. Reynolds and Murgatroyd (1977) reported consistent differences in attendance rates between Welsh secondary modern schools with similar catchment areas (see SCHOOL DIFFERENCES), differences associated with the school's rules and policies rather than with structural variables such as

size or age of buildings. More recently Rutter et al. (1979) have reported significant differences in attendance rates between London schools, after controlling for intake variables. Galloway (1982a) demonstrated significant changes in persistent absentee rates within individual schools over a period of three years. His evidence suggests that the school's influence on attendance is greatest in disadvantaged areas where the likelihood of absence is highest in the first place.

There have been few systematic studies on either the prognosis or the management of absence from school. Galloway, Ball and Seyd (1981a) showed that legal action is taken against only a very small proportion of persistent unauthorized absentees. The prognosis following legal action was extremely poor, but substantial improvement was associated with a change of school when this was arranged for some special reason, rather than as an ordinary age-related transfer (Galloway, Ball and Seyd 1981b). Many local education authorities have established special centers for poor attenders. However, these are only able to cater for a very small minority of the pupils in question, and systematic studies of their effect on subsequent attendance are conspicuously absent.

There is no simple explanation for absence from school. Variables within the individual and within his or her family, home neighborhood and school are all likely to be important. A comprehensive assessment is required in each case, focusing on the school's provision for the pupil as well as on the pupil and his or her background. Successful management requires parental cooperation with assistance from teachers and members of the educational and social work support services.

Bibliography

Cooper, M. G. 1966: School refusal. Educational research 8. 223-9.

Cutter, N. C. and Jones, E. R. 1971: Evaluation of ESEA Title VIII Dropout Prevention Program 'Project KAPS' School Year, 1970–71. Mimeo. Quoted in Robins and Ratcliff 1980.

Department of Education and Science, 1974: Press Notice: Results of school absence survey, London: DES.

Galloway, D. 1982a: Persistent absence from school. Educational research. In press.

——— 1982b: A study of persistent absentees and their families. *British* journal of educational psychology. In press.

Galloway, D. M., Ball, C. and Seyd, R. 1981a: Administrative and legal procedures available to local education authorities in cases of poor school attendance. *Durham and Newcastle research review* 9, 201–9.

——— 1981b: School attendance following legal or administrative action for unauthorised absence. *Educational review* 33, 53–65.

Galloway, D. M., Ball, C., Blomfield, D. and Seyd, R. 1982: Schools and disruptive pupils. London: Longman.

Harbison, J. and Caven, N. 1977: *Persistent school absenteeism in Northern Ireland*. Belfast: Statistics and Economics Unit, Dept. of Finance (Northern Ireland).

Hathaway, S. R., Reynolds, P. C. and Monachesi, E.D. 1969: Follow up of the later careers and lives of 1,000 boys who dropped out of high school. *Journal of consulting clinical psychology* 33,370–80.

Hersov, L. 1960: Refusal to go to school. *Journal of child psychology and psychiatry* 2.137–45.

Hill, B. 1971: Worried about truancy, *Times educational supplement*, 2nd July. May, D. 1975: Truancy, school absenteeism and delinquency. *Scottish educational studies* 7. 97–107.

Reynolds, D. and Murgatroyd, S. 1974: Being absent from school. *British* journal of law and society 1, 78–80.

Reynolds, D. and Murgatroyd, S. 1977: The sociology of schooling and the absent pupil: the school as a factor in the generation of truancy. In Absenteeism in South Wales: studies of pupils, their homes and their secondary schools, ed. H. C. M. Carroll. Swansea: University College of Swansea, Faculty of Education.

Robins, L. N. and Ratcliff, K. S. 1980: The long-term outcome of truancy. In *Out of school*, ed. L. Hersov and I. Berg. London: Wiley.

Rubinstein, D. 1969: School attendance in London, 1870–1904: A social history. Hull: University of Hull.

Rutter, M. et al. 1979: Fifteen thousand hours: secondary schools and their effects on pupils. London: Open Books; Cambridge, Mass: Harvard University Press.

Tennent, T.G. 1971: School non-attendance and delinquency. *Educational research* 13, 185–90.

Tyerman, M. J. 1958: A research into truancy. *British journal of educational psychology* 28, 217–25.

absenteeism Time lost from paid work due to frequent and repeated absence. Often used as a criterion in personnel selection research, absence rates may be measured by total days absent or number of spells of absence – one absence lasting twenty days may not have the same significance as twenty absences of one day each. Absences represent lost time to the employer, as do tardiness and unauthorized pauses for breaks. In recent years attendance and work schedules have received increased attention as organizations have experimented with flexible working schedules. Absence control policies differ greatly among organizations. There is no evidence of a unitary personal trait or disposition to be absent.

Bibliography

Steers, Richard M. and Stone, Thomas H. 1982: Organizational exit. In *Personnel management*, ed. Kendrith M. Rowland and Gerald R. Ferris. Boston, Mass.: Allyn and Bacon.

accidents An accident is an unexpected event which causes injury to persons or damage to property, or both. Psychology relates to accidents through explanations of human error. Calculations of proportions of accidents due to human error are specious because there is invariably a complex pattern of preceding causal events leading up to every accident and within this pattern there are bound to be some human errors. Every psychological theory from psychoanalysis to information processing has some explanation as to why errors occur. The art of applying psychology to accident investigations is to select the appropriate mix of theories which seems relevant to the particular problem. There is a conflict between the two equally tenable concepts that errors are an inevitable concomitant of human action and that people are responsible for their actions. This is usually resolved by the compromise of "reasonable care". Accident data and evidence are always dubious and rarely comparable because of problems of definition and of reporting. However accidental injury occurs mainly in the home and in private cars. Occupational injury is relatively rare, as occupational safety has improved steadily over the past thirty years. WTS

Bibliography

Singleton, W.T. 1973: Theoretical approaches to human error. *Ergonomics* 16.6, 727–37.

acetylcholine A neurotransmitter in both the peripheral and central nervous system. Acetylcholine is synthesized from choline. Once released at the SYNAPSE, it interacts with postsynaptic receptors, and then is degraded enzymatically by acetylcholinesterase. There are two types of acetylcholine (cholinergic) receptors. Nicotinic receptors are mimicked by nicotine and blocked by α -bungarotoxin. Synapses involving nicotinic receptors are excitatory and have been postulated by McGeer, Eccles and McGeer (1978) to be ionotropic: that is, the interaction of acetylcholine and nicotinic receptors causes a direct change in the ion permeability of the postsynaptic membrane. Muscarinic receptors are mimicked by muscaine and blocked by atropine. These synapses can be excitatory or inhibitory and are thought to be metabotropic, using cyclic AMP as a second messenger (see ADENYL CYCLASE). Peripheral actions of acetylcholine include parasympathetic (muscarinic) innervation of smooth muscles and glands and nicotinic innervation of skeletal muscle (see NEURONS, ALPHA MOTOR). Centrally, acetylcholine is found predominantly in LOCAL CIRCUIT NEURONS, primarily in the EXTRAPYRAMIDAL MOTOR SYSTEM, THALAMUS and CEREBRAL CORTEX. In addition, there are cholinergic projections from portions of the LIMBIC SYSTEM to hippocampus. Central cholinergic synapses are predominantly muscarinic. Cholinergic systems are involved with movement and behavioral inhibition. (See also NEUROTRANSMITTER.) GPH

Bibliography

McGeer, Patrick L., Eccles, John C. and McGeer, Edith G. 1978: *Molecular neurobiology of the mammalian brain*. New York and London: Plenum.

achievement motivation This concept was developed by McClelland (see McClelland et al. 1953) and refers to the motive to achieve some standard of accomplishment or proficiency. People with a strong achievement motive (which McClelland calls need for achievement) prefer moderate to easy or hard goals or risks, want concrete feedback regarding task performance, prefer tasks where skill rather than luck determines the outcome, seek personal responsibility, have a future time perspective, and err somewhat on the side of optimism in estimating their chances for success, especially on new tasks. McClelland (1961) claims that the achievement motive is crucial in entrepreneurship and influences success in entrepreneurial occupations (e.g. selling); he has even claimed that cultural differences in achievement motivation account for differences in economic growth rates. It is argued that the need for achievement is fostered by child rearing practices which encourage independence. It is held by McClelland to be a subconscious motive, and therefore more accurately measured by projective techniques such as the Thematic Apperception Test, than by self reports. Research on achievement motivation has been criticized on numerous