

SOCIAL CLASS, THE SYMBOLIC ENVIRONMENT, AND
THE RELATIONSHIP BETWEEN PARENTAL BEHAVIOUR,
SELF-CONCEPTION AND PSYCHOPATHOLOGY IN ADOLESCENT BOYS

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"Leventhal wanted to ask (the physician) about the disease. It was rare. Well, did medicine have any idea how a thing like that singled out a child in Staten Island rather than, say, St. Louis or Denver? One child in thousands. How did they account for it? Did everyone have it dormant? Could it be hereditary? Or, on the other hand, was it even more strange that people, so different, no two with the same fingerprints, did not have more individual diseases?"

Saul Bellow, The Victim, p.57.

"The determining cause of a social fact should be sought among the social facts preceding it and not among the states of the individual consciousness."

Durkheim, The Rules of Sociological Method, p.110.

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SUMMARY

This thesis describes an attempt to develop and test a model of the relationship between the social environment and mental disorder. Despite a voluminous literature, and a research tradition which extends back over thirty-five years, understanding of the part played by the social environment in the aetiology of mental disorder remains relatively obscure. This is so even in the case of analyses of the relationship between social class and mental disorder, where the research evidence is perhaps more consistent than in any other part of the field.

On the basis of a review of the existing literature, it is argued that an effective sociological model of the causation of mental disorder should satisfy three basic criteria. Psychiatrically, it should explain why "abnormal" behaviour occurs. From a sociological point of view, it will obviously require to relate this to the social experience of the individual. Methodologically, it should be capable of reduction to a set of complementary propositions, from which a series of testable hypotheses may be logically derived.

Using Popper's terms, a distinction is made between "essentialist" and "nominalist" models of social structure. Consideration of the research-literature indicates that studies which invoke an essentialist model of social structure are unlikely to satisfy these criteria, because they fail to create an effective link between the individual and his social environment, and so do not permit direct testing of the processes presumed to be influential in the causation of psychiatric

breakdown. Conversely, studies based on a nominalist perspective have produced hypotheses which, while more testable, have tended also to be sociologically rather trivial as accounts of the genesis of mental disorder. This indicates the need for a perspective which uses the individual as its focus of analysis, but which also makes meaningful links between the individual and his social environment.

It is argued that symbolic interactionism provides such a perspective. An analysis of symbolic interactionist theory suggests that sociological research in psychiatry may usefully be organised around the concepts of the self and the symbolic environment. It is further suggested that these may be applied to research at a "situational" and an "aetiological" level. The present study is an attempt to establish the utility of these concepts for research in this area, with particular reference to the relationship between social class and mental illness, through an investigation of the latter type.

On the basis of these two concepts, a set of three basic assumptions were formulated, concerning the relationship between parental behaviour, self-conception and psychopathology. From these three assumptions, and in the further light of a review of extant literature, ten hypotheses were constructed for testing in the present investigation. In essence, these predict that there will be social-class differences in the way the variables of psychopathology, self-perception and parental behaviour are related to each other, and that these will be attributable to differences in the assumptions which underlie interactions within the family in different class groups.

These hypotheses were tested in a prevalence study involving 392 adolescent boys, using questionnaire measures of psychopathology, self-perceptions and perceptions of parents - the sample being stratified by social class.

The results give some support to the main hypotheses of the research. In particular, it was discovered that the self-concept is an essential intervening variable in the relationship between parental behaviour and psychopathology. Moreover, it was discovered that the only social-class group in which parental behaviour per se is related to the existence of psychopathology in the child is social class 3, where the relationship is significantly greater than that found in classes 1 and 2 or classes 4 and 5. In the latter group, the findings tend to suggest that insofar as parental behaviour is related to psychopathology, anxiety is related to a perception of father as more relaxed, independent and strong than mother, which pattern is significantly different from that found in classes 1 and 2, where neuroticism correlates with a perception of mother as more strict, cold, sure of self, strong and independent than father. The indications are also that the relationship between self-conception and psychopathology is stronger in these middle-class than in the working-class groups, with a particularly strong relationship between psychopathology and the discrepancy between how boys see themselves, and what they think their parents would like them to be like.

For reasons which are ^{specified} ~~adumbrated~~ in the text, it was however decided that the concept of the symbolic environment is not in itself adequate to account for these findings. A revised explanation is presented, based on the notion of parental behaviours and adolescent

personality-characteristics which are "functional" within particular types of (class-determined) environment. The findings are analysed in the light of this revised explanation. Suggestions are also made concerning methodological improvements which might be effected in similar studies in the future.

FOREWORD

Chapters I and II are based on a revised and substantially enlarged version of an article on "Sociology and the study of psychiatric disorder", which was published in the Sociological Review, vol. 17 (1969), pp. 377-397. Chapter VII and a small part of chapter II have already been published as an article on "Social-class differences in the relationship between birth order and personality development", which appeared in Social Psychiatry, vol. 6 (1971), pp. 172-178. Copies of both articles are enclosed with the thesis.

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SECTION I

BACKGROUND AND METHODS OF THE STUDY

CHAPTER 1

SOCIOLOGY AND THE STUDY OF PSYCHIATRIC DISORDER:
A REVIEW OF THE LITERATURE AND THE RESEARCH PROBLEMS

Anyone who wishes to undertake an investigation of the part played by sociological factors in the aetiology of mental disorder may be excused for confessing to a certain amount of diffidence on entering his task. The literature on this subject is voluminous: the issues embraced by research within this field are both intricate and diffuse. Several recent surveys of this literature have highlighted the serious conceptual and methodological problems which dog aetiological research in psychiatry (Kleiner and Parker, 1963; Mishler and Scotch, 1963; Kohn, 1968, 1972; Petras and Curtis, 1968; Kaplan, 1969). These also serve to underline the meagre and inconclusive nature of such findings as have emerged from the bulk of the studies undertaken to date in this field. At the end of their excellent review of sociological investigations into schizophrenia, Mishler and Scotch (op. cit., p.340), for example, liken their task in trying to draw some conclusions to that of:

"talking with the relatives of the deceased after a funeral. Other than some platitudes there is little that can be suggested that would remedy, alleviate or eliminate the trouble."

Other, more admonitory, statements are not hard to find. As Mishler and Scotch point out, criticism and review in this field preponderate over actual research. Wardle (1962), for instance, has expressed the opinion that in the absence of unequivocal proof of a relationship between sociological variables and psychosis, the contribution of sociology to psychiatry is likely to be greatest in attempts to understand and change public attitudes towards the mentally ill, rather than in endeavours to identify presumed aetiological links. Dohrenwend (1966) also insists, inter alia, that before sociologists can conduct effective research on

psychiatric phenomena, they must come to some agreement on the crucial problem of defining a psychiatric "case".

At a more theoretical level, and on the basis of an exhaustive review of the existing research evidence, Professor Roger Bastide argues in his recently translated book (Bastide, 1972) that the "mechanical" conception of causality on which the greater part of this research has implicitly been founded, provides an inappropriate model for the study of human behaviour. Much the same observation has been made by Matza (1964) in relation to the study of criminality; and with specific reference to research on mental disorder, by Scheff (1966) and Elias (1969). This is a particularly important point which will be examined in more detail below.

The conclusion ultimately drawn by Bastide is, however, that sociologists working in this area should eschew the study of aetiology, and concentrate instead on attempting to understand mental disorder as a social phenomenon. A similar argument is presented by Schatzman and Strauss (1966), in their assertion that:

"it would be much more fruitful for sociology if more research were done about psychiatry than in it or for it." (my italics).

While one acknowledges the validity of many of these criticisms, it is the burden of this dissertation that, despite the difficulties involved, sociology can make a distinctive contribution to understanding of the causes of mental disorder. It is felt, moreover, that its application to this field can also throw light on certain basic issues in sociology.

Any attempt to apply sociology to the study of psychiatric illness does, however, demand prior consideration of two related sets of problems. First is the basic (and somewhat neglected)

problem of what conception sociologists hold of human nature; and the framework one should adopt for viewing the relationship between the individual and society. The second is an issue stemming from more methodological concerns. The development of sociological theory shows a recurring preoccupation with the problem of verification - a fact which demonstrates the difficulty of developing a theory that is both sociologically relevant and amenable to empirical testing, and which is discernible in the long-standing ambivalence of the relationship between sociology and positivism (Martindale, 1961; Runciman, 1963, ch. 1).

Examination of these topics could give some indication of what a sociological theory of mental disorder might look like. It should at least produce a rationale for sociological investigations in this area. It could in fact be argued that social psychiatry has tended to suffer from the fact that individual workers have set up explanatory or theoretical systems in which a number of a priori assumptions have been implicated; rather than starting with an examination of these assumptions themselves and modifying them in the light of such analysis, to provide a more satisfactory basis for any explanation of the interaction between society and the person (Elias, op. cit.).

Psychiatry and the conceptual frameworks of sociology

Many of the ambiguities contained in the results of existing sociological research into the causes of mental disorder arise, in the opinion of the present author, from the eclectic approach of researchers who start with a particular model of social structure and attempt to fit into this a model of personality which is guided by the basic assumptions of traditional psychiatry. This psychiatric

model and the presumed relationship between the two conceptual systems is sometimes made explicit, but more normally is implied in the assumptions which guide research. The definition of mental illness is thus, in the words of Scott (1958), "operational rather than conceptual", militating against effective exploration of the links between the individual and events in his social environment. The reverse criticism could be applied to much of the research in which psychiatrists have sought to make use of socio-cultural variables and hypotheses.

While the tendency to regard the person and his social environment as separate entities, with psychology involving the study of the individual and sociology the study of the group or society, has undoubtedly made for advances in knowledge, it seems increasingly acknowledged that this has also presented obstacles to the understanding of human behaviour - not least to the development of an effective social science (Yinger, 1963; Elias, op. cit.; Rushing, 1969). The pervasiveness of this dualism is evidenced in the fact that the rather hoary debate between essentialism (Popper, 1961, pp 26-34) and nominalism - between "organic" and "mechanical" models of social functioning (Stark, 1962) - is still something of an issue in sociology (Weinstock, 1966; Silvers, 1966). With regard to the interaction of person and society, the dichotomy between essentialism and nominalism in their pure forms resolves itself, of course, into a question of whether one holds individual behaviour to be determined by the pressures from a social environment which has an existence of its own, over and against that of its individual members; or the patterns and regularities of social interaction to arise from the

autonomous behaviour of individuals whose actions converge because they are pursuing similar goals. It need hardly be said that in practice the dispute is largely one of emphasis, with sociologists adopting their individual positions at points between these two extremes.

Essentialist notions have undoubtedly predominated in sociological contributions to social psychiatry. It may also be significant that (as will be seen below) nominalist interpretations of social-psychiatric phenomena have tended to be more favoured by psychiatrists than by sociologists. A model which traces the origins of social structure to the actions of the individuals who comprise it can only be reconciled with two views of human nature, both of which place limitations on the frameworks one can adopt for studying the relationship between the social environment and psychiatric breakdown. One may either: (a) focus on voluntary activities and regard psychiatric disorder as a product of the stress individuals undergo in voluntary competition*; or (b) regarding the social structure as a by-product of the actions and predispositions of individuals, explain the relationship between society and mental disorder in terms of the characteristics that exist or are produced in the areas or social groups into which mentally ill individuals tend to gravitate. Since this begins to anticipate topics which will be examined more fully below, this discussion will be postponed until later.

* The concept of stress has proved somewhat resistant to measurement, or even definition. For an exhaustive review of the rather equivocal findings on the relationship between stress, social status, and psychiatric breakdown, see Dohrenwend and Dohrenwend (1969). See also Langner and Michael (1963), Phillips (1968) and Kohn (1968, pp 164-166).

A review of research trends and evidence

It is probably no accident that most of the studies undertaken into the relationship between culture and psychiatric or para-psychiatric phenomena have tended to be informed by an essentialist paradigm of society. Regarding the individual as subject to external pressures over which he has no control is an attractive conception for one who is studying apparently irrational behaviour. The explanations of psychiatric disorder which it would seem possible to marry with this theoretical position, are either that it results from a tension between innate psychic needs and the demands for conformity placed upon the individual by his culture; or that it is a function of a disturbance or impairment in the quality of the individual's participation in a group or moral order, causing frustration of certain postulated bio-social impulses, either inherent or derived.

The former position is probably best reflected in Freudian theory and its derivatives, in which neurosis is presumed to arise from the suppression of a set of anarchic and biologically-determined individual needs, in the interests of communal existence (Freud, 1945; Wrong, 1961). For the present, the factor to be noted in this formulation is that the personality and the social environment are fairly explicitly presumed to be closed, discrete entities, functioning on separate and relatively independent levels. The social environment is viewed as external to the individual, operating on him as a set of definite, if invisible, forces.* This is of

* For a useful critique of this position, see Elias (1969). Sociologically, of course, this is a long-standing observation (Cooley, 1902).

course paralleled by Freud's well-known "hydraulic" paradigm of personality, to explain the relationship between personal tension, external pressure, and the build up of frustrated drives (Colby, 1955; MacIntyre, 1958; Sarason, 1965, part 3). While such an explanation probably still enjoys a fair degree of currency in clinical practice, it is hard, in the research field, to locate any recent work which derives from these ideas.

The second main essentialist position has been aptly delineated by Kunitz (1970) in his critique of "equilibrium theory" in psychiatry:

"The health of the individual is dependent on the health of the community - that is, personal equilibrium depends on social equilibrium."

An "unhealthy" community tends moreover to be defined as a "disintegrated" community - one in which the contacts between individuals are tenuous, with consequent impoverishment of shared value systems and mechanisms of social control. This is also generally regarded as an inevitable consequence of the move from small and close-knit (rural) communities to the more amorphous and impersonal environment that is felt to prevail in modern urban societies.*

The multi-disciplinary study of patterns of mental illness in "Stirling County", for example (D.C. Leighton, J.S. Harding, et al., 1963) adduces evidence to support the thesis that social disintegration has a direct bearing on the prevalence of psychiatric disorder. Alexander Leighton (1959, pp 199-200), sketching in

* For a classic criticism of this approach, see Mills (1943) on "The professional ideology of social pathologists".

the conceptual background to this study, makes his organicism quite explicit:

"As organisms such as human beings are self-integrating units composed of cells which are also self-generating, so also to some degree the community is an organism composed of human beings. The fact that the individuals in a county are physically detached does not negate this, but rather reflects the type of integration The organismic characteristics of communities may be summed up by referring to them as quasi-organisms."

His subsequent statement that "the emphasis is on 'organism' rather than 'quasi'" sets the seal on this position.

The major weaknesses of this study stem, in the view of the present author, from this theoretical foundation, necessitating as it does the introduction of a set of assumptions concerning social functioning, the basic needs of the individual, and the interplay between these two. The authors of this study (A. Leighton, op. cit.) attempt to explain the relationship between the social environment and psychiatric deterioration, by postulating the existence of a number of essential human needs - such as "spontaneity", the expression and receipt of "love", and an inherent sense of worth or identity - the expression of which is held to be essential for the development and maintenance of a "healthy" personality. It is further argued that the attenuated nature of social relationships in a declining community creates difficulties for the satisfaction of these needs, with adverse consequences for the personality. In his penetrating criticism of the Leightons' work, Kunitz (op. cit.) has demonstrated that these assumptions are basically tautologous; and while this does not in itself invalidate the findings of this study, it does weaken their explanatory value and suggest that other, more parsimonious, models should be preferred.

For the sociologist, Durkheim's study of the relationship between social cohesion and the incidence of suicide (Durkheim, 1952) provides an obvious and still influential example of an attempt to relate an essentialist model of social organisation to an area of social pathology. It also affords a good illustration of the strengths and weaknesses of this tradition. On the one hand, the essentialist position has proved a rich source of sociologically relevant ideas and explanations. These same explanations have, however, proved notoriously difficult to test in a scientifically acceptable manner.

The most salient feature of Durkheim's conceptual position - that the individual experiences social life in terms of "things" which impinge upon and shape his behaviour (Durkheim, 1964, p. 13 and passim) - may have been dictated by his methodological position (that the methods of the natural sciences are applicable to the study of social phenomena). As is now widely accepted, the weakness of Durkheim's analysis lies in the fact that "social facts" as (in terms consistent with his theoretical stance) he defines them (Durkheim, 1964, p. 13), are not capable of demonstration (Rex, 1961, pp 4-15) and their operation can consequently only be inferred from his data (Douglas, 1967). Moreover, despite his avowed intention to eschew psychological explanations of suicide, Durkheim's classification of the suicidal act can be seen to rest ultimately on psychological assumptions (Inkeles, 1959, pp 249-50), which again are inferred from and strongly supported - but not necessarily proven - by his data. This is not to deny the brilliance of method and design of "Le Suicide"; but what we have here is a prime instance of the methodological dilemma, as noted earlier, with which sociology is confronted.

Ecological studies of psychiatric illness

Moving from the positivistic organicism of Durkheim to the work of the ecological school, we see in operation a very similar model of the relationship between man and society (Schnore, 1958) with corresponding difficulties of verification. Sociological research on mental illness effectively dates from the pioneering Chicago study of Faris and Dunham (1939), which established that there was an inverse relationship between social status and schizophrenia, with this type of disorder tending particularly to be concentrated in the more deprived neighbourhoods of the city. Since then, a number of studies have evinced a similar relationship between social class or ecological area and the incidence of certain kinds of psychological disorder (Hare, 1956a; Kaplan et al., 1956; Rennie, Srole et al., 1957; Hollingshead and Redlich, 1958; Primrose, 1962; Dunham, 1965; Rowitz and Levy, 1968); but there is also some evidence to contradict these findings (Clausen and Kohn, 1957; Stein, 1957; Kennedy, 1964; Dohrenwend and Dohrenwend, 1969).

Such ecological research has of course inspired a considerable critical literature. Ever since their research was first published, for example, a major debate has centred on the interpretation Faris and Dunham (op. cit.) chose to place upon their findings. Using independent criteria, these authors defined those areas with high rates of schizophrenia as "disorganised", and argued that social disorganisation gave rise to impoverished patterns of communication between the persons living in such areas, which they in turn held to be an important element in the aetiology of schizophrenia. The principal alternative to this explanation has come to be known as the "drift" hypothesis. In essence, this attributes the

concentration of schizophrenia in more deprived neighbourhoods not to any causal factors in the social environment of these neighbourhoods, but rather to the tendency for individuals with a developing psychotic illness, or a prior disposition to psychotic breakdown, to gravitate into such areas (Myerson, 1941; Dunham, 1965, pp 220-21).

In another influential study, Hollingshead and Redlich (1958), while working from a less specific frame of reference than ecological theory, are faced with the same difficulty in explaining the same negative correlation between social class and the incidence of schizophrenia, and a contrasting tendency for neurosis to be positively correlated with class position. These researchers show appropriate circumspection in interpreting their findings, and although they draw attention to the possible influences of (presumed) class differences in socialisation procedures and attitudes towards social mobility, in their book they in effect say no more than that there is a relationship between social class and mental disorder, while the problem of explanation remains.

In a now ageing paper which draws attention to the difficulty of validating interpretations from ecological material, Clausen and Kohn (1954) do not go so far in their criticisms as W.S. Robinson (1950), who rejects the method out of hand, but agree that as a technique it is too coarse grained to give dependable results. They demonstrate that ecological work is based on two major sets of assumptions. A first set is statistical in nature, implying that it is possible to isolate from the group of variables which typify a neighbourhood, the particular cluster of variables which explain that area's higher or lower incidence of mental illness. Secondly, a number of assumptions are invoked in the interpretation of the sociological

significance of these statistical findings. The area is presumed to have an "effect" on its inhabitants through, for example, acting upon genetic predispositions in the individual; through the impoverished quality of social interaction within it (as in the "social isolation" hypothesis of Faris and Dunham); or through the existence of divergent value systems (as reflected, for instance, in socialisation patterns) in particular areas.

It is thus apparent that when the ecologist is faced with the problem of explaining area differences in rates of mental illness, he must, like Durkheim, leave his purely sociological model behind and introduce into his argument a set of psychological assumptions, which again render his findings explicable in terms of a theoretical structure, but which lack any ring of finality. His findings are always open to several alternative - and equally plausible - explanations, because they fail to demonstrate conclusively how individuals are affected by the trends which are invoked as explanations of the data. That the foremost social ecologist working in this field is himself sensitive to this kind of criticism is evidenced in the following remark (Dunham, 1961, p. 230):

"If he operates as an ecologist (the researcher) will emphasise the processes within the environment and attempt to show the social variable or complex of variables that is associated with the rate differential. If he tries to get at the social factors that are causative or predisposing for persons in that environment, he will be thrown on another level of analysis where his ecological findings will prove only indicative of some factors that he might study as having an aetiological significance."

It is some fourteen years since Dr. H.G. Birch (1959), in his discussion of Clausen and Kohn's paper on the "Relation of Schizophrenia to the Social Structure of a Small City" (Clausen and Kohn, 1959), complained that research reports on the ecological distribution

of psychiatric disorder had too often been prefaced by the plea that they should be regarded as "tentative" or "exploratory" statements. The continuing appearance of such studies in the literature almost persuades one to agree with Birch's (loc. cit.) subsequent judgment that:

"It almost seems as though the method of exploration has become the method of choice in the investigation of some of these problems, that the preliminary method, because of the ease with which it may be utilised, has become the desirable method for investigation."

It therefore seems reasonable to conclude that ecological research in the field of psychiatric disturbance contains both conceptual and methodological deficiencies. Conceptually, it is unable to locate the specific processes involved in the onset of a disorder. Methodologically, it depends on the questionable use of statistics to measure the presumed interconnections between variables. Such studies can thus be viewed as resting at the level of statistical descriptions of the psychiatric characteristics of populations in certain urban areas. They are studies of the epidemiology but not the aetiology of psychological disorders. Valid sociological generalisations about psychiatric aetiology require a model of the social environment which links the individual more directly to it, and which thereby permits more direct examination of the processes presumed to be influential in the causation of mental breakdown.

Psychopathology, "drift" and social selection

Among those studies which have gone beyond a purely descriptive statement of ecological trends, the balance of the evidence does in fact appear to favour those interpretations which ascribe the

concentration of schizophrenia in the central areas of (larger) cities, to the movements of schizophrenics into those areas. The best known examples of this view are probably the hypotheses of "drift", "attraction" and "social selection". As was indicated earlier, the "drift" hypothesis argues (Myerson, op. cit.) that individuals with personality weaknesses or developing psychotic conditions have a tendency to drift downwards into underprivileged social groups or areas of the city. The "attraction" hypothesis is slightly different in that it assumes that the psychological needs of the (actual or potential) schizophrenic induce him to settle in those areas of the city where life is held to be more anonymous, and social relationships therefore less demanding. Both hypotheses are accordingly founded on the commonsense nominalist notion that individuals rise or fall in the social hierarchy, according to the degree of their success in the competitive situations of work and everyday interaction, and that those individuals who are unable to compete successfully, gravitate into marginal groups or areas. The difference between them (Dunham, 1965, p. 221) is that, by contrast with the notion of "drift", the "attraction" hypothesis ascribes a degree of choice and volition to the schizophrenic person, in that it depicts him as sensitive to the demands made upon him in social interaction, and actively selecting a social milieu in which these demands are kept within tolerable limits.

Gerard and Houston (1953), for example, in their analysis of the distribution of schizophrenia among males in Massachusetts, found that a large number of the schizophrenics from impoverished areas were living in isolation. They further demonstrated that

schizophrenics living with their families were less likely to move their place of residence than were schizophrenics living on their own, and suggest that this mobility of schizophrenics living in isolation was a means of protecting themselves against involvement in close personal relationships.

Similarly, Hare (1956a), having established that the incidence of schizophrenia was highest in the decaying central areas of Bristol, also found that large numbers of schizophrenic ex-patients in both "good" and "poor" central areas of the city were living on their own. In a further analysis of these data, Hare (1956b) attempted to test Gerard and Houston's explanation of the mobility of schizophrenics living in isolation. Arguing that the pattern he had found in Bristol could be attributed either to some causal factors in the social environment of certain areas (a notion which he dubbed the "breeder" hypothesis), or that the characteristics of certain areas attract unstable individuals (the "attraction" hypothesis), Hare re-analysed his data on schizophrenic and manic-depressive cases in order to determine which hypothesis offered the better explanation of his original findings. The results of this additional analysis gave some degree of support to both hypotheses, but overall were more consistent with the "attraction" hypothesis. Hare concluded that the excess of schizophrenia in certain areas could largely be attributed to the tendency of pre-disposed individuals to move into, and segregate themselves within, areas of the city where boarding house accommodation was more easily obtained and the need to be involved in threatening personal relationships correspondingly diminished.

This kind of interpretation would also seem to gain some support from Carstairs' (1959) study of the concomitants of successful rehabilitation among schizophrenics in London. His results led Carstairs (ibid., p. 387) to conclude that:

"the chronic schizophrenic patient who returns to live in the community will be most likely to succeed if he is able to ensconce himself on the periphery, rather than in the centre of active social relationship."

The results of his most recent investigation of the relationship between "Community and Schizophrenia" have also led Dunham (1965) to reject the notion that ecological variations in the distribution of psychosis can be attributed to causal factors in the social environment prevailing in certain areas or groups. His painstaking analysis of the distribution of schizophrenia in two areas of Detroit indicate rather that schizophrenia has a similar inception rate in social classes I-IV, that the severity of symptomatology was the same in all classes, and that the large number of schizophrenics he discovered in social class V was due to their tendency to move down the social hierarchy. Their social class position might therefore be presumed to be a function of their schizophrenia, rather than vice-versa. Moreover, Dunham's findings were also consistent with those of Gerard and Houston and of Hare, in indicating that a significant proportion of mental patients had moved from their family of origin, and were living on their own in the centre of the city. Comparing the relative amount of schizophrenia in the two areas of the city, Dunham found a preponderance of the order of 2.7 : 1 in the number of schizophrenics in the poorer (central) area of the city, as against the more prosperous area on the periphery of Detroit. A more detailed analysis of the relationship between schizophrenia and the length of time an

individual had resided in the area failed to elicit significant differences between the two areas, however. Dunham accordingly concluded that the environment of an area does not play a significant role in the aetiology of schizophrenia. Rather, his findings indicate that the preponderance of this condition in the more deprived neighbourhood was due to the fact that those families which produced schizophrenics had tended to move into that part of the city. In short, Dunham now argues that deprived groups or "disorganised" urban communities do not cause schizophrenia, but rather influence its distribution within the social system.

Dunham's findings on the relationship between schizophrenia and social class membership are paralleled in Goldberg and Morrison's (1963) study of young male schizophrenics in England and Wales. The results of this investigation give strong support to the notion that, in this country at any rate, some process of "drift" or social selection is largely responsible for the relationship one finds between schizophrenia and low social status. Using information provided by the Registrar General, on a national sample of men aged 25-34 who were first admitted for treatment for schizophrenia in 1956, it was first established that the occupational distribution of the fathers of these men was virtually identical to that of the general population, whereas the patients themselves showed an excess in social class V.

A clinical study of 165 consecutive male admissions aged under 30 to two London mental hospitals, involving interviews with the patients themselves and with their parents, confirmed this finding. There had been a decline in the occupational status of this group

from father to son; and, among the patients themselves, in their own work history. One of the main proofs of individual downward "drift" was provided by the fact that, although several of the patients had received a grammar-school education, these had tended to end up in semi- or unskilled jobs; and their employment histories showed that in adolescence the patients still conformed broadly to the career expectations of their parents, with a considerable proportion of them hoping to enter professional or technical jobs. Moreover, patients whose illness seemed to have been of insidious onset during adolescence did not attain any professional or technical qualifications; whereas those in whom the illness had developed as an acute episode before admission, had tended to drop in social class shortly before entering hospital.

Turner and Wagenfeld's (1967) analysis of the occupations of schizophrenic patients again found a substantially disproportionate number of schizophrenics in the lowest occupational category. It was discovered that the fathers of these patients were also over-represented at the lowest status-level, though not so markedly as their sons. This finding is in direct contrast to those of Dunham and of Goldberg and Morrison, whose studies both found a class-distribution for fathers similar to that for the general population. This was viewed as tending to support the hypothesis that schizophrenia is caused by factors in the social environment of the individual.

A more detailed analysis of the occupational movement of the patients relative to the social position of their fathers indicated that the over-representation of patients in the lowest class

resulted primarily from downward mobility. A further analysis of these data indicated that the concentration of patients in the lowest social class arose rather from a failure to attain the occupational status that - given their class of origin - they might reasonably have been expected to attain, than from a process of downward "drift", such as is suggested by the findings of Goldberg and Morrison.

Summary

The following would therefore seem to be the main conclusions to be drawn from a review of research in this field. The essentialist tradition has proved a rich source of sociologically relevant hypotheses in the study of the causation of mental breakdown. These same hypotheses are, however, notoriously difficult to test in a scientifically acceptable manner and such findings as have emerged are open to a number of different interpretations. This would indicate the need for a method and a perspective which relate the individual more directly to his social environment. In the case of ecological data, where such hypotheses have been subjected to more rigorous examination the evidence on the whole tends to support explanations based on the nominalist assumption that the concentration of psychosis in certain areas or social groups is attributable to the effects of "drift" or "social selection" of predisposed individuals, rather than to causal factors in the social environment of these groups. But while such explanations are - in principle, at any rate - more testable, they are also sociologically rather trivial, since they deal with the sociological consequences, rather than the

antecedents of mental disorder.

It seems hardly necessary to add that such explanations say nothing of those factors which may make for psychiatric predispositions within the individual. One is therefore still left with the problem of delineating the precise role of the social environment in the aetiology of mental disorder.

CHAPTER 2

PSYCHIATRY AND THE INTERACTIONIST FRAME OF REFERENCE:
THE BACKGROUND AND ASSUMPTIONS OF THE PRESENT STUDY

The basic task of the sociologist studying the causes of mental disorder will be to show how the social experience of the individual has impinged upon and modified his actions. In the light of the discussion in the previous chapter any account will also clearly require to specify at what level the social environment may meaningfully be said to have an existence, and how this links with the individual behaviour of its members. Such an account should also meet the scientific requirement of testability. That is, it should consist of a series of complementary statements which are amenable to empirical test because they allow sets of propositions to be deduced from them. It is suggested that these criteria can most effectively be met within a frame of reference based broadly on symbolic interactionist theory.

The symbolic interactionist approach

As a branch of what Martindale (1961, part 5) calls "social behaviourism", symbolic interactionism focuses on the "social person", the "social relationship" and the "meaningful action" as its units of analysis. It views the orderly patterns of social existence as stemming from the complex interactions and accommodations of individuals who possess similar expectations concerning each other's behaviour (Mead, 1934; Martindale, op. cit.; Rose, 1962) and who are correspondingly sensitive to the expectations placed on their behaviour by other individuals. This stands in contrast to the views that social structure impinges upon the behaviour of the person through some force or representation which is external and superior to him; or that social structure is simply the end-product of actions perpetrated by individuals who have been

socialised, or are otherwise predisposed, to behave in certain ways.

From the point of view of research in psychiatry, symbolic interactionist theory possesses the advantage that it is based on a particular view of human nature, which informs its notions of social interaction and its consequences. It would accordingly seem relevant to present a brief outline of certain important characteristics of this view, before considering its application to psychiatric phenomena.

Interaction and human nature

The first constituent of this perspective - the pragmatist doctrine of "emergent evolution" - is probably also the most crucial, since the other elements may be seen ultimately to derive from it. Most work in psychiatry seems to rest implicitly on an orthodox (Darwinian) view of evolution. Freud's work, for example, bears the undeniable stamp of the time in which he was writing. In particular, Freud's conception of human motivation - as stemming from a set of (biologically based) impulses - directly reflects this Darwinian influence (Ramzy, 1965). Learning theory, with its direct extrapolations from animal to human behaviour, is governed by the same assumptions; as is much of the ethological work which finds its way into psychiatry. While accepting the theory of evolution as essentially true, several writers have argued that, in human beings, biological evolution emerges as a new and different process (Strauss (ed.), 1965, part 1; Lindesmith and Strauss, 1968, part 2). Emphasis is placed by these writers on the human capacity for speech and manipulation of symbols, and the important differences this introduces between animal and human behaviour. It is a point

akin to this which Macmurrary (1961, p. 67) has in mind when he states that:

"Many animals are social; yet no species is social in the sense that we are, for none has the form of its life determined from the beginning by communication."

This is also at the root of Pavlov's theory of the "second signal system":

"When the developing animal world reached the stage of man, an extremely important addition was made to the mechanism of higher nervous activity. In the animal, reality is signalised almost exclusively by stimulations and the traces they make in the cerebral hemispheres which directly lead to the special cells of the visual, auditory or other receptors of the organism. This is what we too possess in the shape of impressions, sensations and ideas of the world around us, both the natural and the social - with the exception of oral and written speech. This is the first system of signals of reality common to man and the animals. But speech constitutes a second system of signals of reality which is peculiarly ours, and is a signal of the first signals. On the one hand the numerous speech stimulations have removed us from reality; on the other it is precisely speech which has made us human." (Pavlov, quoted in Lindesmith and Strauss, 1968, p. 14; and Lawton, 1968, p. 39).*

Among the several consequences to which this gives rise, two would seem to be of particular importance for psychiatry. These accordingly formed the main points of departure for the present study.

First, as stated by Pavlov, language can be said to act as a kind of "filter" between the individual and external reality. Thus, the individual will experience and respond to his environment at either or both of two levels - the concrete (or "natural") and the symbolic level (Berger and Luckman, 1967). In the sociology of

* It is, however, important to note that the second signal system occupies a relatively minor place in Pavlov's work (Bauer, 1952), although it has provided the basis for an influential body of research within the U.S.S.R.

physical medicine, this fact has been recognised in Mechanic's concept of "illness behaviour" (Mechanic and Volkart, 1961; see also Zborowski, 1952), and similar ideas underlie some recent work in the study of mental "stress" (Robertson and Kapur, 1972).*

Second, is the related notion of self-reflexivity. Through his capacity for speech the individual is capable of becoming an object of his own thinking (he can, in other words, think self-consciously about himself). This introduces the important range of work on the self-concept and interpersonal perception.

Two further characteristics of this position seem worthy of special note. First, a model such as this postulates that the individual and his social environment are "open" and interpenetrating - rather than closed and separate - systems. The social environment can, in many respects, be regarded as a set of reference points adopted by the individual (Shibutani, 1955). Second, the model further implies a processual paradigm of mind and a cognitive paradigm of personality; as opposed to the spatial and hydraulic paradigm of (for example) Freudian theory. Together, these give rise to a particular view of the way in which the individual may be presumed to be affected by events in his social environment.

"Labelling" theory

Within the symbolic-interactionist tradition, labelling theory has emerged as an important and increasingly influential perspective

* See also Schachter and Singer (1962).

in the study of social deviance. A central tenet of this perspective is that no action possesses intrinsic features which enable it to be classified as "deviant" or "non-deviant" (Becker, 1963, 1964; Erikson, 1962). Behaviour, according to this approach, becomes "deviance" only when it elicits from members of the public, or - more usually - from official agents of the public (e.g., the police), a response of a particular quality.

The most ambitious attempt to apply labelling concepts to the study of psychological disorder is that of Scheff (1966), who in a set of nine propositions presents a subtle and interesting explanatory scheme which relates to the origins, prevalence and course of mental illness. Basing his case on Becker's (1963) distinction between "rule-breaking" and "deviance", Scheff argues that individuals come to be judged as strange or threatening when their behaviour violates the assumptions of what is decent, appropriate, etc., held within their own cultural group. For many of these departures from the norm, a ready label (such as perversion or criminality) is available. Such categories do not, however, cover the entire range of rule-breaking:

"there is always a residue of the most diverse kinds of violations, for which the culture provides no explicit label" (Scheff, op. cit., p. 33).

To this residue, Scheff gives the name "residual rule-breaking" and avers that most psychiatric symptoms can be fitted into this category. He argues further that: a) residual rule-breaking is of diverse origins, with much of it being a function of "normal" behaviour, and as such remaining unobserved or ignored by the individuals concerned; and b) when such behaviour comes to be defined as "abnormal", the individual finds himself cast in a role

from which it is extremely difficult to extricate himself - an important element in this process being the stereotypes which people hold of insanity, these being learned and constantly reinforced in the course of normal social interaction. Scheff thus focuses on psychiatric symptoms as they relate to a social process, rather than regarding them as constellations of behaviour in isolation from external events.

In his critical analysis of the labelling perspective, Gibbs (1966) argues that, in concentrating on reactions to deviant behaviour, the proponents of this approach do not make it clear whether they are presenting a substantive theory of deviant behaviour, or are simply drawing attention to a neglected area in an attempt to clarify the concept of deviance. If they are attempting a theory, it is important to recognise that the "labelling" concept does not explain why only certain individuals behave in a "deviant" way. Indeed Scheff, in his first proposition, treats the causes of residual rule-breaking as problematical, with his theory subsequently being couched in terms of social reactions to these deviations from the norm. Accepting the general validity of this perspective, whether one accords primary or secondary importance to labelling processes in the explanation of mental disorder therefore obviously depends on whether or not one regards individual breaches of residual norms to be caused by definite and relatively stable internal processes or entities. Scheff's view of mental illness is of course based on an extreme nominalism: for him, "mentally-ill" people are those who are so labelled and who respond appropriately to this label. The behaviour which gives rise to the label is therefore seen as transient,

rather than stable or recurrent.*

The present study is based on the symbolic-interactionist perspective. It is, however, also based on the assumption that psychiatric states are "real", in the sense that "abnormal" behaviour is at least partly the product of internal processes which in turn are at least partly derived from previous social experience.

Within the interactionist perspective, the present investigation attempts to test the relevance of the concepts of the "self" and the "symbolic environment" for research in psychiatry. It would therefore seem necessary to examine these notions in greater detail, before attempting to apply them to the study of psychiatric phenomena.

1. The Self

One of the primary assumptions of the present study is that the self is a product of social experience, and that it is through the study of attitudes toward the self that sociology is likely to make one of its most useful contributions to the understanding of mental disorder. Within the interactionist frame of reference this implies analysis of the "definition of the situation" held by individuals operating in particular social contexts and of the effect on the

* On the basis of a review of the relevant research-literature, Gove (1970) concludes that there is no evidence to support the notion that "labelling" is a significant factor affecting the behaviour of mentally-ill people. Bentz and Edgerton's (1971) research indicates that there is a trend (in the United States, at any rate) towards more public acceptance of the mentally ill. They also tested the notion that rejection results when a person is labelled mentally ill. They conclude that their data, and the evidence from other published research, neither confirm nor refute the argument that labelling takes place in mental illness.

individual's behaviour of the structure of the interpersonal situations in which he is involved. At a commonsense level it would appear feasible to divide this into two related areas of research. On the one hand are "situational" studies - that is, studies of the situations in which individuals are immediately involved, and the manner and extent to which these impose regularities on behaviour. On the other hand are "aetiological" studies, which would look at the person as the end product of key experiences in sets of structured interactions. Situational studies have been conducted at a mainly qualitative and impressionistic level by writers like Goffman (1961, 1969) and Lemert, who has usefully drawn attention to the fact that in paranoia, for example:

".... the behaviour of the individual must be seen from the perspective of others or that of a group and, conversely, the behaviour of others must be seen from the perspective of the involved individual." (Lemert, 1962, p. 6).

Reckless and a number of collaborators (Reckless et al., 1956; Scarpitti et al., 1960), Zazzo (1958), McPartland and Cumming (1958), Kuhn (1960), Rosengren (1961), Couch (1962), Rosenberg (1965), Coopersmith (1967), Kaplan (1970a, 1970b, 1971), Kaplan and Pokorny (1970, 1971) are among those in diverse fields who have conducted studies which fall into the "aetiological" category. The present study is also of this latter type.

The central tenet of the interactionist view of self is that human beings develop "consciousness" and an awareness of self through their experience in social interaction. The interactionist paradigm construes the self as an emergent, which derives from the individual's learning to take the perspective of other individuals in the course of social interaction, and to calibrate (Abrahamson, 1966) his intended

actions in accordance with how he feels these are likely to be interpreted by others. While this idea is not new, it has undoubtedly enjoyed greater currency in the United States than in this country. From the work of William James, with his distinction between the "I" and the "me" of the "social self"; through Cooley's reflexive or "looking glass" self (Cooley, 1902); to the work of George Herbert Mead (Mead, 1934; Strauss (ed.) 1965), a number of American writers working within the tradition of philosophical pragmatism have started from the fact that all social behaviour involves a process of mutual adjustment on the part of interacting organisms, and that this has an important bearing on the development of human personality (Diggory, 1966, ch. 1).

The formulation of G.H. Mead

In his original formulation of the interactionist perspective, G.H. Mead (op. cit.) approaches the problem of the emergence of self from the standpoint of behaviour. He starts from the fact that all social intercourse requires mutual adjustment between the participants: each party to an interaction (whether human or non-human) is responding to the behaviour of the other, and vice-versa. Through learning, association, or conditioning, the individual is in due course able to anticipate the probable behaviour of others in a variety of situations.

Among animals (and human infants), interaction can be assumed to be conducted at this non-deliberate level. It can, in Mead's (ibid., p. 46) term, be thought of as enacted at the level of a "conversation of gestures" and is capable of analysis in the simplest

terms of stimulus and response. Interaction carried on at this level neither involves nor elicits self-awareness among its participants: it consists of what Mead terms "non-significant" gestures. This constitutes the essential difference between animal and (adult) human interaction. The greater part of human social intercourse is conducted at the level of what Mead calls the "significant" gesture or symbol. A "significant" gesture is one which has come to possess a common meaning for all the participants in any social situation. Significant gestures:

"implicitly arouse in an individual making them the same responses which they explicitly arouse in the individuals to whom they are addressed." (Mead, op. cit., p. 47).

They:

"answer to a meaning in the experience of the first individual and also call out that meaning in the second individual." (ibid., p. 46).

Language may itself be viewed as a special transformation of these "significant" gestures.

The significant gesture changes the whole nature of social interaction, and provides the conditions for the emergence of self-consciousness:

"When, in any given social act or situation, one individual indicates by a gesture to another individual, what this other individual is to do, the first individual is conscious of the meaning of his own gesture - or the meaning of his gesture appears in his own experience - in so far as he takes the attitude of the second individual towards that gesture, and he tends to respond to it implicitly in the same way that the second individual responds to it explicitly." (Mead, op. cit., p. 47).

It is through this reflexive action of "taking the attitude of the other" that we become aware of ourselves as objects. We place ourselves in the position of our partners in social interaction,

adopting their perspective when considering or evaluating ourselves and our own behaviour. This in turn depends on the capacity for speech and the shared meanings of "significant gestures". In the course of social interaction, we come to conduct internal conversations with ourselves. We unconsciously rehearse sequences of interaction in our imagination, and anticipate consequences which make us modify or change our intended actions. Thus, it is out of such reference to others, and the process of "taking the attitude (or role) of the other," that we come to develop self-awareness.

In Mead's formulation, this process is further assumed to lead to the development of a conception of the self, in which the responses of others towards ego play an important part. The individual starts taking the role of the other in piecemeal fashion, in specific kinds of situations, then comes gradually to establish systems of expected responses, which are characteristic of the particular individuals with whom he is regularly involved in interaction. This system of responses in due course becomes further organised into a general set of attitudes towards the self - a kind of synthesis of the (inferred) attitudes of particular others - which Mead terms the "generalised other". In the words of Mead (op. cit., p. 138):

"The individual experiences himself as such, not directly, but only indirectly, from the particular standpoints of other individual members of the same group, or from the generalised standpoint of the social group as a whole to which he belongs."

In social interaction, therefore, the individual not only develops ideas and perceptions about other people, but also ideas and perceptions of himself, these self-perceptions being themselves elicited from the behaviour of others towards him.

The individual is, of course, also held to respond to the actions of others as these are defined and perceived within the context of the value system of the social group to which he belongs. Every group develops its own system of significant symbols, which are held in common by all its members, and around which group activities are organised. Group membership is seen by Mead as an essentially symbolic matter, the symbols which are developed in the course of corporate existence being internalised by group members and used as the basis for evaluating behaviour. Members adopt each other's perspectives towards their own behaviour, and so interpret and "calibrate" (Abrahamson, 1966) that behaviour in communal terms. The others with whom an individual is in close and constant interaction accordingly assume a major relevance in directing his behaviour.

Psychopathology and the self

This perspective - and particularly the concepts of "self" and "self-attitude" - seem to have gained increasing influence in research and thinking on personality development and psychopathology over recent years. On the basis of his review of developments in socialisation theory and research, Sewell (1963) for example, sees work on this subject within the social sciences as increasingly influenced by what he terms the "Role Approach". Orville G. Brim, for instance, has drawn on interactionist assumptions to elaborate, in a series of essays (Brim, 1958, 1960, 1966) a theory of socialisation based on the notion of role-learning. Brim's basic premise is that what is learned during socialisation is a series of complex interpersonal relationships. The individual learns, in the manner outlined above,

to adapt himself to the demands and expectations of significant persons in his environment. The result is the emergence of a series of "self-other systems" in which the child is oriented toward particular sets of role-prescriptions and evaluations. Personality, in Brim's view, consists in large measure of these learned and internalised systems of interaction.

Within psychiatry, the concepts of self and of attitudes toward the self have of course held a prominent position in the work of such writers as Harry Stack Sullivan (1953) and Carl Rogers (1951, part 3; 1952). In this country, R.D. Laing (1965) has suggested that schizophrenic symptoms may be interpreted as a mode of defence, in which the self is shielded from perceived threats from the environment by the cultivation of bizarre patterns of behaviour designed to discourage approaches by other individuals, which "non-adaptive" behaviour then becomes a standard means of coping with stress. More recently, Laing has used similar ideas to construct an interesting theory and typology of marital behaviour and its relationship to psychopathology, introducing the concepts of "self" - identity and "meta" - identity into his analysis (Laing, Phillipson and Lee, 1966, part 1), but tends to elaborate these ideas psychologically - to view interacting individuals, rather than interacting social individuals from this perspective.

In 1961, Ruth Wylie published her scholarly monograph on "The Self Concept" (Wylie, 1961), in which she presents an exhaustive and critical review of the extant literature on this subject. Wylie draws attention to the inconclusive nature of the research findings in this area, arguing that constructs concerning the self

have been too vaguely defined, and:

"stretched to cover so many inferred cognitive and motivational processes that their utility for analytic and predictive purpose has been greatly diminished." (Wylie, op. cit., p. 318).

On the other hand, she also notes that "there are enough positive trends to be tantalising" (ibid., p. 317), and suggests that the most fruitful line for research may be to eschew such molar notions as "self-actualisation" or "self-consistency", in favour of the more limited concepts of "self-acceptance" or "self-esteem". With regard to the broad area of psychopathology, her review of the pertinent literature certainly indicates that:

"no easy synthesis of results concerning the relation of 'adjustment' to self concept is possible" (ibid., p. 235);

but the balance of the evidence she reports does suggest that psychopathology is related to self esteem. Of the studies she reports, for example, six indicate that neurotics have significantly lower levels of self esteem than do "normals", while one reports a non-significant trend in the same direction. Findings on the relationship between psychosis and the self are rather more equivocal. Three report a tendency for psychotics to have lower levels of self-esteem than "normals", three discover no significant difference between these groups, and one reports a significantly higher level of self regard among paranoid schizophrenics than among normal subjects.

Various other studies have elicited a significant relationship between psychopathology and low self evaluation (see, for example, Diggory, 1966, pp 372-380). Since the publication of Wylie's monograph, low self esteem has also been found to correlate with anxiety by Horowitz (1962), Bledsoe (1964), Rosenberg (1965, ch. 8), Coopersmith (1967, pp 131-133) and Kaplan and Pokorny (1969).

Significant associations between low self esteem and depression have been established by Bills (1954), Rosenberg (op. cit., pp 18-22) and Kaplan and Pokorny (op. cit.).

But these findings raise an obvious question of interpretation. What is the direction of the relationship between these variables? Is low self esteem a consequence of depression, or of anxiety, as is argued, for example, by Horney (Munroe, 1957, pp 343-49, pp 454-57)? Or does a derogatory attitude toward the self give rise to depression or chronic anxiety?* The latter interpretation has been adopted by Rosenberg (op. cit.) in his argument that low self esteem, in addition to being inherently distressing, is associated with a set of phenomena which lead to feelings of anxiety. Similar constructions have been presented by Coopersmith (op. cit., chs. 2 and 3) and by Kaplan (Kaplan and Pokorny, 1969; Kaplan and Meyerowitz, 1970). In support of his argument, Rosenberg (op. cit., pp 149-167) specifies four factors - namely, "instability of the self image", the "presenting self", "vulnerability" and "feelings of isolation" - which he sees as related to low self esteem and which "may be expected to create anxiety". When each of these factors was held constant the relationship between anxiety and self esteem was diminished.

Kaplan relates his similar paradigm to the general area of "psychosocial deviance" (in which he includes the various kinds of psychopathology), arguing that low self esteem will be:

* It is of course also possible that self-derogation and anxiety/ depression are synonymous with each other.

"accompanied by feelings of subjective distress (manifested as anxiety, depressive affect, etc.) which, depending upon their intensity, might impede adequate performance of social roles." (Kaplan and Pokorny, op. cit., p. 421).

He sees this as conducive to "psychosocial deviance", in that:

"the individual may attempt to enhance his self attitudes through use of reality distorting mechanisms or the adoption of patterns of socially defined deviance, modes of response which are generally considered maladaptive, whether or not they are successful in assuaging the subjective distress accompanying negative self attitudes." (ibid., p. 422).

Kaplan is at present testing this model in a longitudinal study of Texas schoolchildren, with the prediction that children who had a high self derogation score (using Rosenberg's (op. cit.) instrument) in his preliminary survey will subsequently come to the attention of legal, psychiatric or welfare facilities, and that those who do embrace such "deviant" patterns of behaviour will have increased in their levels of self esteem (Kaplan, personal communications).

It therefore seems fairly well established that there is a relationship between self conception and psychopathology. Further discussion of this issue will be undertaken at appropriate points below. We must now examine the relationship between social experience and psychopathology (and so, by implication, the self). This brings us to consideration of the second major implication which the interactionist perspective would seem to hold for research in psychiatry - the fact that the individual experiences events at a symbolic level. In this, our particular interest will be in the study of socialisation and the possible relevance of family-structure and experience for the development of psychiatric predispositions in the individual.

2. The Symbolic Environment

Within psychiatry, there is of course long-standing acceptance of the idea that early experiences within the family have an important bearing on the subsequent adjustment of the individual. At the same time, research and thinking in this subject have tended to adopt what Elias (1969) has termed a "billiard-ball" and Bastide (1972) a "mechanical" model of causality, in postulating the relationship between external occurrences and internal states. In such a conception, the links between events inside the family and the development of psychopathology within the individual are presumed to resemble the relationships of cause and effect which exist between objects in the physical world. Just as, in physics, an event of a particular kind will have predictable consequences for a given set of objects so, during socialisation, a characteristic behaviour pattern on the part of either parent will have predictable effects on the psychological development of the child. Thus, cold, aloof, "schizophrenogenic" mothers,* authoritarian fathers, or parents who present inadequate models for sexual identification have all been invoked in the search for causal factors in psychiatric disorder. In these and other explanations, the underlying assumption is the same: all individuals - regardless of social context - will be affected in a broadly similar way by the same kinds of experience within the family (see, for example, Walters and Stinnett, 1971). The same point has been made by Caldwell (1964, p. 17) in her exhaustive review of the research on the effects of infant care, although with reference to a rather different aspect of the field:

* For a good review of work on this concept, see Kohn and Clausen (1956).

"In spite of the general acceptance of the principle of individual differences, most research has tended to disregard factors conducive to reactive differences among subjects and to assume that a given type of parental behaviour should be responded to uniformly by all children."

The interactionist model outlined at the beginning of this chapter would seem to imply that the relationship between parental behaviour and psychopathology in the child depends on the meaning assigned to that behaviour within the value-system of the social group to which the child belongs. In his assertion that speech constitutes a "signal of the first signals", Pavlov (loc cit.) also argues that language (and, by extension, symbolic systems in general) acts as a mediator between the individual and external reality. At the level of the second-signal system, events become structured in the consciousness of the individual; and both their effects and his response will vary according to the meaning he attaches to them (see also Stryker, 1968). If such a model can be demonstrated to be true, then it might not necessarily invalidate, but would certainly demand the modification of, a mechanical or "billiard-ball" approach to the study of socialisation: the consequences of an event will depend as much on how it is interpreted by the individual, as on any intrinsic qualities it may possess. The present study attempted to verify this idea in a study of social-class differences in typical patterns of parental behaviour, and their relationship to psychopathology in adolescent boys.

Class, values and socialisation

It has for long been recognised that there are significant variations in the value-systems of different social-class groups, and that these have an important bearing on the socialisation

experience within the family, of individuals from different class backgrounds. On the assumption that childhood experience plays a prominent part in the aetiology of psychiatric breakdown, class differences in socialisation procedures have sometimes been invoked to account for the relationship that has emerged in various studies, between social class and the incidence of neurosis and schizophrenia (see, for example, Clausen and Kohn, 1954; Hollingshead and Redlich, op. cit.). However, such explanations have never been tested in a scientifically acceptable manner (Sewell, 1968; Kaplan, 1969), depending as they do on inference and assumption, rather than on direct validation.

a) Early studies

The greater part of the earliest research on the relationship between social stratification and socialisation techniques was based on ideas drawn from psychoanalytic theory. As such, it tended to concentrate on the earliest years of life, and to concern itself with such variables as breast-feeding, toilet-training, the extent to which demand-schedules were used in nursing, and the way in which parents dealt with activities like thumb-sucking or genital play in their children. Thus, Davis and Havighurst (1946) in a study of Chicago families, established that there were much greater differences between middle and lower-class families than between white and negro families, in patterns of child-training: and that middle-class mothers were more restrictive than their lower-class counterparts, in such matters as breast-feeding, nursing and toilet-training, were more likely to restrict the child's sucking period, and also expected the child to assume responsibilities at an earlier age. Similar findings emerged

from another investigation carried out in Chicago by Martha C. Ericson (1946).

Appearing in the same year was Arnold Green's engaging article on "The Middle-Class Male Child and Neurosis", one of the few pieces of published work to explicitly attempt to relate class-differences in socialisation-techniques to the emergence of psychopathology in the child. Based on that author's impressions of his early life in a small industrial town in Massachusetts, the article develops a rather complex argument, based on the neo-Freudian concepts of Fromm and Horney, to suggest that middle-class boys grow up anxious and neurotic. As already stated, however, the evidence he cites is purely impressionistic.

Some six years later, Klatskin's (1952) study of middle and lower class parents in New Haven elicited no significant difference between these two groups in the duration of breast or bottle feeding, nor in the use of demand schedules; but found that lower-class parents began toilet-training earlier and also used prohibitive discipline. Similar results emerged in the Harvard study by Sears and his associates (Sears, Maccobby and Levin, 1957), which found no evidence of any social-class differences in infant feeding practices; but indicated that, by comparison with their middle-class counterparts, lower-class parents showed greater severity in toilet-training, greater use of physical punishment, more restriction of the expression of aggression towards parents by their children, and greater dependence on the use of ridicule and the deprivation of privileges among lower-class parents as a means of enforcing discipline. Middle-class mothers proved more affectionate towards their children; and in middle-class homes there also tended to be greater agreement between

husband and wife concerning child rearing practices.

Numerous other studies have given general support to the findings of the Harvard group on the greater permissiveness of upper-class parents towards their children, although with discrepancies on such details as the incidence and duration of breast feeding, and the age of starting and completing sphincter training (see, for example, White, 1957). On the basis of an exhaustive review of the American child-rearing research, both published and unpublished, Bronfenbrenner (1958) was led, by results such as these, to argue that a change had occurred in child-rearing patterns - particularly in feeding and toilet-training - over a relatively short period of time, with the trend being towards greater permissiveness on the part of middle-class mothers in the period immediately following World War II, while lower-class mothers have probably become more restrictive in these areas during this period. Bronfenbrenner also sees the evidence as suggesting that middle-class mothers have always been more permissive in handling such needs as the child expresses, less likely to use physical punishment, and more egalitarian in their relationship with the child.

Trends similar to those in the more recent American research were established by the Newsons (1963) in their study of infant care in the English Midlands. These authors report, for example, that middle-class mothers are more likely to breast feed, and to be more tolerant of genital play on the part of the child. Class differences also emerged in the extent to which the father participated directly in the care of the child, with men involved in shop and office occupations (i.e., those in the non-manual group in social class III, in the Registrar General's classification) being most conscientious

in this respect, and those in unskilled jobs (social class V) least likely to involve themselves in this way. The fact that middle-class babies were more likely to be put to bed before 6.30 p.m. and less likely to be "actively soothed to sleep" or have a bottle or "dummy" on awaking during the night would, however, seem to indicate a more rigorous adherence to schedules and a degree of restriction over the satisfaction of the child's immediate wants which may reflect a difference in the behaviour of English and American middle-class parents.

Existing research does therefore suggest that there are real differences between the various social classes, in their approaches to child-rearing. The question remains, however, as to whether these differences have any ultimate relevance for the development of personality or psychopathological traits among children from different social-class backgrounds.

Davis and Havighurst (op. cit.) were more interested in eliciting the differences in socialisation procedures between the two class groups they studied than in the consequences these might have for the personality development of children. The only direct evidence they offered in this latter direction was that thumb-sucking (which might be a sign of oral deprivation) and masturbation were reported more frequently for middle than for lower-class children. While these authors were cautious in making inferences from these findings (their main conclusion being that middle-class patterns of child care are more likely to produce a responsible and conscientious, though frustrated, child) these results were widely interpreted by writers of psychoanalytic persuasion, as evidence that middle-class socialisation techniques were more likely

to produce neurotic and maladjusted adults.

In one of the few studies in this area to actually include an independent measure of the child's personality, White (op. cit.) found no relationship between this and the aspects of infant handling encompassed by her research. But perhaps the most rigorous test of the relationship between early training and personality development is contained in Sewell's interview study with the mothers of 165 rural Wisconsin children (Sewell, 1952; Sewell, Mussen and Harris, 1955). This concentrated on the mothers' reports of their normal practice in relation to feeding, weaning, the use of nursing-schedules, training in sphincter control and punishment for toilet "accidents", and matched these data against the personality-characteristics of the children, as measured by objective personality tests and ratings by mothers and teachers of the children's behaviour. Sewell found virtually no relationship between these personality measures and the way in which mothers characteristically handled training problems. Negative results were also obtained when the child's personality was correlated with indices (derived from a factor analysis of Sewell's data on infant training) of the degree of permissiveness displayed by the mother in feeding and toilet training her child. Of a possible 460 relationships, only 18 emerged as significant at the 5 per cent level of confidence,* and of these seven were opposite to the direction predicted by psychoanalytic theory (Sewell, Mussen and Harris, 1955). Murray Straus's replication of this study in Ceylon (Straus, 1957) yielded similar negative results.

* Of 460 possible relationships, chance alone would of course yield 23 which are significant at the .05 level of confidence.

b) Recent trends in the study of socialisation

Whether or not in reaction to the relative paucity of the findings on personality and psychopathology which have emerged from such research, more recent developments in the study of socialisation seem to reflect Sewell's judgment (Sewell, 1961, 1963, 1968) that less emphasis needs to be placed upon infant training, and greater attention paid to parent-child relationships extending into later childhood and adolescence (see, for example, Walters and Stinnett, 1971). Moreover, there has been considerable extension of the range of possible socialisation influences that have been examined. As Inkeles (1968) has noted, socialisation is accomplished both through the explicit efforts of parents and other agents of the socialisation process, and through structural or contextual factors that influence the life-experience of the individual. Thus, not only have more diverse and subtle types of parent-child interaction been considered, but more detailed attention has also been paid to language-patterns and their relationship to socialisation and behaviour (Bernstein, 1961; Bernstein and Henderson, 1969; Lawton, *op. cit.*), to the general allocation of authority and other roles within the family (Kohn, 1959a, 1959b, 1969; Kohn and Carroll, 1961), to the learning of sex-roles (Hartley, 1959), and to socialisation influences in adolescence and adulthood (Brim and Wheeler, 1966).*

* For extensive reviews of these and other developments in socialisation research over the last 15 or so years, see Hoffman and Hoffman (eds) (1964, 1966) and Clausen (ed.) (1968).

In his review of "Some Recent Developments in Socialisation Theory and Research", Sewell (1963) sees such trends as evidence of the increasing influence on socialisation research, of social-systems theory, and of the concept of social role as a link between social structure, behaviour, and the person. In what Sewell (ibid.) terms the "Role Approach", the basis of the socialisation process is held to be the characteristic patterns of relationship between individuals (within the family, for example) - these relationships being viewed as social systems comprised of role elements. As Sewell (ibid.) and Clausen (1966a) also specify, this shift of emphasis has been considerably influenced by assumptions derived from symbolic interactionist theory.

Social class and the "Role Approach" to socialisation

Studies of the relationship between socialisation and social class certainly reflect this trend. The emphasis of such research has almost entirely shifted from the analysis of techniques of infant training to a concern with the way in which social class affects the quality of relationships within the family, conceptions of morality and the expectations parents have of the child's behaviour, assumptions concerning the way in which parental roles should be performed, and other such aspects of interaction between parents and children.

Thus, a study by Bronfenbrenner (1961) indicates that in lower middle-class families, boys receive more punishment than girls, while girls are accorded greater warmth and attention by their parents than are boys. As the social position of the family increases, so do socialisation techniques tend to become more

"love-oriented", and more common to the two sexes. Boys in the upper middle-class receive less direct discipline, and girls are less protected or indulged by their parents than in the lower middle-class.

On the basis of these data, Bronfenbrenner (op. cit.) argues that the socialisation "risks" faced by children of either sex vary by social class. Socialisation experiences tend on the whole to be more favourable for girls in the upper middle-class, and for boys in the lower socio-economic group. While lower middle-class boys do receive relatively less parental support and less effective (because dependent on physical punishments) discipline, Bronfenbrenner's data and his review of the literature suggest that this is related to the development of higher levels of aspiration, leadership and competitiveness, which are likely to be beneficial to them in later years. Conversely, girls run the risk, in this socio-economic group, of being over-protected by parents, and of becoming conformist as a result. The upper middle-class boy, on the other hand, risks being what Bronfenbrenner terms "over-socialised", and hence of losing some of his capacity for "independent aggressive accomplishment". Bronfenbrenner's data also suggest that in this higher socio-economic group, girls surpass boys on teachers' ratings of such traits as responsibility and social acceptance.

Emmerich and Smoller (1964) have examined the way in which the expectations held by middle-class parents of their children's social behaviour vary according to the sex of both parent and child, and of the attributes of certain of the individuals (namely, teacher, sister, brother and friend) with whom the child might typically interact.

Parents of nursery-school children were asked to indicate the extent to which they would encourage or discourage in their child, the display of certain kinds of behaviour towards other people. Ten "interpersonal norms" were chosen for study, with five of these (assertiveness, friendliness, independence, obedience and trustingness) being presumed to be positive attributes which the parent might wish the child to exhibit. The remaining five - comprising aggression, avoidance, dependence, over-friendliness and submissiveness - were thought to represent negative characteristics, which the parent might wish to inhibit in the child. The results indicate that middle-class parents attempt to communicate to or inculcate in their children, norms which encourage receptive conformity towards adults, and individual autonomy and initiative toward other children. The same authors, however, found no significant pattern of behavioural expectations which might be attributed to the sex of the parent or child, or to the interaction between these two. On the basis of this latter finding, the authors suggest that:

"siblings and peers rather than adults serve as the basic source of sex-types norms for the middle-class child, at least during early childhood."

Elder (1962) found that parents of low socio-economic status and of poor educational attainment, as well as Catholic parents, and parents with large families, tended to be more authoritarian in their relationship with their (adolescent) children than were middle-class, well-educated, and Protestant parents, and the parents of small families. Moreover, adolescents who were subjected to either extremely authoritarian or extremely permissive patterns of socialisation tended to feel their parents were less

fair, and tended also to feel more rejected by their parents than did those adolescents who had experienced "democratic" patterns of child-rearing. In a subsequent paper on parental power legitimation, Elder (1963) also found that adolescents are more likely to use their parents as role models if the parents explain their rules when asked to do so, and that parents appear as less attractive role models in families where rules are over-stringent (authoritarian families) or insufficiently defined (permissive families).

In a study of 367 boys aged nine to eleven, Rosen (1964a) found, by means of a structured questionnaire, that boys from the middle class tended to perceive their parents as more competent (i.e., more successful, ambitious and smart) and more emotionally secure (i.e., less nervous, shy and worried) than their counterparts from working-class homes. Middle-class parents were also seen as demonstrating a greater degree of acceptance and support of their children than parents in the working class. Social-class differences in the boy's perception of his parents proved also to be much greater with respect to the father than the mother.

In a set of ingeniously-designed experiments, Murray Straus has examined the effects of social-class on communication within the family and the bearing this has on the ability of the family as a unit to solve a problem (Straus, 1968); and on the influence which the sex of a child may have on the performance of instrumental, and expressive roles within the family in attempting to solve the same problem (Straus, 1967). The results of the latter study indicate that: 1) while fathers tend to exercise more control over sons than over daughters, mothers - contrary to expectation -



were no more controlling of their daughters; 2) boys showed greater power in the problem-solving situations (i.e., had a significantly greater number of suggestions acted upon) than did daughters; 3) middle-class parents were both more controlling and more supportive in the task situation than were working-class parents, as were their children; 4) and in contrast to the Parsons-Bales theory of role-specialisation, the husband tended to be predominant in the performance of both instrumental and expressive roles, particularly in the middle class; and 5) because working-class husbands were relatively low in role-performance, wives in this socio-economic group exercised more power relative to their husbands than did middle-class wives. The results of Straus's later study (Straus, 1968) revealed large social-class differences in the amount of communication that took place within the family during the process of solving the problem set them. Middle-class families were more communicative and also more creative (i.e., produced a greater range of possible solutions) in their attempts to solve the problem. Moreover, these social-class differences in levels of communication and creativity were consistent across the three countries (the U.S.A., Puerto Rico and India) from which the subjects for the study were drawn, despite the great cultural differences that might be expected to prevail between these countries.

But perhaps the most developed single body of research on the relationship between social class, values, and socialisation procedures, is contained in the work of Melvin Kohn (Kohn, 1959a, 1959b, 1963, 1969; Kohn and Carroll, 1960; Pearlin and Kohn, 1966; Kohn and Schooler, 1969). Kohn's initial work on this

subject was based on an interview study of the parents of 200 middle-class and 200 working-class white boys aged ten to eleven living in Washington, D.C. He found (Kohn, 1959a) that, while middle and working-class parents share a broadly common set of values in socialising their children, there are also important differences between the two groups. There was, for example, considerable agreement between mothers of both social classes that happiness and such standards of conduct as honesty, consideration, obedience, dependability, manners and self-control, are highly desirable for both boys and girls. But there were differences between the two groups in the values that parents saw as "important" (in the sense that failure to achieve them would adversely affect the child's future), and "problematic" (in the sense that they are thought to be difficult of achievement). Thus, for the working-class parent the "important but problematic" area of socialisation values centres around qualities such as obedience, neatness and cleanliness, that ensure respectability. The middle-class parent, on the other hand, values the development of internalised standards of conduct, setting a premium on such traits as honesty and self-control. Kohn notes that this is paralleled to some extent by the finding of the Lynds in "Middletown" that, when asked to "score a list of fifteen habits according to their emphases upon them in training their children", working-class mothers put greater emphasis on "obedience" than did mothers of higher social status.

In a separate publication, Kohn (1959b) examined the relationship between these socialisation values, and the way in which parents exercise authority within the family. He found that the circum-

stances under which middle and working-class parents punish or refrain from punishing their children, are quite different. Working-class parents, with their emphasis on qualities that assure respectability, proved more likely to respond in terms of the immediate consequences of the child's actions. Their attention, in other words, was focused on the act itself: desirable behaviour was essentially interpreted as that which did not violate parental prescriptions. Middle-class parents - aiming at the development of an internalised set of standards in the child - typically responded in terms of how they interpreted the intentions underlying the child's actions. These results receive confirmation in a study by Rosen (1964b), who found that middle-class parents are more likely to discipline the child by reason and appeals to guilt; and tend also to resort to physical punishment less often than do working-class parents.

Kohn's third paper from this study, published with Eleanor Carroll (Kohn and Carroll, 1960), reports further social-class differences in the way in which parental responsibilities in socialisation are allocated, as between mother and father. It was found that working-class mothers expected the husband to constrain and punish the child to a greater extent than did middle-class mothers. Middle-class mothers emphasise the father's obligation to be as supportive of the child as the mother herself: his disciplinary role is of secondary importance. Middle-class fathers share their wives' view of how responsibilities toward sons should be allocated. They appear to be less supportive of daughters, apparently seeing this as more properly the function of the mother. Working-class fathers seem to view child-rearing as more completely their wives'

responsibility. They play neither the directive disciplinarian role their wives expect of them, nor a more supportive role vis-a-vis the child. Bronfenbrenner (1961a) also found middle-class fathers to be more supportive toward their sons than were working-class fathers; while Aberle and Naegele (1952) have noted a tendency for middle-class fathers to be more demanding in their expectations for their sons than for their daughters.

In interpreting the reasons underlying these differences, Kohn (1963) argues that they stem from basic differences between middle and working-class conditions of life. The middle-class parent's emphasis on self-direction can plausibly be related to the fact that middle-class occupations permit and indeed require the exercise of a greater degree of autonomy and self-direction on the part of the individual. Middle-class occupations, for example, deal more with the manipulation of interpersonal relations, ideas and symbols; within them, the individual is subject to less direct supervision; and success in a middle-class occupation is more dependent than in a working-class occupation, on the independent actions and initiative of the individual. In working-class occupations, Kohn notes, the individual is to a greater extent governed by rules which are set down by someone in authority - a fact which is reflected in the importance attached by working-class parents during the socialisation process, to conformity on the part of the child to external proscriptions.

Subsequent research has tended to confirm the generality of this relationship, both within the United States and in cross-national comparisons. Pearlin's replication in Turin of Kohn's original Washington survey (Pearlin and Kohn, 1966; Kohn, 1969, ch. 3)

established that, while Italian and American parents do emphasise different values for their children, the essential class differences discovered in Washington emerged also in Turin, with working-class parents emphasising values that encourage conformity to external restraints, and middle-class parents stressing self-direction. Indeed, the conservatism found in American working-class socialisation values was even more marked in the Italian working class. Josephine Klein's (1965) review of the English literature reveals similar trends.

In a subsequent study of a sample of 3,101 fathers chosen to be representative of all men engaged in civilian employment in the United States, Kohn and a number of co-workers (Kohn, 1969) again found social class to be related to the father's values for his children. Again, middle-class fathers valued self-direction; working-class fathers stressed conformity and respectability (Kohn, 1969, ch. 4). In a re-analysis of his Washington data supplemented by information from the national survey, Kohn (1969, ch. 7) established that both middle and working-class mothers expect their husband to play a role that facilitates the development of valued traits in the child. Thus, while there was no difference between the two social class groups in the extent to which father was expected to play a "constraining" role in the socialisation process, this role was differently evaluated by middle and working-class mothers. Within the middle class, the father's responsibility for imposing constraints is viewed as secondary to his responsibility for being supportive to the child. Indeed, in the minds of many middle-class mothers, for the father to play a major role in imposing constraints interferes with his ability to be a supportive figure. In the view of both working-

class fathers and mothers, however, it is virtually impossible for fathers to be supportive of sons unless they also play a major part in imposing restraints upon their sons. It is interesting, in this latter connection, that Kohn's data also suggest (ibid., p. 118) that working-class sons view father as supportive only when he does not play a major part in setting limits on their behaviour.

Existing research would therefore seem to indicate that there are genuine social-class differences in childhood socialisation - differences which in turn reflect variations in the value-systems of different social-class groups. What implications may these findings contain for the present investigation?

The evidence suggests that these differences in values affect the socialisation process in two basic ways. First, they create divergences between social classes, in the socialisation goals set by parents for their children. Second, they also make for social-class differences in the way parents typically behave toward their children in striving to attain these goals.

With regard to the former point, the research evidence suggests that in middle-class families stress is laid on the autonomy and emergent personality of the child, middle-class parents being concerned with understanding the internal dynamics and motivations of the child (Kohn, 1969); and perhaps as a corollary of this, apparently more susceptible to the published views of "experts" in the field of child-rearing (Bronfenbrenner, 1958). In addition, Kohn's studies strongly indicate that middle-class parents also aim at the development of self-control and self-direction in the child, through the internalisation of moral standards - an interpretation which obtains support from Emmerich and Smoller's (op. cit.) finding

that middle-class parents encourage their children to conform to adult norms, and to behave independently in relation to other children. It seems rather more difficult to form definite conclusions concerning working-class socialisation goals, perhaps because these have tended to be regarded simply as the opposite of middle-class goals in this area (on the notion that class-values are arranged along a continuum), rather than as a set of goals in their own right (on the assumption that these value-systems are discontinuous). Kohn's studies do, however, provide good support for his argument that working-class socialisation aims at producing conformity to external standards, with working-class parents seemingly less concerned with or aware of the motivations which underlie the child's behaviour. Socialisation is accordingly aimed at the behaviour, rather than the personality of the child. This interpretation is also consistent with Rosen's (1964b) finding that middle-class parents are more likely to discipline a child through appeals to reason and guilt; whereas working-class parents tend more often to resort to physical punishment. Klein (1965) also agrees that "traditional" working-class parents tend to rely more (although not exclusively) on external controls.

The research evidence bearing on the second point is rather more inconsistent. On the whole, however, it seems that the role of the father is more susceptible than that of the mother, to the influence of social class. Thus, as one moves up the class hierarchy, so does the father's function as a disciplinarian diminish, and his supportive role become relatively more important (Bronfenbrenner, 1961; Rosen, 1964a; Straus, 1967; Kohn, 1969). McKinley's analysis of the relationship between social class and family life

has led him to the same conclusion, although his explanation of this pattern is couched in terms of his theory concerning the relationship between social status (defined as "the position one occupies in the reward system of a society"), the frustration experienced by individuals who fail in the class system, and their responses (chiefly aggression and "role compensation") to these feelings of frustration (McKinley, 1964, esp. chs. 4 and 10). Within the working class, there seems also to be a greater degree of demarcation of parental roles, the socialisation of the child being seen as more properly the function of the mother than of the father. The mother's position relative to father again seems sensitive to the family's class-status, with the mother appearing to hold greater power vis-a-vis her husband in the working class (Straus, 1967); whereas within the middle-class family there is a more egalitarian distribution of power as between husband and wife (Kohn and Carroll, 1960). Again, this interpretation is broadly supported by McKinley's conclusions from the evidence he reviews (McKinley, op. cit.). It should however be noted that Klein (1965) argues from her review of the literature that there are regional differences in the extent to which the position of the senior woman is emphasised in working-class families. This obviously raises the issue of the extent to which social-class influences may be modified by "cultural" variations, which will be considered in chapter IX.

Social class, family structure and psychopathology

What relevance might these findings have for the study of the relationship between psychopathology and social class? With the exception of Bronfenbrenner's (1961) "speculative analysis", and possibly

of Elder's (1962, 1963) studies, this question has in fact been somewhat neglected.

It is possible, on the one hand, that these class-differences are directly implicated in the emergence of psychopathology, in the manner suggested by the "billiard-ball" model of causality outlined earlier. Thus if, for example, a family-structure in which mother plays a more dominant role than father is more typical in one social-class than in another (as the evidence cited above suggests is true of the working, as opposed to the middle class), and if this family pattern is a significant aetiological factor in mental breakdown, then one would expect a higher incidence of psychopathology in the social-class group (the working-class) in which that family-structure was more characteristic.

If, on the other hand, values (and symbolic systems in general) act as mediators between these external features and any effects they may have on the individual, then it is possible that the relationship between psychopathology and parental role behaviour will vary between different social groups according to the value they place on different types of behaviour. This second possibility adds a complex but - if it is confirmed - obviously important dimension to the study of socialisation and psychiatric aetiology. A major aim of the present investigation was therefore to examine the extent to which the association between parental behaviour and psychopathology is the same across different social groups, and the extent to which it may vary or remain the same, as between different social groups.

The Present Investigation

To summarise the argument so far: it has been suggested that - for purposes of research in psychiatry - the symbolic interactionist perspective provides the most effective link between social processes and individual behaviour. It has also been argued that, within this perspective, the concepts of the self and the symbolic environment offer the most promising approaches for studying the sociological antecedents of mental disorder. It was accordingly decided, in the light of the preceding review of the literature, to test the validity and usefulness of this general perspective, through investigating the relationship between parental role-behaviour, psychopathology and the self, and the extent to which this relationship is affected by social class.

The problem now is to express these notions as a set of key propositions, from which a series of testable hypotheses may be logically derived. The following set of "middle-range" assumptions was developed as a step towards this.

1. Basic assumptions of the study

Assumption 1. It is first assumed that social interaction (in the present case, within the family) is structured, and that its structure tends to vary between different social (class) groups. This structure is itself comprised of the roles individuals play in relation to each other, these being sustained by the differences in values and attitudes which prevail within different social groups. As has been seen above this assumption is supported, in the case of the family, by a substantial research literature.

Assumption 2. Second, it is assumed that human beings develop an awareness and conception of themselves through their experience in social interaction. As earlier discussion has shown, implicit in this interactionist view of the self are at least three subsidiary assumptions. First, the human consciousness of self (or, more technically, the ability to become an object of one's own thinking) is thought to emerge only through the individual's ability to place himself in the position of other people, adopting their perspective when considering himself and his own behaviour. This process is in the second place presumed to build itself into a conception of the self, in which the responses of others towards ego play an important part. Third, the individual is held to respond to the actions of other people, as these are defined and perceived within the context of the value-system of the social group to which he belongs.

Assumption 3. The final basic assumption of the research is that the conception of the self, and the assumptions concerning the motives and probable behaviour of other persons, built up by the individual as a result of the processes outlined above, are significant determinants of his subsequent behaviour, feeling-states and modes of social adjustment (given that he remains capable of learning and re-adaptation through subsequent social experience).

2. Major hypotheses of the study

Given these assumptions, certain related consequences may reasonably be expected to follow. In the first place, the differing family experiences of individuals coming from different social-class backgrounds will tend to give rise to different "modal" self-concepts and sets of perception of "key" roles (such as mother

or father) in ways which will reflect the divergent value-systems and family-structures of the social-class groups to which they belong. Two general hypotheses accordingly emerge: a) that there will be social-class differences in the conceptions individuals hold of themselves; and b) that there will be social-class differences in the perceptions individuals typically have of their parents. From a methodological point of view, however, it will obviously help in deciding the form and content of the instruments to be used in testing these hypotheses, if some prediction can be made concerning the direction of these social-class differences. On the basis of the preceding review of the socialisation literature, the following hypotheses were therefore developed for testing in the present study.

Hypothesis 1a - middle-class individuals will see their parents as placing more emphasis on such qualities as independence, reliability and self-control in their children, than will persons from a working-class background, where the emphasis will be on obedience and sociability.

Hypothesis 1b - middle-class individuals will, as a result of this, view themselves as possessing the qualities of independence, reliability and self-control more often than working-class individuals, whose self-conception will be organised around the notions of obedience and sociability.

Hypothesis 2a - middle-class fathers will, on average, be seen as higher in qualities related to succorance and emotional support than will working-class fathers, whose perceived role will be more heavily related to the performance of instrumental than expressive functions within the family.

Hypothesis 2b - social-class differences in the perceived role of mother will emerge in respect of her role vis-a-vis father, rather than in respect of her role per se. In particular, the working-class mother will be seen as exercising more power within the family relative to father, than will the mother within a middle-class family, where there will be a more even distribution of parental power.

Returning to the basic assumptions of the research, the second general consequence which may reasonably be expected to emerge is that a "key" role (such as father or mother) performed in an identical manner in different sub-cultures will, because of the different expectations attached to behaviour, tend to have very different effects on the individuals involved in close and constant relationships with persons performing that role.* In the field of mental health research, there is some evidence to substantiate this deduction. Kohn and Clausen (1956) matched a group of individuals who had been treated for schizophrenia with a group of "normal" controls. As compared with their controls, schizophrenics from high-status families consistently more often reported that their mother had been the dominant authority figure during their early adolescence. No significant relationship was found between parental authority behaviour and the existence of schizophrenia among lower-status individuals; but the lower-status controls reported an authority structure in the family

* This is the second general hypothesis as it was originally formulated. This hypothesis was subsequently revised, to allow for the fact that the expectations children form will be based on their own experience within the family, so that it seems unlikely that children will acquire expectations which are significantly different from their parents' behaviour. This point, and the interpretation of the results stemming from this general hypothesis, will be discussed in detail in chapter IX.

which was more similar to that of the high-status schizophrenics than of the high-status controls. These are very similar to the results elicited by Heilburn (1961) in his comparison of the mothers of 43 schizophrenic daughters, with a control group of mothers of "normal" children, which indicated that the lower-class mothers of patients were less authoritarian than the lower-class mothers of normals; whereas upper-class mothers of patients were more authoritarian than upper-class mothers of normals. These findings do, of course, fit nicely with the previously-mentioned tendency for working-class mothers to occupy a position of greater power vis-a-vis father within the home. On the strength of these findings, the following hypotheses were accordingly developed.

Hypothesis 3a - within working-class families, psychopathology will be related to a perception of mother as a less powerful or dominant figure than father within the home; while in middle-class families psychopathology will be associated with a perception of father as less dominant than mother. By extension, it was also predicted that:

Hypothesis 3b - there will be similar social-class differences in the relationship between self-conception and the perception individuals have of their parents.

Our review of the literature has already indicated that there is a relationship between psychopathology and self-esteem. If the further assumptions concerning the symbolic environment are true, one might also expect there to be social-class differences in this relationship. McPartland and Cumming (1958) have published relevant work in this field. Using the "Twenty Statements Test", these authors found that "concrete" and "extravagant" modes of self-definition

were related to psychiatric illness. McPartland and Cumming did not examine the significance of social-class differences in self-concept, but an analysis of the figures presented in their paper shows that, consistent with the assumptions outlined above, a particular type of self-concept which was more common among middle-class patients than among middle-class "normals" showed a reverse pattern among working-class individuals.* The sampling procedure of these authors does not, however, seem entirely satisfactory, and so this finding awaits further test. The following hypotheses were therefore formulated.

Hypothesis 4a - there will be a relationship between self-perception (and particularly self-esteem) and psychopathology.

Hypothesis 4b - there will be social-class differences in the actual nature of this relationship. Thus, in the case of middle-class individuals, psychopathology will be related to a perception of oneself as dependent and unreliable, while in working-class persons the relationship will be with a perception of oneself as unsociable.

In addition and, it is felt, consistent with the basic assumptions of the study, it was predicted that there would be social-class differences in the relationship between birth order and psychopathology. Studies of the relationship between birth order and personality development or psychiatric state have produced an

* 26.8% of middle-class "normals" described themselves in terms of self-concept type 'C', as opposed to 35% of middle-class psychiatric cases. Among working-class subjects, the percentages were 52.8 and 31 respectively ($X^2 = 5.534$; $p < .025$).

array of inconclusive and at times frankly contradictory findings which it seems hardly necessary to recount, in view of the several competent reviews which already exist (Clausen, 1966b; Granville-Grossman, 1966; Erlenmeyer-Kimling et al., 1969). It was these inconsistencies, and a belief in the importance of the role of birth order in personality development, which prompted the inclusion of this variable in the present study.

The family relationships of an only child will by definition be restricted to contacts with his parents. By the same token, a substantial part of the late-born child's social experience is likely to derive from close and constant interaction with other children. But whether or not children in particular birth-order positions develop characteristic traits, or modes of thinking and behaviour, may depend on how these experiences are in turn shaped by factors which may vary between different social groups. Thus, if the normal relationship of parent to child in a particular social class is close, helpful and egalitarian, his experience within the family may benefit the only child; whereas if the expected pattern is for parents to be more aloof and authoritarian, the only child may be at a relative disadvantage. Alternatively, it could be argued that, as a group, only children will for example tend to develop "adult-oriented" styles of thought, speech and behaviour; while late-borns are more "child-oriented" in these areas. Differences may however still develop between different social-class groups, according to the extent to which the social environment within which they move demands the exercise of "adult" or "child-oriented" qualities.

The possibility of the differential significance of birth-order has not, of course, been overlooked by contributors to the psychiatric literature on the subject. Barry (1967), for example, argues that:

"(some) discrepancies may be related to such variables as family-size, sex, socio-economic levels and, especially, type of culture."

In support of his thesis, Barry draws attention to the discovery by Solomon and Nuttall (1967) that upper-class male schizophrenics in Massachusetts showed a preponderance of first over last-born sibs of 3.5:1. This ratio he claims to be opposite in direction to that found in most reported samples of (presumably working-class) American schizophrenics.

The present study was accordingly also designed to test the idea that order of birth possesses a different significance for individuals from different social groups. To do this, the following hypotheses were developed.

Hypothesis 5a - there will be social-class differences in the relationship between birth order and psychopathology.

Hypothesis 5b - there will be social-class differences in the way in which birth order is related to self-conception.

These ten hypotheses formed the core of the investigation. The next chapter will be devoted to a description of the techniques and instruments used for testing them.

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CHAPTER III

RESEARCH METHODS AND DESIGN

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Sampling for research

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A study designed to test the hypotheses set out in chapter II must obviously satisfy the following criteria. First, within the study-population, it will be necessary to distinguish between those individuals who do, and those who do not, have some degree of psychopathology. Second, the study-population should itself comprise groups of individuals drawn from different social-class backgrounds. Third, and in order to test hypotheses 5a and 5b, information will also be required on the order of birth of each subject. Fourth, the study should include a measure of self-conception. Fifth, it should also include a measure of each subject's perception of his parents. Sixth, it should include a measure of each subject's perception of his parents' perception of him. Finally, these last three variables should be measured on a scale or set of scales which allow comparisons to be made in terms of the postulated social-class differences in values outlined near the end of chapter II.

Controlling for psychopathology

The concepts of "mental health" and "mental illness" are notoriously difficult to define or quantify. Leaving aside the question of whether psychiatric conditions may validly be regarded as "diseases", the main issue facing the researcher in this field is an operational one. What criterion should one use for identifying individual cases of psychological disorder in a given population? In the present study, this reduced itself to a question of whether psychopathology should be defined in terms of whether or not an individual had received psychiatric treatment within a given period of time, or whether psychological state should be assessed

by administering some measure of behaviour, personality or symptomatology to a random sample of the population.

Either of these procedures carries certain disadvantages. The former measure, for example, introduces two possible kinds of bias. First, it is by no means certain that everyone who becomes mentally disturbed seeks formal psychiatric treatment. Thus, it is possible that variations in the incidence of mental disorder in different populations are due rather to the greater ability of certain groups to tolerate disturbed behaviour or to handle it in other (non-medical) ways, than to any "true" differences in the occurrence of psychiatric impairment (Scheff, 1966). A second possible source of bias lies at the level of psychiatric diagnosis. Are psychiatrists more ready, for example (as suggested by the findings of Hollingshead and Redlich, 1958) to diagnose as schizophrenic, persons who are less articulate in talking about their mental state, who come from areas with a "bad" reputation, or who behave in a certain way in the interview-situation because they possess a different, less confident, or less appropriate set of assumptions as to what is expected of them in the professional relationship?

Attempts have been made to counter these difficulties by obtaining estimates of the number of people in a community who may actually be judged to be ill or "at risk" at one particular point in time. This entails interviewing samples of the general population with some measure of symptoms or psychopathology and the major difficulty here is obviously that of developing a set of reliable criteria on which to base a diagnosis. In one of the best-known studies of this type, Srole and his colleagues

(Srole et al., 1962) estimated 24 per cent of the population of central Manhattan to be suffering from "marked", "severe", or "incapacitating" symptoms of mental disorder. High prevalences of psychopathology were also uncovered by the Leightons and their co-workers in "Stirling County" (D.C. Leighton et al., 1963).

Entry to formal psychiatric treatment therefore probably provides a more stringent measure of psychopathology than is obtained in a symptom inventory. Against this advantage must however be set the unknown biases involved in diagnosis and referral. In a comparison across social-class groups, these considerations are important since it is more than possible that these biases are related to social class. It was therefore decided to use a test measure of psychopathology. Details of the measure used will be provided later in this chapter. The use of such a measure does however contain one further important implication, which should be borne in mind in interpreting any findings that may emerge from the research.

Such tests consist of a set of statements (usually selected on the basis of a factor analysis) which are presumed to relate to specific traits or symptoms, with the subject being asked to indicate on each statement which one of a limited number of responses corresponds more closely to his opinion or experience. Responses which indicate the presence of the trait are then normally assigned a score of 1 or 2, while those which suggest it is absent carry a score of 0. The overall score is then obtained by summing together these individual scores.

What is obtained is therefore a cumulative score, which assumes that psychopathology can be measured along a continuum from high to

low, following a more or less "normal" pattern of distribution.* In the present state of knowledge, this is a tenable assumption, but it should be noted that certain psychiatrists would argue that "normality" and "psychopathology" are discontinuous states, that only a small proportion of the individuals included in a prevalence study such as the present would be judged "abnormal" on psychiatric criteria, and that a questionnaire measure alone would therefore not provide a valid or accurate measure of psychopathology. To satisfy this criterion, the study would require to be conducted on criterion groups of "normals" and those suffering from some psychiatric condition. This begs the issue of the bias which was discussed earlier and which, it was felt, acted as sufficient justification for the decision to use a test-measure of psychopathology. However, it is obviously impossible to give a satisfactory answer to this theoretical point at this stage and the matter awaits further study. As a first step, it would for example be helpful to administer the same instruments as were used in this study to measure perceptions of self and parents, to individuals from different social-class backgrounds who had been diagnosed as psychiatrically impaired, and see whether the trends uncovered in the present study were also found in the psychiatric population.**

* An assumption on which the present study depends heavily, since much of the analysis of the empirical data consisted of correlations and examinations of trends consistent with psychopathology scores.

** A cogent argument in favour of the use of symptom measures in general populations, as a means to throwing more light on the aetiology of behaviour disorders has been presented in Shepherd, Oppenheim and Mitchell (1971, ch. 10).

The study-population

After some deliberation, it was decided to conduct the survey on a population of adolescents. There were two basic reasons for this decision. First, because adolescents can be contacted through educational establishments, a representative sample of subjects from different social-class backgrounds can be obtained relatively cheaply and conveniently; whereas a survey on an adult population would necessitate contacting a random sample of individuals from such a source as the electoral register, in which it would therefore be impossible to control in advance for social class, and other such potentially-important variables as age. Second, and perhaps more importantly, a major difficulty of using adult subjects for a study of the relationship between family-processes and psychopathology is that one will be dependent on retrospective information concerning the individual's experiences within the family, with all the possibilities of bias and distortion which this obviously introduces. In a study based on adolescents, one will be dealing with a population among whom the perceptions of parental figures will be related to current experience. This does not mean that a study using such a population will be totally free of bias - and certain possible sources of bias will be discussed later in relation to the findings of the study - but it seems reasonable to assume that this bias will be less than in a retrospective investigation. Moreover, a population of adolescents is sufficiently close to adulthood to make it reasonable to suppose that any processes which have a bearing on the individual's level of psychopathology at this stage will also have some significance for his adult adjustment.

It was also decided to carry out the study on boys only. It seems likely that the socialisation experience of adolescent girls will be sufficiently different from that of boys to necessitate a separate analysis for the two sexes. The study already promised to involve a number of fairly detailed and complex comparisons by social class. A further analysis by sex would double the amount of work involved, and while an examination of these socialisation characteristics as they affect girls would undoubtedly be a worthwhile exercise, it was felt that the additional work would make the study too unwieldy for a single person to deal with it.

Preliminaries

A letter was accordingly sent to the Burgh's Director of Education, giving details of the investigation and requesting permission for this to be carried out among boys in their third year of secondary education (i.e., those aged 14-15). This was duly granted, with the proviso that any materials used in the study should be seen and approved by the Director before use.

In order to ensure that the sample of boys obtained within each social-class group was as homogeneous as possible, it was decided to stratify the sample according to two criteria - father's occupation, and area of residence within the city. On the basis of data presented by Hope (1969), it was decided to draw subjects from three areas of Edinburgh - Pilton, Calton and Colinton. Pilton and Calton were selected as basically working-class areas of the city; the former a purpose-built estate near the periphery of the city, the latter a central "tenement" area, with a high proportion of homes rented from private landlords. Colinton is

a mainly residential area on the southern boundary of the city. It was originally intended that the working-class sample should be drawn from schools within the Pilton and Calton wards; and that middle-class subjects should come from schools serving the Colinton area. In the event, however, it transpired that only a relatively small number of boys attending schools in the Calton area were resident in the Calton ward itself. The area for selection had therefore to be extended to include the St. Bernard's, Holyrood, Central Leith and St. Andrew's wards, all of which are immediately adjacent to the Calton ward itself. No such problem arose in the case of the Pilton area, in which it proved possible to obtain the entire sample from a large comprehensive school serving the greater part of the ward. Boys from these areas were included in the study only if their home address was in one of the electoral wards specified above, and their father was in social class III, IV or V of the Registrar General's classification (Registrar General, 1966). To ensure that the working-class sample was as homogeneous as possible, and following the recommendation of Bechhofer (1969), those boys whose fathers were in "clerical and shop workers" occupations (i.e., socio-economic groups 5, 6 and 7 in the 1966 classification) were excluded from the social class III sample.

A similar problem arose in the case of the Colinton ward. It had originally been intended to draw the sample for this ward (which was of course expected to provide the middle-class population) from a new comprehensive school within the area. When the occupations of the fathers of these boys were checked, however, it transpired that only 5 out of 63 boys came from homes where the father was in an occupation in the Registrar General's category of social class I

or II. The 58 working-class boys in this school were therefore added to the working-class samples from Pilton and Calton. It should perhaps be noted that the working-class boys from the Colinton ward came from the Oxfgangs area of that ward - a relatively new council estate of working-class homes.

The middle-class sample was eventually obtained by taking boys from selective schools near the Colinton area. It was impossible, however, to obtain a large enough sample by this means from the Colinton area alone. Boys were therefore introduced into this middle-class sample whose families were resident in the Craiglockhart and Morningside wards of the city, both of which are relatively close to the Colinton area. As before, boys were included in the study only if their home address was in one of the appropriate wards, and their father was in social class I or II. The schools used in the study are listed in Appendix I.

As mentioned above, the sample consisted of boys aged 14-15 years. All boys within each school included in the study who satisfied the residential and occupational requirements for the relevant social-class group were incorporated into the sample. It should also be noted that subjects were included in the research only when both parents were alive and living together (information on this being obtained from school record cards, and checked with the headmaster).

Testing procedures

In each school, a letter was sent out about a week before testing was due to take place, to the parents of those boys selected for the sample, giving a brief outline of the purpose of the study, and asking whether or not they would be willing to allow their son to participate

in the research. The letter was as follows (with occasional minor alterations, according to the stylistic preferences of the headmaster):

X School.

Dear Parent,

I am writing to ask for your cooperation in the matter outlined below.

X School has been invited to take part in a study which is being carried out in a number of schools in Edinburgh, on the attitudes and general development of teenage boys. In each school, a group has been chosen from all third-year pupils. The boys selected will be asked to complete two simple paper and pencil tests. One of these is a standard personality test; the other is a test of attitudes towards people.

Your son is among the boys selected. It would therefore be most helpful if you could indicate on the attached form whether you are willing to allow him to participate in the research.

I should add that this study has the full approval of the Director of Education.

Yours sincerely,

Headmaster.

Attached to the form was a note of consent, in which the parent was asked to indicate whether or not he was willing to allow his son to participate in the study.

For the purpose of the research, social classes I and II were combined to form a "middle-class" sample; social class III (with the exclusion of socio-economic groups 5, 6 and 7) was used as a "skilled working-class" group; and social classes IV and V amalgamated to form a "lower working-class" group. The middle-class population yielded 117 subjects, with no parental refusals to cooperate in the investigation. There were 169 boys in the skilled working-class sample, with an additional 9 (5.1%) whose parents declined to allow their sons to participate. Of the 113 possible subjects in the lower working-class sample, the parents of 7 (6.2%) did not give their permission, leaving 106 boys from this particular social-class group in the sample. This low rate of refusal leads the author to believe that the sample is representative for each group. It should, however, be noted that Shepherd, Oppenheim and Mitchell (1971, pp 32-33), in their study of the prevalence of behaviour disorders in schoolchildren in Buckinghamshire, found that the sons of parents who did not give their permission for their child to cooperate in the study (7% of their sample) were significantly more likely to be rated by their teachers as below average in attainment, uninterested in school work, uncooperative in class, to be prone to telling lies; and to have stolen things on one or more occasions. The nature and extent of any bias this may introduce is obviously impossible to assess.

The boys were normally tested in their classroom groups, the size of group varying from 5 boys in one small school in the city centre, to 42 boys, who were tested in the main hall of a senior-secondary school. The test-programme will be outlined in some

detail below. Suffice it to say here that the programme consisted of a standardised personality measure, which on average took 35-40 minutes to complete; and a test of the subject's perceptions of certain "key" figures, which was specially designed for the research, and which was normally completed in 15-20 minutes. So far as possible, the two tests were administered on separate days. In certain schools, however, headmasters indicated that they would prefer the programme to be completed in one session. In such cases, after the boys had completed the personality test (which was always completed first), a break of ten minutes was allowed before they started on the second test.

A number of boys were absent on the day(s) the tests were administered in their particular school. Arrangements were made for these boys to be tested individually by the author once they had returned to school. All the boys in the sample were eventually obtained for purposes of testing, with the exception of one persistent truant who was in fact eventually sent to approved school.

Test-measures

i) Psychopathology. As already indicated, the study was based on a psychometric criterion of psychopathology. The "Mental Measurements Yearbook" (Buros, 1968) listed a number of tests - including the junior version of the Maudsley Personality Inventory, and Stott's Bristol Social Adjustment Guide - which might be used for this purpose. Consultation with clinical psychologists working in the M.R.C. Unit for Epidemiological Studies in Psychiatry narrowed the choice down to the junior M.P.I. and Cattell's High School Personality Questionnaire (the H.S.P.Q.); and because a number of ongoing studies in the

M.R.C. Unit for Epidemiological Studies in Psychiatry were at that time using the senior version of the H.S.P.Q. (the 16P.F.), the decision was eventually made in favour of that test.

The H.S.P.Q. (Cattell and Beloff, 1962) is a widely-used and well-standardised test of personality. It consists of a set of 142 statements, to each of which the subject is required to answer "yes", "no", or "uncertain". A copy of the test is included in Appendix II. The answers to these statements are analysed according to a standard procedure which renders scores for 14 basic dimensions of personality. From these "primary" factors (which are listed in Appendix II) a number of subsidiary ("second-order") factors can also be derived. For the purposes of the study, three of these second-order factors were used as indicators of psychopathology. These factors - extraversion, anxiety, and neuroticism - were calculated by means of the procedures recommended by Cattell and Beloff (1962), which are also specified in Appendix II.

ii) Perceptions of "key" figures. The perceptual and interpersonal variables of greatest relevance for the study were the following: the subject's perceptions of a) his "actual" self, b) his "ideal" self, c) his mother, and d) his father; and his perceptions of how e) his mother and f) his father perceived him. The decision on the most appropriate instrument(s) for measuring these variables had to be made in the light of a number of practical considerations. First, the instrument(s) needed to be fairly short and quick to administer, and should preferably be amenable to administration in a group. Second, it was necessary that it should not be too expensive either to obtain or to produce. Third, and with particular reference to hypotheses 2b and 3a, the instrument(s)

had to enable comparisons to be made between different "key" figures on the same evaluative dimensions. Fourth, it then needed to be comprehensible to boys over a wide range of literacy and intelligence. Finally, the dimensions measured needed to be relevant to the predictions made concerning the direction of social-class differences in self-conception and parental behaviour.

It was decided that these requirements would probably be most effectively met by an instrument based on some such measure as Osgood's "semantic differential" (Osgood et al., 1957) or Kelly's "repertory-grid" technique (Bannister and Mair, 1968). These instruments are similar to each other, in that each requires the subject to evaluate a number of persons or concepts on a set of adjectives or adjectival scales. However, they also differ from each other in certain important respects.

a) The semantic differential

The semantic differential essentially consists of a set of scales based on pairs of adjective antonyms, on which the subject is required to rate a number of concepts specified by the researcher. In an early paper on the instrument, Osgood and Suci (described in Osgood et al., op. cit.), for example, made a list of 50 pairs of antonyms, including such sensory terms as "sweet-sour", "loud-soft", "black-white", "heavy-light", "thick-thin" and "bright-dull". There were additional pairs on the list which did not refer to sense-attributes - words such as "ferocious-peaceful", "beautiful-ugly" and "good-bad". The investigators provided their subjects with 20 concepts - including such items as "lady", "sin", "dictator" and "boulder" - and required them to place each concept on each of the 50 scales defined by the

antonym pairs. This provided a matrix of 50 judgments x 20 concepts which was then subjected to a factor analysis.* This analysis yielded three independent factors, which were characterised by Osgood and Suci as a) evaluation, b) potency and c) activity. Scales that loaded highly on the evaluation factor included such pairs as "good-bad", "sweet-sour", "beautiful-ugly" and "clean-dirty". Those loading high on the potency factor included the terms "brave-cowardly", "loud-soft", "hard-soft", and "rough-smooth"; whilst among those making a major contribution to the activity factor were "active-passive", "hot-cold" and "fast-slow". Subsequent studies by independent investigators have produced the same broad factor-structure. The instrument has also been shown to have some value as a diagnostic tool in psychiatry (Osgood and Luria, 1954).

From the point of view of the present study, the semantic differential has two important weaknesses. The first has been highlighted by Roger Brown (1958).

Osgood, Suci and Tannenbaum (op. cit.) claim that the differential is a measure of "connotative" meaning. While acknowledging the importance of the differential as a research tool, Brown (op. cit.) shows that the meaning of the factors which emerge from semantic differential analyses is frequently ambiguous, because the instrument is itself based on an ambiguous definition of "connotative" meaning. He illustrates his point by an analysis of the concept "boulder". As the word is sometimes used, the connotation of this concept

* The technique of factor analysis will be outlined below.

would entail the construction of a list of the attributes which define the class called "boulder". The term "connotation" may, however, be used in another, broader way to refer to any terms which may be accidentally associated with the concept, but which do not define it - in other words, terms which are "suggested" by the concept. Thus, if a subject is asked to rate the concept "boulder", on a scale from "loud" to "soft", he may rate a boulder as "loud" because, for example, a) when boulders fall they make more noise than smaller objects; b) among animal species, large (adult) specimens can usually make more noise than smaller, less mature specimens, and this rule is extended to boulders; c) "soft" means "yielding" as well as "not-loud", and boulders are not yielding. Brown's criticism gains support from more recent research on semantic-differential data, in which it has been demonstrated that the meanings of scales, and their relationship to other scales, vary considerably with the concept being rated (see, for example, Presly, 1969).

The second major criticism of the semantic differential technique is of a more philosophical nature. In the normal form of the semantic differential, each concept is specified at the top of a separate page, the subject being asked to rate these on a set of scales which are listed underneath each concept. The subject is therefore, so to speak, asked to evaluate each concept in the abstract, judging each in isolation from other concepts. This assumes that judgments on the scales "hard-soft", "warm-cold", "slow-fast", for example, are themselves based on some ultimate and ideal notion of "warmth", "hardness", etc., and that the individual arrives at judgments by using these ideal notions as absolute criteria by which to measure any concept. Against this, it may be argued that such judgments

are essentially relative in character - that they depend on a series of comparisons between different concepts, individuals, etc. to decide whether one is more "hard", "warm", "fast", etc. than another. This issue will be examined in more detail below. Suffice it to say at present that this author's view tends to the latter conception, and that this influenced the way in which the instrument used in this research was developed.

b) The repertory grid

The "repertory grid" technique is a logical development from George Kelly's "personal construct" theory (Bannister and Mair, 1968). Kelly's theory is based on the assumption that human beings are, in their everyday life, acting on a set of hypotheses they have made about external reality. It is held that, on the basis of his everyday experience, each individual constructs a "model" of reality which enables him to make sense of it, and which also permits him to plan his behaviour in relation to it. Through successively modifying his interpretations in the light of everyday experience, the individual develops a more accurate awareness of reality.

From these assumptions, Kelly derives his fundamental postulate that:

"a person's processes are psychologically channelised by the way in which he anticipates events",

and develops his theory as a set of eleven "corollaries" consistent with this fundamental postulate. Of these corollaries, the first - the "construction corollary" - is perhaps the most relevant for our purpose. This specifies that:

"a person anticipates events by construing their replications."

In this, Kelly argues that in interpreting events, an individual

notes those features which characterise certain events or persons and are particularly uncharacteristic of others. The individual thus erects a set of constructs which enable him to make a set of comparisons between different aspects of reality. The individual's "model" of reality is organised around a system of such "constructs" which provide him with a basis for considering the likenesses and differences between particular persons or events.

The "Repertory Grid" Test is the technique developed by Kelly for eliciting such construct-systems. In its original form (Bannister and Mair, 1968, pp 51 ff.) the subject was asked to supply the names of a number of people known to him, to fit a number of specified roles such as mother, father, best friend, the nicest person you know, and the like. When these had been supplied they were grouped repeatedly into threes and the subject asked to specify some way "in which two of these people are alike and thereby different from the third". The examiner noted the subject's answers on a "grid" or matrix whose horizontal and vertical dimensions correspond to "constructs" and "elements" respectively. The results were then analysed in terms of the type of construct produced, what type of role tended to produce what type of construct, and so on.

From this was evolved the Grid Test proper. In this the subject, in addition to supplying the construct in the manner indicated above, goes on to specify which of the available figures before him possesses or does not possess the characteristic named. Thus, if the construct elicited were "approachable-unapproachable", the subject would then be asked to state whether each of the figures on his list was approachable or not. As before, these responses are recorded on a matrix.

The construct-system thus elicited can then be analysed by one of a number of methods, including factor analysis.

To the present author, this technique seems superior to the semantic differential in three basic ways. First, it is based on a consistently-developed theory, whereas the semantic differential was essentially developed as a research tool, from which a set of theoretical implications were evinced (Osgood et al., op. cit.). Second, the dimensions on which judgments are made (the personal "constructs") are elicited from the subject, rather than provided by the researcher. Third, in the original form of the Grid Test, the subject is asked to use the constructs in a comparative manner, making his assessments by contrasting individuals against each other. As stated earlier, to the present author this seems a more realistic means of obtaining judgments from an individual than asking him to rate other persons on a set of abstract criteria. While, in the later and more widely-used form of the test, the subject is asked to indicate whether additional figures do or do not possess the constructs specified, it can still be argued that the method by which the original construct is elicited will mean that there will still be a comparative basis to the judgments obtained.

The Repertory Grid Test was, so far as possible, therefore used as the model in developing the perceptual measure used in the present study. The methodological requirements of the study did however mean that considerable modifications had to be made in the format of the Grid Test proper. In particular, the fact that any instrument used in the research should enable one to make comparisons between different groups of boys on constructs which were relevant to the principal hypotheses of the study, obviously meant that constructs

could not be elicited from individuals in the conventional manner. The instrument used in the study was therefore something of a compromise between the Semantic Differential and Repertory Grid techniques.*

Development of instrument

Permission was obtained from the Director of Education, for some pilot work to be carried out in Niddrie Marischal School. At the time of the research, this was a junior-secondary school serving a deprived area of the city. Pupils ranged in ability from boys of high average intelligence, to the barely literate. The pilot study was undertaken in a school of this type, because it was felt that, for the instrument to be comprehensible to as many boys as possible, it should be developed and tested on boys with low to average levels of literacy and intelligence.

The following list of figures was compiled, to form the "elements" on whom the boys were expected to make assessments.

1. My best friend.
2. My mother.
3. My father.
4. The kind of person I really am.
5. The kind of person I would like to be.
6. A person I would go to if I were in trouble.
7. The person I dislike most.
8. The person I admire most.
9. How I think my mother sees me.
10. How I think my father sees me.

* In developing this instrument, the author was much influenced by Bannister and Mair (op. cit., pp 50 ff.).

Certain of these elements - namely: my mother; my father; the kind of person I really am; the kind of person I would like to be; how I think my mother sees me; and how I think my father sees me - were essential to the testing of the research-hypotheses. The remaining elements were included because it was felt it might be interesting, in the final study, to make comparisons between the boy's perception of his mother or father, and such non-specific figures as "the person (he) would go to if (he) were in trouble", or "the person (he) dislike(d) most". It was also anticipated that, in the main study, this material would be factor-analysed; and it was felt that such elements as "the person I admire most", and "the person I dislike most" were likely to elicit opposite responses on individual constructs, and therefore to produce a more definite factor-structure.

Through consultations with various members of the M.R.C. Unit, the author also drew up the following list of 26 constructs.

cheerful	-	sad
easy to talk to	-	difficult to talk to
strict	-	lenient
hard-working	-	lazy
has a warm nature	-	has a cold nature
understands other people	-	doesn't understand other people
unsure of him (her) self	-	sure of self
soft-hearted	-	hard
friendly	-	unfriendly
fair	-	unfair
kind	-	unkind
selfish	-	unselfish
approachable	-	unapproachable
silent	-	talkative
interested in people	-	not interested in people
excitable	-	relaxed
domineering	-	meek
dependable	-	undependable
has a "loving" nature	-	does not have a loving nature
hard to understand	-	easy to understand
strong (in personality)	-	weak
sociable	-	unsociable
quick-thinking	-	slow-thinking
makes people feel at ease	-	makes people feel ill-at-ease
has "drive" ("gets things done")	-	has no "drive"
depends on other people	-	independent

Four basic considerations helped to determine the selection of constructs for this list. First, they needed to be relevant to the hypotheses of the study. Second, it was necessary - in order that comparisons might be made on the same constructs between different elements (such as "mother" and "father") - that these constructs could be meaningfully used in relation to all elements. Third, an attempt was made to choose constructs which were felt likely to be meaningful and comprehensible to boys of different social backgrounds and levels of ability. Finally, one attempted to make these items as near as possible in form to personal constructs, rather than semantic differential scales. Items were therefore chosen to be denotative, rather than connotative in meaning: that is, all the constructs were felt to be terms which would fairly commonly be used to describe people, and therefore relatively free of the kinds of accidental associations mentioned by Brown in his criticism of the semantic differential.

The Repertory Grid Test and the H.S.P.Q. were both seen and approved by representatives of Edinburgh's Department of Education.

The pilot study

For the pilot study, three groups of 12 boys were chosen at random from the third-year population of Niddrie Marischal School. The pilot study had the following basic aims. First, one wanted to assess how long boys would take on average to complete the tests. Second, one wanted to ensure that both instruments, and particularly the items on the Repertory Grid Test, were comprehensible to all boys. Third, it was intended to reduce the number of constructs in the Repertory Grid Test by about half, by eliminating items which boys

found difficult to understand, and also be deleting constructs which were either highly correlated with other constructs, or were so slightly correlated with other constructs that they seemed unlikely to form part of any meaningful factor when the instrument came to be factor analysed.

The fourth purpose of the pilot study was to help decide on the best format for the Repertory Grid Test in the main study. It was for this reason that the pilot study was conducted on three groups of boys.

Initially, it had seemed to the author that the Grid test might best be administered in either of two possible forms. In the first - the "split-half" form - the subject would be presented with a construct at the top of the page, and asked to divide the role-figures, who would be listed down the side of the page, into two equally-sized groups - those "most like" the construct at the top of the page, and those "least like" the construct. In the second, the construct would again be specified at the top of the page, with the elements listed down the side. In this second form, however, the construct would also be presented against each element, in the form of a scale, with the concept and its antonym specified on opposite ends of the scale, in a similar manner to the Semantic Differential. It should be noted that both of these instruments differ from the Semantic Differential, in asking the subject to judge elements against a construct, thus introducing a comparative basis to the subject's judgments, in the same way as the Repertory Grid proper.

During preliminary conversations with the Head and Deputy Headmaster of the school, it was however suggested that certain of the less able boys might have some difficulty in grasping the

concept of a scale. The Headmaster suggested that it might be worth piloting an additional form, which would invoke a concept with which many of the boys might be more familiar. He put forward the idea of a system of "star" ratings, similar to that used in most popular newspapers for rating the performance of footballers, and which the great majority of the boys were almost certain to have encountered. Thus, using a five-star system, just as an outstanding performance by a football player would receive five "stars", so a role-figure who was rated high on the construct at the top of the page would receive a score of five, while someone who was rated low on the construct would receive a score of one, with intermediate ratings being given scores between these two extremes. This idea seemed worth testing, and so a third form of the instrument, based on this suggestion, was included in the pilot test.

A special problem arose on all three forms of the instrument, in the case of the last two elements - the boy's perception of how his behaviour made him appear to his mother and father. It was felt that, since they demanded that the subject adopt a different frame of reference (i.e., that which he attributed to his parents) from that which he was using with the other elements in assigning ratings to them on the various constructs, these last two elements could not meaningfully be included on the same list as the others. There seemed to be two possible solutions to this problem. One could have specified these two elements under each construct on a separate set of pages, in the same manner as was done for the first eight elements. This would, however, have doubled the bulk of the instrument, and perhaps therefore have deterred a number of boys from completing it. It was therefore decided to present this

section of the test in the conventional format of the semantic differential, with the element specified at the top of the page, and the constructs listed down the side. Both the "scale" and "star" rating forms could appropriately be used in this part of the questionnaire. For obvious reasons, however, the "split-half" form could not be used for rating these two elements. The "scale" form of this section of the questionnaire was therefore appended to the "split-half" version of the first part.

The pilot study was conducted on three groups of twelve boys drawn at random from the third-year population of the school. The H.S.P.Q. was administered to all three groups. In addition, and on a separate occasion, each group completed a different version of the Repertory Grid instrument.

Findings

The time taken to complete the H.S.P.Q. varied from 22-25 minutes (in 3 or 4 exceptional cases) to 55-60 minutes, in the case of two boys from the lowest stream. The average time was somewhere in slight excess of 35 minutes, with the vast majority of boys having finished by the time 40-45 minutes was up. Cattell claims that the test should be comprehensible to children of even the lowest levels of literacy within the age-group it has been designed to cover. Certainly there were no reported difficulties among the boys in the pilot study. The author read out the instructions with the boys, in the recommended fashion, then left them to complete the test on their own, while he occasionally patrolled the room as unobtrusively as possible. Since the test could be comfortably completed inside a normal school period by

almost all the boys, and since it presented no undue difficulties of comprehension, it was considered justifiable to use it as the psychopathology measure in the main study.

Of the three versions of the Repertory Grid Test, the "star" rating format on average took about 5 minutes longer than the other two. It also suffered from the disadvantage that only one pole of the dimension on which the subject was making a rating was specified so that there was likely to be some ambiguity as to the precise meaning of a rating of one "star" - a fact which obviously further reduced its utility. Moreover, the doubts of the Headmaster and his Deputy proved unfounded. The boys in the group which completed the "scale" version of the instrument had apparently no difficulty in understanding the concept of a scale. The "star" version accordingly assumed a low place in the priority list for this instrument.

Of the two remaining versions, the split-half format suffered from one of the same deficiencies as the "star" ratings, in that one was unable to give a precise definition to the pole opposite to that specified on the instrument. On looking through the individual booklets completed by the boys, it was also discovered that on a number of pages, boys had accidentally divided the key figures into groups of five "X"s to three "O"s (or vice-versa), rather than dividing them into two groups of four, as was requested. It therefore seemed there was a high possibility of errors being committed with this form, with all the difficulties this would present to the analysis of data in the study proper. Finally, and as already mentioned, it was impossible to administer the second part of the Grid test in this split-half form. The

combination of two methods of obtaining data seemed likely to add further complications to data analysis in the eventual study.

Unless there were very strong reasons for rejecting it, it therefore seemed that the scale version was likely to be the most viable of the three forms piloted. As stated above, no boys reported difficulty with this form. It was also superior to the other two in allowing the researcher to identify both poles of the evaluative dimensions used by the subject. Finally, and by contrast with the split-half form, it permitted one to make more meaningful comparisons on individual constructs (as opposed to factors) between different elements (such as "mother" and "father"). In two cases, one element was not rated on one construct. This was a lower error rate than that for the split-half, and it was felt that in the main study, such individual oversights could be more easily dealt with by entering the mean score of all ratings on the relevant constructs for the relevant elements as the score for that cell. It was therefore decided to use the scale form of the test.

Three basic criteria were used to determine which of the adjectives should be eliminated from the final version of the test. First, and for obvious reasons, it had been decided that any adjectives which boys found difficulty in understanding should be deleted. Before the test was started, and at intervals during the period the boys were actually completing the test, the author intimated that boys should ask to have explained to them any words of whose meaning they were uncertain. Two boys asked to have the word "sociable" explained, and "lenient" and "domineering" respectively had to be defined for two other boys. These are obviously rather small proportions and it did not therefore seem justifiable to omit them

on this criterion alone, although "sociable" was perhaps more in doubt than the other two.

A word which has a relatively low correlation with other adjectives will obviously tend to make a small contribution to any major factors in a factor analysis, and will also tend to form a small and separate factor of its own. This therefore formed the second criterion for elimination from the list of adjectives. "Selfish" was relatively unrelated to other adjectives on all three forms of the instrument. It had also been queried by officials of the Burgh's Education Department, and was for these reasons left out of the final list. "Hard-working", too, had a rather poor correlation with other adjectives and was also deleted.

A corollary of the pattern described in the last paragraph is that any adjectives which correlate highly with each other will form a major factor, but that an over-large number of highly-correlated adjectives will simply duplicate each other, and inflate the size of the factor to a needless extent. The constructs "cheerful"; "easy to talk to"; "soft-hearted"; "friendly"; "interested in people"; "has a loving nature"; and "sociable" correlated highly with each other, and with a number of other constructs, such as "has a warm nature" and "approachable". On a somewhat arbitrary basis, these constructs were therefore deleted from the list.

This procedure left the following list of seventeen adjectives, to form the universe of constructs for the study: strict-lenient; warm-natured-cold; understands other people-doesn't understand people; unsure of self-sure of self; fair-unfair; kind-unkind; unapproachable-approachable; silent-talkative; excitable-relaxed;

domineering-meek; dependable-undependable; hard to understand-easy to understand; strong (in personality)-weak; quick-thinking-slow-thinking; makes people feel ill-at-ease-makes people feel at ease; has "drive"-has no "drive; depends on other people-independent. The order of the original set of 26 constructs had resulted from a process of random allocations (by drawing them from a hat). The remaining 17 constructs were simply left in the order in which they had appeared in this original list. An attempt had also been made to minimise any possible response-bias by reversing the order of about half of the construct pairs, so that constructs which seemed prima facie to be more negative would appear first in the pair - as in "strict-lenient"; "unsure of self-sure of self"; "unapproachable-approachable"; "domineering-meek", etc. As in the pilot study, the scales themselves comprised six, rather than the more conventional seven points. This device had been resorted to following consultations with clinical psychologists in the M.R.C. Unit, who suggested that the mid-point of a scale with an uneven number of divisions on it often presented difficulties of interpretation, since it is probably used by many people as a "rag-bag" category when they are unsure of the meaning of a word, or when they find themselves unable to make a decision on that construct, as well as representing a genuine "intermediate" response. It was felt that a six-point scale would force people to make a meaningful response since their response must be nearer to one construct or another on the scale.

Finally, two new elements were added to the final version of the instrument. While he was doing a few calculations and comparisons with the pilot instrument, it was felt by the author that it would be both interesting, and essential to the main hypotheses of the study,

to include two additional "meta-perceptions" - representing the boy's view of what his parents would like him to be like. The elements "what my mother would like me to be like" and "what my father would like me to be like" were therefore included in the final version.

The tests used in the study proper are displayed in Appendix III. These were administered in the manner outlined earlier in the chapter. Let us now turn to an analysis of the results stemming from these instruments.

SECTION II

RESULTS

As indicated in Chapter III, the total sample comprised 334 boys; 117 of these being from middle-class, 119 from skilled working-class, and 98 from lower working-class homes. The data for each boy were reduced and entered on transcription sheets. These provided the material for a data card for insertion on IBM punch cards prior to analysis on the IBM computer at Michigan's Regional Computing Center. The results of that analysis will now be presented and discussed.

1. AGE

The mean age, with the standard deviation, is presented for each social-class group in Table IV.1. As can be seen, there is very little variation in age within the three groups, the average age in each case being roughly 13 years 3 months. It is therefore not surprising that no significant differences appear on this variable between the different social-class groups.

CHAPTER IV

BASIC DATA

TABLE IV.1

Averages and in SDs on Age

Social Class	Mean Age (in months)	Standard Deviation
Middle	159.55	5.50
Skilled Working	159.00	6.07
Lower Working	158.60	6.33
ALL	159.00	6.12

As indicated in chapter III, the final sample comprised 392 boys; 117 of these coming from middle-class, 169 from skilled working-class, and 106 from lower working-class homes. The data for each boy were coded and entered on transcription sheets. These presented the material in a form ready for insertion on IBM punch cards prior to analysis on the KDF9 computer at Edinburgh's Regional Computing Centre. The results of that analysis will now be presented and discussed.

1. Age

The mean age, with its standard deviation, is presented for each social-class group in Table IV.1. As can be seen, there is very little variation in age between the three groups, the average age in each case being roughly 15 years 1 month. It is therefore not surprising that no significant differences appear on this variable between the different social-class groups.

TABLE IV.1

Average age in each social-class group

Social Class	Mean Age (in months)	Standard Deviation
Middle	180.54	5.90
Skilled Working	181.08	4.07
Lower Working	180.64	4.19
All	180.80	4.72

2. Social-class differences in H.S.P.Q. scores

a) Second-order factors. Mean second-order factor scores for the three social-class groups are presented in Table IV.2. As can be seen, there are no major social-class differences in these scores, with the exception of the neuroticism factor, where the difference between middle-class and lower working-class boys approaches an acceptable level of significance,* with middle-class boys emerging as somewhat more neurotic than their lower working-class counterparts. The inter-correlations between these factors are as follows: anxiety x neuroticism = .3163; anxiety x extraversion = -.2726; neuroticism x extraversion = -.6333.

TABLE IV.2.

Social-class differences in mean second-order factor scores

Social Class	Extraversion	S.D.	Anxiety	S.D.	Neuroticism	S.D.	N
Middle	36.88	9.73	57.99	13.8	22.16	5.01	117
Skilled Working	37.72	10.61	56.83	13.2	21.28	4.9	169
Lower Working	38.68	9.94	57.06	14.4	20.90	4.7	106
All	37.73	10.15	57.24	13.70	21.44	4.78	392
t for:							
1 v 2	-		-		-		
1 v 3	-		-		1.94 (p<.06)		
2 v 3	-				-		

* This was calculated by means of the t test of the significance of the difference between means, the formula for which is presented in Table V.1. Unless otherwise specified, the method used was always that for large samples.

b) First-order factors. Mean first-order factor scores are presented in Table IV.3. Raw, rather than "sten" scores (see Cattell and Beloff, op. cit.) are used in this analysis. Analysis of the differences between these means shows middle-class boys as significantly higher than either group of working-class boys, on factors B and G. Their significantly higher scores on the B factor indicate that middle-class boys have a "higher scholastic mental capacity" than boys from working-class families. This is not perhaps surprising in view of the fact - intimated in chapter III - that almost no middle-class boys could be found in junior secondary or comprehensive schools, with the result that the middle-class sample had to be drawn from senior secondary schools, to which entry is determined by competitive examination, and which are pursuing more academically-demanding courses of study. The interesting question is of course whether the higher "B" scores of middle-class boys are a product of this selection process and its associated educational experience, or whether they reflect genuine differences in the socialisation procedures which prevail in middle and working-class families. For present purposes, however, it is important to note this as a possible contaminating variable in subsequent analyses of the data, and to control for this, so far as possible, in any such analysis.

Middle-class boys also have significantly higher scores on the "G" factor of the H.S.P.Q. than do their working-class counterparts. Cattell and Beloff (op. cit.) characterise the child who is high on G as conscientious, persevering, staid, and bound by rules, while the person low on this factor is undependable, disregards rules, and

TABLE IV.3Social-class differences in mean first-order factor scores*

	Middle Class		Skilled Working		Lower Working		t for		
	Mean	S.D.	Mean	S.D.	Mean	S.D.	1 v 2	1 v 3	2 v 3
A	9.42	3.51	9.81	3.38	10.26	3.30	-	-	-
B	7.53	1.39	6.63	1.80	6.58	1.61	4.76	4.69	-
C	9.27	3.64	9.78	3.70	9.47	3.23	-	-	-
D	11.21	3.67	10.81	3.14	10.91	3.08	-	-	-
E	9.68	3.71	10.27	3.27	10.39	3.44	-	-	-
F	10.42	3.63	10.49	3.31	10.63	3.25	-	-	-
G	11.48	3.12	10.56	2.96	10.31	2.83	2.50	2.94	-
H	9.51	3.78	10.23	3.54	9.87	3.48	-	-	-
I	8.14	3.55	7.20	2.81	7.47	2.94	2.39	-	-
J	9.01	3.01	8.59	2.69	8.35	3.03	-	-	-
O	10.04	3.22	10.18	3.29	10.75	3.26	-	-	-
Q2	11.17	2.82	11.57	2.57	11.07	2.75	-	-	-
Q3	10.57	3.11	10.21	2.80	9.75	3.10	-	1.97	-
Q4	9.64	3.37	9.22	3.38	9.72	3.23	-	-	-

* Of the 52 comparisons in this table, chance factors alone would of course yield 2 or 3 which differ significantly at the 5% level of confidence.

by-passes obligations. This conforms to numerous observations and sets of findings concerning the differences between middle-class and working-class socialisation processes (see, for example, Klein, 1965, vol. 1, chs 1, 2 and 6 and vol. 2) and has in fact been used as an explanatory notion in some delinquency research, to account for the higher incidence of recorded delinquency among working-class boys (see, for example, Trasler, 1963).

This pattern is to some extent repeated on the Q3 factor, on which middle-class boys have significantly higher scores than lower working-class boys. According to Cattell and Beloff, a high Q3 score is indicative of a high degree of self-control, an anxiety to attain approved ethical standards, foresight, and consideration for others, while a low score is held to be symptomatic of excitability, poor control of one's emotions, and a rejection of cultural standards and demands. Middle-class boys have significantly higher average scores on the I factor than do skilled working-class boys, a fact which indicates that the former are more "tender-minded", sensitive and over-protected than their skilled working-class counterparts.

This comparison does therefore indicate that there are certain broad differences in the personality and behaviour of working-class and middle-class boys - differences which are probably related to variations in the socialisation procedures of the two social-class groups. The picture that emerges is one of a middle-class boy who is somewhat more neurotic, and significantly more conscientious, self-controlled and capable of abstract thought than his age-peer from a working-class background. This profile receives a partial

echo in Arnold Green's (op. cit.) description of the "Middle-class child and neurosis", while the finding that the difference between the average neuroticism scores of middle and working-class boys approaches significance at the 5 per cent level lends some support to Hollingshead and Redlich's (op. cit.) contention that middle-class socialisation methods are conducive to the development of neurotic traits in the child. It should, however, be noted that the mean neuroticism score of middle-class boys is well within the normal range. Cattell and Beloff (op. cit.) suggest that a score of 28 is "beginning to get quite high".

3. Personal constructs measure

a) Population means on construct scores. Constructs were scored from 1 to 6, the extreme left on each scale being assigned a score of 1, while the extreme right received a score of 6. The mean scores for the total study-population, of the ratings of the various elements on the total range of constructs are presented in matrix form in Table IV.4. Social-class differences in certain columns of this matrix will be presented and discussed in the next chapter. While a number of observations could be made about certain of these scores - such as the relatively small discrepancy between boys' perceptions of their "real" and "ideal" selves; the much bigger differences between what the boys believe their parents think of them and their perception of what their parents would like them to be like;* and the (not unexpected) fact that "the person I

* A true test of the significance of any of these differences would of course require to be based on the differences between these variables in each individual case, rather than on group means.

TABLE IV.4

Mean construct scores on total range of elements included in the study

Element Construct	Best friend	Mother	Father	Real self	Ideal self	Go to in trouble	Dis- like most	Admire most	Self as mother sees	Self as father sees	Mother's ideal	Father's ideal
Strict	4.409	3.834	2.967	4.203	3.857	3.546	2.396	3.861	3.874	3.795	3.479	2.871
Warm	2.136	1.667	2.508	2.464	1.790	1.852	5.235	1.888	2.583	2.710	1.518	1.761
Understanding	2.595	1.936	2.392	2.350	1.389	1.319	5.099	1.723	2.603	2.738	1.374	1.490
Unsure of self	4.560	4.716	5.074	4.123	5.429	5.307	3.373	5.145	3.997	4.025	5.316	5.358
Fair	2.072	1.678	2.157	2.276	1.371	1.424	5.317	1.576	2.407	2.512	1.418	1.508
Kind	2.041	1.425	1.961	2.260	1.413	1.511	5.227	1.579	2.337	2.484	1.444	1.573
Approachable	1.924	1.627	2.248	2.229	1.464	1.420	5.074	1.686	2.628	2.795	1.722	1.794
Silent	4.440	4.489	4.197	4.096	4.235	3.970	4.496	3.964	4.066	4.123	3.953	3.848
Excitable	3.382	3.451	4.147	3.322	4.652	5.230	2.825	4.838	3.351	3.343	4.680	4.617
Domineering	3.204	3.232	2.456	3.185	2.856	2.820	2.573	3.019	3.120	3.096	2.832	2.499
Dependable	2.124	1.572	1.818	2.188	1.299	1.252	5.161	1.438	2.533	2.639	1.471	1.445
Hard to understand	4.317	4.699	4.320	4.197	5.226	5.242	2.126	4.937	3.778	3.707	5.302	5.237
Strong per- sonality	2.486	2.643	1.893	2.750	1.619	1.786	3.994	1.824	2.512	2.730	1.670	1.579
Quick thinking	2.575	2.636	2.200	2.507	1.483	1.753	4.218	1.824	2.575	2.694	1.485	1.449
Sets at ease	2.376	1.842	2.304	2.304	1.410	1.351	5.216	1.559	2.617	2.733	1.565	1.621
Has drive	2.452	2.068	1.827	2.274	1.353	1.492	4.286	1.527	2.582	2.747	1.507	1.545
Dependent	4.052	4.293	4.594	4.028	4.978	4.798	3.039	4.795	4.087	4.158	5.057	5.162

dislike most" is on the whole the "odd man out" on most constructs -- the basic reason for presenting this material is that the principal components analysis by which it was hoped to reduce these 17 construct-scores for each element to more economical and more manageable proportions, was conducted on this matrix of 204 mean scores.

b) Principal components analysis. Principal components analysis is a statistical technique used frequently in the analysis of psychological and other data, which reduces a large number of intercorrelated variables to a smaller number of factors or components, representing specific areas of intercorrelation among the original items. In essence, it involves breaking down the matrix of the intercorrelations between these items, to a set of orthogonal (and hence uncorrelated) and standardised components (Lawley and Maxwell, 1963).

The combination of constructs, elements and subjects used in this study generated a three-dimensional (12 x 17 x 392) matrix of data. As previously indicated, each construct rating was assigned a number from 1 to 6; so that each cell in this matrix contained a number which represented the judgment of a particular element, on a particular scale, by a particular subject. It would of course be possible to obtain separate matrices of construct intercorrelations for individual subjects (summing over elements) as well as for individual elements (summing over subjects). To conduct an analysis which would make use of all the information contained in the original matrix, it is however necessary in some way to reduce it to two dimensions.

The most usual procedure for obtaining principal components from such data would probably be to sum scores over both subjects and elements, thus creating a 17 x 17 matrix of the intercorrelations of every construct with all other constructs in which all the data make a contribution (see, for example, Osgood et al., op. cit., ch. 2). Because the 12 elements were responded to by 392 subjects, each of the 17 constructs was responded to 12 x 392 (= 4704) times. In such an analysis every construct would therefore be paired with every other construct over 4704 values. During preliminary discussions with the programming staff at Edinburgh Regional Computing Centre, it was pointed out to the author that a calculation of this magnitude would present storage problems to the KDF9 computer then in operation at the Centre. An alternative procedure had therefore to be found.

It was felt that an acceptable (though less comprehensive and therefore rather less satisfactory) alternative would be to compile a (17 x 12) matrix of the mean scores across all subjects for each construct on each element, and to use this as the raw material for a principal components analysis. This matrix engendered a 17 x 17 intercorrelation matrix, in which each construct was paired with every other construct over 12 values. The lower half of this matrix of intercorrelations is presented in Table IV.5.

The relatively large number of high intercorrelations in this Table probably indicates that the use of mean scores has inhibited much of the variability one would normally expect to find had the correlation analysis been based on individual data. In turn, this indicates that any factors or components one obtains from this

TABLE IV.5
Matrix of intercorrelations of mean construct scores

	1	2	3	4	5	6	7	8
1	1.0000							
2	-.5366	1.0000						
3	-.4067	.9664	1.0000					
4	.0681	-.8101	-.8802	1.0000				
5	-.5100	.9913	.9832	-.8418	1.0000			
6	-.5124	.9917	.9701	-.8282	.9958	1.0000		
7	-.5506	.9820	.9658	-.8379	.9883	.9869	1.0000	
8	.0238	.4752	.6054	-.4942	.5272	.4768	.4354	1.0000
9	-.0462	-.6500	-.7936	.9109	-.7097	-.6726	-.6914	-.6756
10	.8903	-.2766	-.1177	-.2641	-.2168	-.2329	-.2558	.2203
11	-.4510	.9763	.9813	-.8778	.9921	.9911	.9886	.5145
12	.3311	-.9462	-.9821	.9369	-.9586	-.9433	-.9540	-.5554
13	-.1791	.8557	.9220	-.9442	.8982	.8782	.8623	.6700
14	-.2511	.8872	.9559	-.9199	.9217	.8947	.8840	.7078
15	-.4719	.9774	.9934	-.8678	.9936	.9851	.9860	.5570
16	-.3108	.9251	.9758	-.9377	.9562	.9462	.9435	.5971
17	.1171	-.8596	-.9333	.9469	-.8919	-.8715	-.8467	-.6873

TABLE IV.5 (continued)

	9	10	11	12	13	14	15	16
1								
2								
3								
4								
5								
6								
7								
8								
9	1.0000							
10	-.3431	1.0000						
11	-.7466	-.1457	1.0000					
12	.8348	.0293	-.9666	1.0000				
13	-.8835	.1857	.9114	-.9305	1.0000			
14	-.8653	.0958	.9231	-.9566	.9816	1.0000		
15	-.7651	-.1767	.9938	-.9742	.9092	.9359	1.0000	
16	-.8488	.0229	.9755	-.9767	.9625	.9689	.9739	1.0000
17	.8863	-.1986	-.9020	.9446	-.9787	-.9820	-.9076	-.9565

correlation matrix will probably be more stable than components derived from a correlation matrix based on individual data.

This notion is perhaps confirmed in Table IV.6. The inter-correlation matrix was converted into a set of principal components using the Health Sciences Computing Facility, University College of Los Angeles, programme BMDX72 - one of the standard principal components programmes at the Regional Computing Centre. This performs an orthogonal rotation, with unity in the diagonal, and the diagonal elements unaltered. This elicited three components with an eigen value greater than 0.5. These (unrotated) principal components are reproduced in Table IV.6.

As can be seen, these account for 97.5 per cent of the total variance in the instrument, with 79 per cent of the variance being accounted for by the first factor - findings which reinforce the notion that a matrix of the intercorrelations between population means will tend to produce a more stable set of components than would probably be obtained in a factor analysis of more conventional type. To clarify the structure of the main components and so facilitate interpretation of them, the computer had also been programmed to rotate all principal components with an eigen value greater than 0.5 to a Varimax solution. The results of this rotation are presented in Table IV.7.

Most constructs are heavily loaded on the first component, with 13 out of 17 having a factor loading of greater than 0.9. The six heaviest loadings are on the constructs "hard to understand", which is negatively loaded (-0.9656); "unsure of self", also with a negative loading (-0.9615); "has drive", with a loading of 0.9610;

TABLE IV.6

Principal components analysis:
loadings of 17 constructs on unrotated components

	Loading on factor		
	1	2	3
Strict	-.3670	.8895	-.1275
Warm	.9565	-.2458	-.0400
Understanding	.9916	-.0624	.0278
Unsure of self	-.9188	-.2864	.2453
Fair	.9791	-.1845	-.0130
Kind	.9653	-.2119	-.0629
Approachable	.9616	-.2390	-.1017
Silent	.6134	.3674	.6955
Excitable	-.8302	-.4377	-.0263
Domineering	-.0476	.9707	-.1597
Dependable	.9837	-.1228	-.0712
Hard to understand	-.9864	-.0161	.0810
Strong personality	.9579	.2241	.0074
Quick-thinking	.9738	.1527	.0869
Sets at ease	.9889	-.1325	-.0039
Has drive	.9904	.0599	-.0466
Dependent	-.9562	-.2569	-.0134

Eigen value 13.439 2.518 0.625

Cumulative percentage of variance 79.06 93.87 97.55

TABLE IV.7

Principal components analysis:
loadings of 17 constructs on rotated components

	Loading on factor		
	1	2	3
Strict	-.2738	.9309	.0180
Warm	.9135	-.3408	.1617
Understanding	.9348	-.1848	.2829
Unsure of self	-.9615	-.2259	-.1036
Fair	.9298	-.2911	.2092
Kind	.9302	-.3037	.1520
Approachable	.9371	-.3199	.1080
Silent	.3938	.1122	.9096
Excitable	-.8027	-.3163	-.3703
Domineering	.0439	.9790	.0982
Dependable	.9541	-.2180	.1732
Hard to understand	-.9656	.0822	-.2019
Strong personality	.9210	.0999	.3311
Quick-thinking	.9095	.0101	.3899
Sets at ease	.9386	-.2443	.2342
Has drive	.9610	-.0489	.2465
Dependent	-.9190	-.1304	-.3450

Eigen value 13.439 2.518 0.625

Cumulative percentage of variance 79.06 93.87 97.55

"dependable", which is loaded 0.9541; "sets people at ease", loaded 0.9386; and "approachable", whose loading on this component is 0.9371. Since constructs were scored 1 to 6, from left to right, this means that an element receiving a low factor score on this component is seen as easy to understand, sure of him (her) self, having "drive", dependable, making people feel at ease, and approachable.

Because it accounts for such a large portion of the variance, and because so many adjectives are so heavily loaded on it, it seems reasonable to interpret this as a (general) evaluative component. The more specific nature of the constructs on which this component receives its highest loadings does however mean that this evaluation is heavily geared towards characteristics which are associated with self-assurance, approachability and sociability.

The second component has its heaviest loadings on "domineering" (with a weight of 0.9790), and "strict", on which it is loaded 0.9309. These are supplemented by smaller (negative) loadings on "warm", which shows a loading of -0.3408, "approachable", with a loading of -0.3199, "excitable", which is loaded -0.3163 and "kind", loaded -0.3037. An element with a high score on this component would therefore seem to be characterised by the subject as domineering and strict, and to a lesser extent as cold, unapproachable, relaxed and unkind. This component was accordingly interpreted as "authoritarianism". As in the case of the first component, a high degree of authoritarianism is identified by a low factor score.

Component number 3 is highly loaded on one construct, "silent", on which it has a value of 0.9096. As with the second component,

this is supplemented by rather smaller loadings on a number of other constructs. Thus, the constructs "quick-thinking" (loaded 0.3899), "excitable" (with a loading of -0.3703), "dependent" (loaded -0.3450), and "strong personality" (0.3311) may be regarded as subsidiary factors in this component. Because of the scoring procedures for this instrument, which were noted above, a low score on this component means that an element is seen as silent, quick-thinking, relaxed, independent, and strong. The component was therefore interpreted as "self-sufficiency".

c) Population means on principal components scores

Principal components scores could now be calculated for all 12 elements on all 3 principal components for each subject, by simply multiplying the value from 1 to 6 ascribed by individual boys to any particular element on any particular construct, by the loading of that construct on the component in question, then summing the products for each component. The computer was in fact programmed to calculate and print out these scores for each boy. The mean for all three social-class groups and for the total population on all three components for each element are presented in Table IV.8. It is perhaps worth reminding the reader that all three components are identified by a low factor score.

Of the 108 possible social-class comparisons in this Table, chance factors would yield between 5 and 6 differences which are significant at the 5 per cent level. The fact that there are 13 significant differences in the Table can therefore be taken as an indication that there are genuine social-class differences in various of the elements included in the study. Undoubtedly the

most striking feature of Table IV.8 is the fact that significant social-class differences manifest themselves only in the way that boys view their fathers and themselves, and in their perceptions of what both their mothers and their fathers would like them to be like, while on none of the remaining elements do any statistically-significant differences appear. Since these significant differences have a direct bearing on certain of the major hypotheses of the study, discussion of them will be undertaken at appropriate points in later chapters.

Consistency of principal-components structure across social-class groups

Finally, it was felt necessary to check the extent to which the structure of these principal components remains uniform across all three social-class groups, since it would be quite consistent with one of the major notions underlying the study if differences existed in the way these adjectives were used in different social-class groups. Kohn's (1959a) research does in fact provide strong grounds for assuming that there are social-class differences in the way values are defined. Thus, "honesty" was seen by middle-class mothers as the core of a set of standards of conduct, which comprised consideration, manners, dependability, self-control and neatness; while "happiness" was in their minds related to the goals of curiosity and ambition. Among working-class mothers, on the other hand, honesty seemed to be viewed less as a standard of conduct, and more as a quality of the person, its strongest correlations being with the norms of happiness, popularity, and ability to defend oneself. These mothers also associated happiness less with such competitive

attributes as ambition, than with qualities like honesty, consideration for others, and popularity.

The possibility that social-class differences exist in the way constructs are defined and used in the present population, was tested by calculating the mean score for each construct on each element in all three classes, and conducting a principal components analysis on each of the resulting matrices. As in the principal components analysis of the personal construct data for the total population, a Varimax rotation was performed on all components with an eigen value greater than 0.5. The results of the three analyses are detailed in Table IV.9. In both the middle and the skilled working class, these data reduce themselves to three basic components; while in the lower working class only two components emerge with an eigen value greater than the minimum required.

More detailed analysis of the actual structure of these components indicates that the first component is very similar in all three groups, accounting for a major portion of the variance, and having its heaviest loadings on the same general set of constructs. Loadings were also ranked in order of magnitude for all components in each social class, and Spearman's coefficient of rank correlation computed to check the overall similarity of these factor-structures in the respective social-class groups. These Spearman's coefficients are presented in Table IV.10.

There is a highly significant degree of correlation between all three groups, in the order of the ranks on this first component. In the middle class, the six constructs with the highest loadings on this component are: kind, fair, makes people feel at ease, warm,

TABLE IV.9

Structure of principal components emerging from separate analyses for each social-class group

Middle-class factor loadings

<u>Construct</u>	1		2		3	
	<u>Loading</u>	<u>Rank</u>	<u>Loading</u>	<u>Rank</u>	<u>Loading</u>	<u>Rank</u>
1	-.0228	12	-.1124	13	-.9440	17
2	.9845	4	.0773	10	.0627	12
3	.9636	7	.2433	5	-.0198	15
4	-.5410	14	-.8097	17	.0865	7
5	.9868	2	.1192	8	.0764	9
6	.9874	1	.0712	11	.0682	10
7	.9762	5	.1101	9	.0108	14
8	.6664	11	-.0739	12	.4661	1
9	-.6499	15	-.6967	16	.0792	8
10	-.1494	13	.9467	1	.1989	2
11	.9698	6	.2115	6	.0880	6
12	-.9226	17	-.3481	14	.1100	5
13	.8651	10	.4757	2	.1297	4
14	.8805	9	.4378	3	.0647	11
15	.9859	3	.1494	7	.0211	13
16	.8936	8	.4167	4	.1434	3
17	-.8273	16	-.5249	15	-.1153	16
Eigen value	13.12		1.91		1.18	
Cumulative per cent of variance	77.2		88.4		95.4	

TABLE IV.9 (continued)

Skilled working-class factor loadings

<u>Construct</u>	1		2		3	
	<u>Loading</u>	<u>Rank</u>	<u>Loading</u>	<u>Rank</u>	<u>Loading</u>	<u>Rank</u>
1	-.3933	13	.8851	2	.0967	8
2	.9007	10	-.3865	17	.0924	9
3	.9429	4	-.2421	11	.2081	4
4	-.9939	17	-.0004	6	-.0861	14
5	.9328	6	-.3300	15	.1246	7
6	.9345	5	-.3204	14	.0437	12
7	.9242	9	-.3703	16	.0349	13
8	.2600	11	.0994	4	.9555	1
9	-.8309	14	-.1933	10	-.3796	17
10	.0372	12	.9862	1	.0496	11
11	.9600	2	-.2448	12	.0725	10
12	-.9536	16	.1675	3	-.1857	15
13	.9267	8	.0724	5	.3230	3
14	.9299	7	-.0707	7	.3248	2
15	.9472	3	-.2772	13	.1464	6
16	.9761	1	-.0962	8	.1618	5
17	-.9304	15	-.1427	9	-.3049	16
Eigen value	13.46		2.35		0.76	
Cumulative per cent of variance	79.2		93.0		97.5	

TABLE IV.9 (continued)

Lower working-class factor loadings

<u>Construct</u>	<u>1</u> <u>Loading</u>	<u>Rank</u>	<u>2</u> <u>Loading</u>	<u>Rank</u>
1	-.3247	13	.9007	2
2	.9610	8	-.1829	14
3	.9891	2	-.0004	7
4	-.9406	16	.2443	15
5	.9808	6	-.1439	11
6	.9816	5	-.1487	12
7	.9705	7	-.1606	13
8	.3229	11	.8137	3
9	-.7619	14	-.5143	17
10	-.0552	12	.9664	1
11	.9836	4	-.0962	9
12	-.9794	17	-.0990	10
13	.9180	10	.2567	4
14	.9421	9	.2297	5
15	.9898	1	-.0561	8
16	.9879	3	.0119	6
17	-.9382	15	-.2479	16
Eigen value	12.97		3.00	
Cumulative per cent of variance	76.3		94.0	

approachable, and dependable. In the skilled working class, the sequence is: sure of self, has drive, dependable, easy to understand, makes people feel at ease, and understanding. And in the lower working class, the six most heavily loaded constructs are: makes people feel at ease, understanding, has drive, dependable, kind, and fair. The actual values obtained for Spearman's coefficient of rank correlation range from 0.7794 between middle and skilled working-class boys, to 0.9583 between skilled and lower working-class boys.

Examination of the remaining principal components in the three social-class groups raises two considerations. First, it would appear that lower working-class boys, with only two principal components with an eigen value above that required have a rather simpler, or at any rate less differentiated, personal-construct system than do boys from middle and skilled working-class homes. In these latter two groups, three principal components emerged with an eigen value above the required level. The second point is connected with this. It relates to the structure of these remaining principal components. The second component in the middle-class group is highly and significantly ($p < .01$) correlated with the third component for the skilled working-class; but the correlation between the third middle-class and the second skilled working-class component is significant only at the 10 per cent level. Both the second and third skilled working-class components correlate significantly (at the .025 and the .002 levels, respectively) with the second component in the lower working-class. Of the two remaining middle-class components, only the second is significantly ($p < .002$) correlated with the second component in the lower working-class.

TABLE IV.10

Correlations across social-class groups,
of structure of the various principal components

	<u>Spearman's coefficient of rank correlation</u>	<u>p</u> ⁺
m/cl 1 x skilled w/cl 1	.7794	<.001
m/cl 1 x lower w/cl 1	.8553	<.001
Skilled w/cl 1 x lower w/cl 1	.9583	<.001
m/cl 2 x skilled w/cl 2	.0147	n.s.
m/cl 2 x lower w/cl 2	.6421	<.002
Skilled w/cl 2 x lower w/cl 2	.6004	<.025
m/cl 3 x skilled w/cl 3	.1642	n.s.
m/cl 3 x lower w/cl 2	.3186	n.s.
Skilled w/cl 3 x lower w/cl 2	.7156	<.002
m/cl 2 x skilled w/cl 3	.6348	<.01
m/cl 3 x skilled w/cl 2	.4264	<.1

⁺ The formula used for calculating the significance of these coefficients was:

$$t = p \sqrt{\frac{N - 2}{1 - p^2}},$$

where p = the particular value of Spearman's coefficient, and N = 17 (the number of variables in the rank order).

While the principal components may therefore be regarded as in general similar to each other, there are sufficient variations in the structures of the respective second and third components, to indicate that boys in the three social-class groups do not use certain of these constructs in identical ways. It was accordingly decided, in the interests of simplicity and comparability, to use the principal components derived from the data for the entire population in testing the research-hypotheses; but also - as a safeguard - to carry out additional calculations on the raw personal-construct data, particularly in cases involving the second and third components.

This chapter will present evidence that the...
to be... as these were... in...

Self-perception and parental perception

Directions in... perceptions...
in placing...
...
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... will be... and...

The major goal of this experiment is...
... Table 5.1 has already...
... the average...

CHAPTER V

SOCIAL-CLASS DIFFERENCES IN THE PERCEPTIONS OF SELF AND PARENTS

This table...
... will not...
... are analyzed...
... as placing...
... by the first...
... groups. An...
... perception...
... middle-class...
...
... that the...
... from...
... highest... lowest...

This chapter will present evidence relating to hypotheses 1a to 2b, as these were outlined in chapter II.

1) Self-conception and parental expectations

Hypothesis 1a - middle-class individuals will see their parents as placing more emphasis on such qualities as independence, reliability and self-control in their children, than will persons from a working-class background, where the emphasis will be on obedience and sociability.

The major test of this hypothesis is presented in Tables V.1 to V.3. Table V.1 has already appeared as part of Table IV.8. It presents the average perception held by boys within each social-class group, of the kind of person parents would like their son to be. It should be borne in mind that all three components are identified by a low factor score.

It is first worth noting that all the significant differences in this table emerge from comparisons between middle and working-class boys, and not within the working-class population itself. When these trends are analysed in more detail, we find that middle-class boys see their mothers as placing a higher emphasis on the qualities that contribute to the first (evaluative) component, than do boys from either working-class group. An identical pattern appears in the case of boys' perceptions of their fathers' aspirations concerning their behaviour, middle-class fathers being felt to emphasise highly-valued qualities more than working-class fathers. Also of some interest is the fact that the trend of these scores is identical for both parents, running from lowest (i.e., highest in evaluation) in the middle class, to highest (i.e., lowest in evaluation) in the lower working class,

TABLE V.1

Social-class differences in boys' perceptions of what their parents would like them to be like: principal component scores

Social Class Group	Mother's ideal					
	Component 1		Component 2		Component 3	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Middle	-.175	.690	.017	.632	.171	1.123
Skilled w/cl	.061	1.012	-.043	.845	-.014	1.354
Lower w/cl	.083	1.107	.052	.920	-.217	1.658
⁺ t for:						
1 v 2	2.345	(p<.025)	-		-	
1 v 3	2.064	(p<.05)	-		2.024	(p<.05)
2 v 3	-				-	

Social Class Group	Father's ideal					
	Component 1		Component 2		Component 3	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Middle	-.189	.734	-.071	.762	.198	1.239
Skilled w/cl	-.040	.945	.000	.868	.013	1.438
Lower w/cl	.114	1.007	.040	.862	-.214	1.465
⁺ t for:						
1 v 2	2.315	(p<.05)	-		-	
1 v 3	2.546	(p<.025)	-		2.256	(p<.05)
2 v 3	-		-		-	

⁺The formula used for calculating t was

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}}}$$

with marginally bigger differences appearing between the middle and the lower working class in perceptions of the expectations of father, rather than of mother. Significant differences also appear in the perceptions of both mother's and father's ideals on the behaviours most heavily weighted on component 3, with boys from middle-class families seeing both parents as emphasising these behaviours less than is the case among boys from lower working-class backgrounds. The perceptions of skilled working-class boys fit the same trend as was evidenced in the first component, coming somewhere between the other two social classes, although the scores for this group are not significantly different from those of either of the other two groups.

It would therefore seem that middle-class parents - at any rate, as perceived by their sons - place a greater emphasis on highly-evaluated qualities such as being easy to understand, being sure of oneself, having "drive", being dependable, making people feel at ease, and being approachable, than do their counterparts in the working class. On the other hand, lower working-class parents are seen by their sons as stressing the value of self-sufficiency, defined in terms of being silent, quick-thinking, relaxed, independent and strong. These findings will be discussed below.

Tables V.2 and V.3 confirm the trends in this first Table, to the extent that significant differences appear only between the perceptions of middle and working-class boys. Only three differences, none of them significant at more than the .1 level, appear between the skilled and the lower working class - a finding which, for 34 comparisons, is no more than would be expected to occur by chance. Examination of scores on individual constructs indicates that by

TABLE V.2

Social-class differences in boys' perceptions of
"what my mother would like me to be like"

	Middle		Skilled working		Lower working		t value for		
	Mean	S.D.	Mean	S.D.	Mean	S.D.	1v2	1v3	2v3
Strict	3.641	1.435	3.343	1.543	3.358	1.809	+	-	-
Warm	1.367	0.769	1.580	0.897	1.632	1.138	2.150	2.016	-
Under- standing	1.259	0.498	1.461	0.777	1.481	0.876	2.677	2.295	-
Unsure of self	5.436	0.885	5.225	1.290	5.274	1.375	+	-	-
Fair	1.248	0.504	1.524	0.988	1.453	0.971	3.096	+	-
Kind	1.265	0.509	1.565	1.116	1.353	0.735	3.064	-	+
Appro- achable	1.632	1.137	1.781	1.343	1.774	1.377	-	-	-
Silent	4.051	1.143	3.946	1.360	3.689	1.614	-	+	-
Excitable	4.731	1.241	4.611	1.459	4.612	1.528	-	-	-
Domin- eering	2.701	1.197	2.846	1.496	2.848	1.610	-	-	-
Dependable	1.316	0.636	1.521	1.005	1.677	1.260	2.111	2.659	-
Hard to understand	5.470	0.813	5.216	1.287	5.219	1.278	2.043	+	-
Strong person- ality	1.564	0.839	1.728	1.153	1.773	1.194	-	-	-
Quick thinking	1.419	0.699	1.436	0.902	1.670	1.275	-	+	+
Sets at ease	1.470	0.957	1.661	1.234	1.519	1.083	-	-	-
Has drive	1.427	0.662	1.550	0.957	1.566	1.135	-	-	-
Dependent	5.078	1.237	5.083	1.449	5.075	1.576	-	-	-

⁺p < .1

TABLE V.3

Social-class differences in boys' perceptions of
"what my father would like me to be like"

	Middle		Skilled working		Lower working		t value for		
	Mean	S.D.	Mean	S.D.	Mean	S.D.	1v2	1v3	2v3
Strict	2.749	1.500	2.911	1.636	2.913	1.826	-	-	-
Warm	1.682	1.034	1.821	1.120	1.734	1.170	-	-	-
Under- standing	1.345	0.705	1.559	0.962	1.575	0.856	2.170	2.177	-
Unsure of self	5.542	0.773	5.263	1.291	5.240	1.347	2.280	2.026	-
Fair	1.406	0.877	1.601	1.019	1.419	0.785	+	-	+
Kind	1.396	0.644	1.690	1.102	1.577	1.062	2.838	-	-
Appro- achable	1.690	1.083	1.780	1.246	1.949	1.518	-	-	-
Silent	3.976	1.296	3.904	1.548	3.675	1.692	-	-	-
Excitable	4.740	1.230	4.577	1.627	4.450	1.609	-	-	-
Domin- eering	2.310	1.211	2.563	1.425	2.510	1.607	-	-	-
Dependable	1.233	0.677	1.521	0.950	1.577	1.277	2.993	2.476	-
Hard to understand	5.305	1.050	5.232	1.210	5.182	1.355	-	-	-
Strong person- ality	1.457	0.742	1.594	0.993	1.760	1.225	-	2.206	-
Quick thinking	1.440	0.905	1.437	0.903	1.504	1.023	-	-	-
Sets at ease	1.526	0.889	1.681	1.108	1.619	1.083	-	-	-
Has drive	1.388	0.900	1.551	1.033	1.808	1.429	-	2.595	-
Dependent	5.180	1.371	5.125	1.359	5.192	1.399	-	-	-

⁺ p < .1

contrast with their working-class counterparts, middle-class boys see their mothers as placing significantly more emphasis on the qualities of warmth, kindness, understanding, fairness, dependability, and being easy to understand. On the construct "kind" only the difference between middle and skilled working-class boys is significant at beyond the .05 level of confidence, there also being a difference between the skilled and the lower working class which is significant at the 10 per cent level, with lower working-class boys seeing their mothers as placing somewhat greater stress on this quality.

Table V.3 indicates that the fathers of middle-class boys are seen as preferring their sons to be more understanding, sure of themselves, and dependable than is the case with fathers of working-class boys. In addition, middle-class fathers would seem to place more emphasis than lower working-class fathers on their sons' possessing "drive" and having a strong personality, while skilled working-class fathers are perceived as attaching a lower importance to kindness than fathers in the middle class.

With the total of 51 comparisons which can be made on either of these two Tables, chance factors alone would give two or three differences which are significant at the 5 per cent level of confidence. The fact that on both Tables, nine differences emerge as significant at the 5 per cent level or beyond is therefore a strong indication of genuine social-class differences on these variables. Also worth noting is the fact that the standard deviations on these construct-scores are in general rather smaller in the middle-class than in the two working-class groups. This may be an indication that middle-class boys are presented with a more definite and

consistent set of parental expectations than are working-class boys. The same observation holds true for the standard deviations on the principal-component scores in Table V.1.

Let us now examine the relevance of these findings for hypothesis 1a. The principal components comparisons indicate first that, by contrast with the working-class, middle-class parents communicate a higher preference for the display of highly-evaluated qualities in their sons; and second that self-sufficiency in the son is emphasised more by working-class than by middle-class mothers and fathers. The finding on the third component does in fact tend to refute the prediction that middle-class parents will place a greater emphasis on independence and self-control. In interpreting this finding, it should however be borne in mind that the third component is not stable across all three social classes.

The personal-construct data show a relatively consistent pattern of emphasis within the middle class, with both parents seen as expecting the son to be understanding, kind and dependable. In combination, these suggest that middle-class parents emphasise qualities of dependability and consideration for others. This latter element may also be evidenced in the perceived emphasis laid by middle-class mothers on the quality of fairness in their sons. Middle-class boys also see their mothers as wanting them to be warm and easy to understand, while middle-class fathers are perceived as desiring their sons to be sure of themselves, strong, and possessing "drive". Middle-class mothers would therefore appear to want boys to be sociable, while middle-class fathers lay emphasis on more instrumental qualities which - pace the findings on the third component - seem designed to make their sons autonomous, self-regulating individuals.

It would seem fair to interpret hypothesis 1a as receiving only partial support from these findings. In general, middle-class boys seem aware of a more definite and consistent set of parental expectations concerning their behaviour. Neither group of working-class boys see their parents as expecting them to be more obedient or sociable than do middle-class boys, although this does not of course mean that these qualities are not emphasised in their socialisation process. Having said that, it should also be noted that middle-class mothers do in fact seem to stress certain constructs which are associated with sociability rather more than working-class mothers. It is also possible that the absence of significant findings on the former quality is due to the inadequate nature of the tool used for measuring it. In retrospect, the construct "domineering-meek" is not a satisfactory measure of obedience.

Middle-class parents do, however, seem to desire the development of dependability and consideration for others in their sons, and it is probably these constructs which account for the higher expectations shown by these parents on the first principal component. It is difficult to interpret the evidence relating to the prediction concerning middle-class emphases on independence and self-control in the child. The personal-construct material indicates that these qualities are desired by middle-class fathers, but the mean scores on the third (self-sufficiency) component indicate that they are in fact stressed more by working-class parents. It seems very probable that these discrepancies are due to the lack of stability of the third principal component across social class.

Hypothesis 1b -- because of parental expectations, middle-class individuals will view themselves as possessing the qualities of independence, reliability and self-control more often than working-class individuals, whose self-conception will be organised around the notions of obedience and sociability.

The preliminary test of this hypothesis is presented in Tables V.4 and V.5. Table V.4 gives details of the mean principal-component scores for all three social classes on the element "the kind of person I really am".

It is interesting that scores on the first and third components again form a consistent trend with social class. On component 1, middle-class boys evaluate themselves less highly than do boys in either working-class group, with lower working-class boys perceiving themselves as higher on the qualities which contribute to this component, and skilled working-class boys coming somewhere between the two, although much nearer their lower working-class counterparts. The differences between the middle-class and working-class samples are both significant at well beyond the 5 per cent level of confidence. Similarly, on component 3, lower working-class boys see themselves as least self-sufficient, middle-class boys view themselves as most self-sufficient, and skilled working-class boys come in between the two, although nearer the lower working-class sample. Once again, the differences between middle and working-class boys are statistically significant, both of them exceeding the .025 level of confidence.

One observation should be made before passing to Table V.5. When Table V.4 is compared with Table V.1, there seems to be a marked discrepancy on both components 1 and 3, between middle-class boys' perceptions of themselves and what they think both their parents

TABLE V.4

Social-class differences in boys' self-perceptions

Social Class Group	Component 1		Component 2		Component 3	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Middle	.187	.911	.084	.790	-.300	1.335
Skilled w/cl	-.067	.880	-.038	.767	.095	1.371
Lower w/cl	-.093	.938	-.026	1.032	.169	1.482
t for: 1 v 2	2.351	(p<.025)	-		2.437	(p<.025)
1 v 3	2.257	(p<.05)	-		2.481	(p<.025)
2 v 3	-		-		-	

would like them to be like. There is a certain, but much smaller, discrepancy between perceptions of self and of the expectations of parents on the third component in the lower working class. Middle-class boys would therefore appear to see themselves as falling short of parental expectations more frequently than boys from working-class families. However, since the variables of self-perception and perception of parents' expectations for self have been obtained from the same population of boys, this notion cannot be verified by a normal "t" test for the significance of the difference between means. More detailed consideration of this point will therefore be deferred until later in this chapter.

Table V.5 gives details of social-class differences in boys' self-perceptions on individual constructs. The seven differences which are significant beyond the 5 per cent level of confidence exceed by 4 or 5 the number one would normally expect to occur by chance alone. As before, these significant results arise only from comparisons between middle and working-class individuals.

Middle-class boys report themselves as significantly less sure of themselves and possessing significantly less drive than boys from either working-class population. They also see themselves as less talkative than either skilled or lower working-class boys, the difference between them and the lower working-class being significant at the .01 level, while their difference from skilled working-class boys is significant only at the .1 level of confidence. Finally, middle-class boys view themselves as significantly harder to understand ($t = 2.136, p < .05$) and somewhat more excitable and slow-thinking ($p < .1$ in both cases) than do skilled working-class boys.

TABLE V.5

Social-class differences in boys' self-perceptions

	Middle		Skilled working		Lower working		t values for		
	Mean	S.D.	Mean	S.D.	Mean	S.D.	1v2	1v3	2v3
Strict	4.287	1.191	4.172	1.118	4.152	1.264	-	-	-
Warm	2.478	1.100	2.438	1.101	2.415	1.120	-	-	-
Under- standing	2.405	1.035	2.355	0.982	2.387	1.220	-	-	-
Unsure of self	3.769	1.432	4.304	1.366	4.199	1.585	3.165	2.118	-
Fair	2.357	1.035	2.262	1.098	2.174	1.092	-	-	-
Kind	2.247	0.943	2.311	1.046	2.163	0.931	-	-	-
Appro- achable	2.290	1.127	2.219	1.110	2.180	1.192	-	-	-
Silent	3.837	1.436	4.149	1.413	4.368	1.524	+	2.671	-
Excitable	3.102	1.410	3.399	1.460	3.368	1.646	+	-	-
Domin- eering	3.163	1.131	3.190	1.244	3.232	1.362	-	-	-
Dependable	2.342	1.115	2.156	1.085	2.104	1.132	-	-	-
Hard to understand	3.991	1.493	4.361	1.361	4.151	1.625	2.136	-	-
Strong person- ality	2.829	1.176	2.732	1.162	2.580	1.289	-	-	-
Quick thinking	2.655	1.148	2.411	1.162	2.424	1.259	+	-	-
Sets at ease	2.357	1.046	2.283	0.956	2.188	0.965	-	-	-
Has drive	2.470	1.023	2.231	0.988	2.127	1.030	1.970	2.491	-
Dependent	4.043	1.347	4.018	1.490	3.887	1.745	-	-	-

+ $p < .1$

The picture suggested by these results is therefore one of middle-class boys who typically evaluate themselves less highly than working-class boys, defining themselves as self-sufficient but rather lacking in self-confidence and drive, and seeing themselves as uncommunicative and difficult to understand. Conversely, working-class boys have relatively high levels of self-esteem, and are less self-sufficient, more self-confident, and more talkative.

That part of hypothesis 1b which predicted that working-class boys would see themselves more frequently as possessing qualities related to sociability and obedience is therefore partially confirmed - to the extent that higher self-esteem and lower self-sufficiency may be regarded as conducive to sociability in the individual. The absence of any significant finding on obedience may again be a reflection of the lack of an adequate measure of this variable in the instrument used, rather than of the extent to which working-class boys see themselves as displaying or not displaying such behaviour; but it is obviously impossible to make any more definite statement on this variable.

The findings for middle-class boys are, however, virtually the opposite of those predicted. That part of hypothesis 1b relating to the self-conception of middle-class boys must therefore be refuted. The picture of middle-class boys as low in self-esteem, self-confidence and "drive" may in fact at least partially explain the rather higher average neuroticism score displayed by these boys in Table IV.2.

The first part of hypothesis 1b postulates that the self-concepts of boys in different social-class groups will reflect

the expectations which they perceive their parents as possessing concerning their behaviour. This prediction must again be rejected. Indeed, and as already noted, the contrast between Tables V.1 and V.4 indicates that middle-class boys' self-perceptions and their perceptions of their parents' preferences concerning their behaviour are rather antithetical to each other. It was therefore felt necessary to examine in more detail the differences between these two sets of perceptions in each social-class group.

This analysis is presented in Table V.6. Since the self-perceptions and the perceptions of parents' expectations concerning behaviour were obtained from the same populations, the significance of the difference between the two was calculated by the t formula for the significance of the difference between correlated means, with $t = \frac{\bar{d}}{S.E. \bar{d}}$. The significance of the difference between social classes in this mean difference was also calculated, using the following formula:

$$t = \frac{\bar{d}_1 - \bar{d}_2}{\sqrt{\frac{S^2}{n_1 + n_2 - 2} \times \left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$

$$\text{where } S^2 = ((S.E._1)^2 \times n_1 \times (n_1 - 1)) + ((S.E._2)^2 \times n_2 \times (n_2 - 1)).$$

TABLE V.6

Social-class differences in mean distance between self-concept and perception of parents' expectations of self

Social Class Group	Self-concept v mother's ideal							
	Component 1				Component 3			
	Mean dist.	Std. error	t	p	Mean dist.	Std. error	t	p
Middle	.366	.100	3.65	.001	-.470	.161	2.92	<.01
Skilled w/cl	-.157	.122	1.29	-	.231	.185	1.25	-
Lower w/cl	-.169	.132	1.28	-	.426	.204	2.09	.05
t for: 1 v 2	3.158 (p <.002)				2.885 (p <.01)			
1 v 3	3.264 (p <.002)				3.493 (p <.001)			
2 v 3	n.s.				n.s.			

Social Class Group	Self-concept v father's ideal							
	Component 1				Component 3			
	Mean dist.	Std. error	t	p	Mean dist.	Std. error	t	p
Middle	.376	.096	3.90	.001	-.389	.151	2.57	.025
Skilled w/cl	-.106	.101	1.05	-	.028	.178	.16	-
Lower w/cl	-.204	.120	1.70	.1	.375	.175	2.14	.05
t for: 1 v 2	3.360 (p <.001)				1.805 (p <.1)			
1 v 3	3.827 (p <.001)				3.330 (p <.001)			
2 v 3	n.s.				n.s.			

Turning first to the difference between boys' perceptions of themselves and their perceptions of what their mother would like them to be like, we note that there are highly significant discrepancies between these two among middle-class boys on components 1 and 3.* This indicates that the average middle-class boy sees himself as falling far short of his mother's expectations on the highly-valued qualities which make up component 1, and that he feels his mother wants him to be less self-sufficient than he thinks he in fact is. Skilled working-class boys see only a slight discrepancy between these variables. In the lower working class there is no marked discrepancy between the two perceptions on component 1; but on component 3, boys see their mothers as desiring them to be more self-sufficient than the boys judge themselves to be.

An almost identical pattern presents itself in relation to the fathers' expectations. Middle-class boys see their fathers as wanting them to be higher in highly-esteemed qualities, and to be less self-sufficient than the boys themselves think they are. As with their perceptions of their mothers' ideals, skilled working-class boys see their fathers' expectations as being in close harmony with the image the boys have of themselves. Lower working-class boys see themselves as exceeding their fathers' expectations on component 1 (although the difference is significant only at the 10 per cent level), and also feel that their fathers would like them to be more self-sufficient than they actually are.

* Component 2 was excluded from this analysis, in view of the negligible differences that appeared on this component in Tables V.1 and V.4.

There are significant differences in these mean differences, as between middle and working-class boys. In all the eight comparisons between these two groups, the difference is statistically significant, although in the case of the middle v skilled working-class comparison on component 3 in the second part of Table V.6, the difference is only significant at the 10 per cent level. As in previous Tables, the mean scores themselves form a consistent gradient of magnitude, from middle, through skilled, to lower working class.

These findings suggest that there may be a higher degree of identification with parental expectations among skilled working-class boys than in either of the other two groups. To test this possibility, principal component scores on the element "the kind of person I really am" (referred to as "self" in the Table) were correlated with scores on the elements "what my mother would like me to be like" and "what my father would like me to be like" (referred to as "mother's ideal" and "father's ideal", respectively). The correlations between these scores on all three components are presented in Table V.7.

In Table V.7, those correlation coefficients which have been underlined are significant at or beyond the .05 level of confidence. Looking first at the correlations on all three components between "self" and "mother's ideal", one is struck by the generally low correlations which obtain. Of the nine coefficients contained in this part of the Table two are statistically significant, though rather small. There are, moreover, no significant differences between any of the social-class groups, in the magnitude of these

TABLE V.7

Social-class differences in correlations
between perceptions of self and
of parents' expectations for self

Social Class Group	Self x mother's ideal		
	1	Component 2	3
Middle	.0833	<u>.2067</u>	-.0252
Skilled w/cl	<u>.2406</u>	.0723	.0666
Lower w/cl	.1189	.1751	.1443
t for: 1 v 2	-	-	-
1 v 3	-	-	-
2 v 3	-	-	-

Social Class Group	Self x father's ideal		
	1	Component 2	3
Middle	<u>.2179</u>	.1339	.1559
Skilled w/cl	<u>.2925</u>	<u>.1824</u>	.1555
Lower w/cl	<u>.1997</u>	.1846	<u>.2725</u>
t for: 1 v 2	-	-	-
1 v 3	-	-	-
2 v 3	-	-	-

coefficients. Five of the nine correlations between "self" and "father's ideal" are statistically significant, although again there are no significant differences in the magnitude of these coefficients as between different social-class groups. These results would therefore suggest that, in general, boys model their behaviour on what they think their father, rather than their mother, would like them to be like. In both parts of Table V.7, however, the number of significant correlations exceeds what one would expect to occur by chance. One would therefore appear to have grounds for assuming that parental expectations are important (though not overwhelming) influences on the development of the self-concept of teenage boys.

Thus, while the notion that skilled working-class boys would tend to identify with parental expectations is to some extent supported by the intercorrelations between "self" and "mother's ideal" on the first component, it is refuted on the second component, where the only significant correlation between these two elements appears in the middle-class group, and on the third component where there are no statistically-significant coefficients. In the case of the association between "self" and "father's ideal", the idea receives some confirmation in the intercorrelations on component 2, but is refuted on the other two components. The lack of any significant differences on either set of correlation coefficients, as between skilled working-class boys and those from the two remaining groups does, however, provide what is perhaps the most conclusive refutation of this idea.

So far, analysis of social-class differences in the self-concept has been entirely restricted to the element "the kind of

person I really am". While no significant differences appeared in Table IV.8 (q.v.), in the mean component scores for the element "the kind of person I would like to be", it was felt it might be interesting and useful to conduct a more detailed analysis of differences in the mean construct scores on this element, and to examine the relationship between "ideal" self-conception and perceived parental expectations in the three social classes. These data are presented in Tables V.8 and V.9.

In Table V.8, which details the mean scores on each construct for all three social-class groups, on the element "the kind of person I would like to be", 7 differences prove to be significant - a number which exceeds by 4 or 5, the number one would normally expect to occur by chance. Of these significant differences, 4 emerge from comparisons between middle and working-class boys, and 3 from contrasts between skilled and lower working-class boys. It is also noticeable that, in contrast to most of the other findings reported so far, these scores form less consistent trends across social class. Of the 17 sets of means, only 6 - strict, fair, domineering, hard to understand, has drive and dependent - show definite progressions from middle, through skilled, to lower working class. Middle-class boys identify more with the norms of leniency and fairness, and less with that of being easily understood by other people, than boys from lower working-class families. They also place greater emphasis on fairness than do skilled working-class boys. By contrast with the skilled working-class group, lower working-class boys orient their self-ideal more towards the notion of having a strong personality (in which they are also different - though only at the 10 per cent level - from middle-class boys) and less towards setting people

TABLE V.8

Social-class differences in boys' self-ideal

	Middle		Skilled working		Lower working		t value for		
	Mean	S.D.	Mean	S.D.	Mean	S.D.	1v2	1v3	2v3
Strict	3.991	1.379	3.905	1.505	3.609	1.566	-	1.925	-
Warm	1.684	0.997	1.893	1.239	1.811	1.082	-	-	-
Under- standing	1.370	0.758	1.351	0.793	1.604	1.061	-	+	2.113
Unsure of self	5.393	1.047	5.417	1.099	5.406	1.216	-	-	-
Fair	1.243	0.530	1.426	0.807	1.476	1.014	2.314	2.118	-
Kind	1.315	0.649	1.467	0.898	1.442	0.886	+	-	-
Appro- achable	1.367	0.762	1.542	0.944	1.457	0.919	+	-	-
Silent	4.094	1.151	4.333	1.361	4.311	1.589	-	-	-
Excitable	4.667	1.296	4.575	1.513	4.849	1.525	-	-	-
Domin- eering	2.750	1.174	2.845	1.393	2.951	1.411	-	-	-
Dependable	1.278	0.627	1.329	0.812	1.279	0.810	-	-	-
Hard to understand	5.119	1.352	5.192	1.220	5.455	1.097	-	2.046	+
Strong person- ality	1.607	0.786	1.711	1.069	1.414	0.825	-	+	2.587
Quick thinking	1.569	0.886	1.458	1.005	1.467	0.886	-	-	-
Sets at ease	1.386	0.791	1.355	0.824	1.592	1.059	-	-	1.962
Has drive	1.342	0.683	1.379	0.844	1.423	0.855	-	-	-
Dependent	5.119	1.389	4.945	1.659	4.830	1.842	-	-	-

+ p < .1

at ease and being understanding (with this last construct again eliciting a difference which is significant at the 10 per cent level of confidence, between the middle and lower working-class samples).

While other factors than parental expectations are undoubtedly involved in the formation of a self-ideal, it is interesting to contrast Table V.8 with Tables V.2 and V.3. Middle-class mothers were seen as placing a greater emphasis on (among other qualities) the constructs "fair" and "easy to understand" than were working-class mothers. To a certain extent, therefore, Table V.8 echoes the trends in Table V.2. Lower working-class fathers were seen as attaching less importance than middle-class fathers to the boy's possessing a "strong personality", and yet middle-class boys place a smaller emphasis on this quality than their working-class peers.

A different approach to this analysis is presented in Table V.9, where in an attempt to measure the extent of the associations between self ideal and parental ideals, a set of correlation coefficients were computed. For ease of presentation and discussion, this analysis was restricted to the principal component scores. As before, all correlations which have been underlined are significant at the 5 per cent level or beyond.

There is a significant correlation between the self ideal and parental expectations on all components, with the exception of that between self ideal and father's ideal where, in the lower working-class, the coefficient fails to reach an acceptable level of significance on the third component. There are, however, no significant social-class differences in the size of any of these correlations. Nor are there any appreciable differences in these correlations as between

maternal and paternal expectations, with the possible exception of component 3, where the correlations between self-ideal and mother's ideal are on the whole a little larger than those for father's ideal. One must therefore conclude - the comparisons between Table V.8 and Tables V.2 and 3 notwithstanding - that, in all social-class groups, parental expectations are probably a significant determinant of the way in which a boy's self-ideal develops. At the very least, parental expectations are strongly reflected in the self-ideal.

Comparing Tables V.7 and V.9 with each other, parental expectations would therefore seem to be rather more important to the formation of the self-ideal than to the development of the self-concept itself. The relationship between self-conception and parental aspirations may therefore be to some extent dependent on the strength of the relationship between the self-concept and the self-ideal. The correlations between these two elements on all three components were accordingly computed, and are presented in Table V.10.

Some rather interesting trends are highlighted by this Table. First, on all three components, the association between self and self-ideal is substantially smaller in the middle class than in the other two social classes. Indeed, on the first component the relationship is not even statistically significant. The middle-class correlation coefficient is significantly smaller than that of the skilled working class on component 1, of the lower working class on component 2, and of both working-class samples on component 3. The correlation between the two elements is highest in the skilled working class on component 1, this coefficient being

TABLE V.9

Social-class differences in correlations
between self-ideal and parental expectations

Social Class Group	Self-ideal x mother's ideal		
	1	Component 2	3
Middle	<u>.4701</u>	<u>.3000</u>	<u>.3585</u>
Skilled w/cl	<u>.4761</u>	<u>.2840</u>	<u>.4020</u>
Lower w/cl	<u>.4061</u>	<u>.3507</u>	<u>.2038</u>
t for: 1 v 2	-	-	-
1 v 3	-	-	-
2 v 3	-	-	-

Social Class Group	Self-ideal x father's ideal		
	1	Component 2	3
Middle	<u>.3959</u>	<u>.3368</u>	<u>.2372</u>
Skilled w/cl	<u>.4712</u>	<u>.2450</u>	<u>.3695</u>
Lower w/cl	<u>.3436</u>	<u>.3970</u>	.1866
t for: 1 v 2	-	-	-
1 v 3	-	-	-
2 v 3	-	-	-

significantly greater than that of either of the two remaining social-class groups; while on the second component the correlation is biggest in the lower working class, this coefficient again being significantly bigger than that for the other two groups. On the third component, both working-class populations show large and roughly equal correlations between the two elements in question, with both being significantly greater than the middle-class coefficient.

There is therefore a much less definite relationship between the self-concept and the self-ideal among middle than among working-class boys. Whether this indicates that the self-ideal is of less importance to the formation of the self-concept of middle-class than of working-class boys (assuming the ideal self to be both temporally prior to and an influential factor in the development of the self-concept), or whether this pattern is due to discrepancies in the difference between these two elements brought about by the agency of some intervening variable(s), it is of course impossible to say at this stage.

These relationships were examined further in Tables V.11 and 12, where partial correlations are presented for the relationships between self, self ideal and parental expectations. For ease of analysis, these partial correlations were calculated only for scores on the first principal component. The formula used was:

$$r_{AB.C} = \frac{r_{AB} - r_{AC} \times r_{BC}}{\sqrt{(1 - r_{AC}^2)} \times \sqrt{(1 - r_{BC}^2)}}$$

where $r_{AB.C}$ means "the correlation between A and B, holding C constant. The significance of each partial coefficient was also

TABLE V.10

Correlations between self-concept and self-ideal

Social Class Group	Component		
	1	2	3
Middle	.1754	<u>.2498</u>	<u>.2128</u>
Skilled w/cl	<u>.5370</u>	<u>.4120</u>	<u>.4492</u>
Lower w/cl	<u>.2739</u>	<u>.6010</u>	<u>.5610</u>
t for: 1 v 2	3.407	-	2.198
1 v 3	-	3.215	3.068
2 v 3	2.483	2.041	-

TABLE V.11

Partial correlations between self, self ideal
and mother's perceived expectations

Mother's ideal held constant

	Middle Class	Skilled Working Class	Lower Working Class
Partial coefficient	.1393	.6698	.3161
t	-	11.622	3.381

Self ideal held constant

	Middle Class	Skilled Working Class	Lower Working Class
Partial coefficient	.0013	.0306	.0052
t	-	-	-

Self held constant

	Middle Class	Skilled Working Class	Lower Working Class
Partial coefficient	.5339	.5850	.4679
t	6.742	9.293	5.373

TABLE V.12

Partial correlations between self, self ideal and father's perceived expectations

Father's ideal held constant

	Middle Class	Skilled Working Class	Lower Working Class
Partial coefficient	.1287	.6526	.2832
t	-	11.097	2.997

Self ideal held constant

	Middle Class	Skilled Working Class	Lower Working Class
Partial coefficient	.2132	.0798	.1529
t	2.330	-	-

Self held constant

	Middle Class	Skilled Working Class	Lower Working Class
Partial coefficient	.4455	.5488	.3790
t	5.313	8.458	4.157

tested, using the formula:

$$t = \frac{r_p}{\sqrt{(1 - r_p^2)}} \times \sqrt{(N - C - 2)},$$

where r_p is the partial coefficient, and C is the number of variables being held constant.

In all three classes, when self-perception is held constant, the correlation between self-ideal and parental expectations remains large and highly significant. When self-ideal is held constant, the relationship between the self and parental expectations is virtually nil with the exception of self and father's ideal in the middle class. An interesting trend appears when parental ideals are held constant, with the relationship between self and self-ideal remaining significant in the two working-class samples, but not in the middle class.

These findings suggest that the self ideal is indeed either more consistently or more significantly related to the self-concept of working-class than of middle-class boys. They also indicate that father's expectations are more important than the self-ideal in the formation of the self-concept of middle-class boys. These trends will be interpreted further in chapter X.

Summary of results on self-concept and parental expectations

1) By contrast with both working-class samples, the middle-class group see their parents as having higher expectations of them on highly-valued qualities (i.e., those loaded high on component 1) (Table V.1).

2) Middle-class boys see themselves as significantly lower on these qualities than do working-class boys. The mean score for working-class boys' self conception is relatively near that of what they think their parents would like them to be like (particularly in the case of mother's ideal); whereas there is a fairly big discrepancy in these mean scores in the middle class (Table V.4).

3) When this observation is checked by a t test for the difference between correlated means, a highly significant difference is found between these perceptions in the middle-class group, but not in either of the working-class groups. Moreover, the average difference scores in the middle class are significantly greater than those in the working class (Table V.6).

4) Lower working-class boys perceive a significantly greater parental emphasis than middle-class boys, on behaviours with high loadings on the third (self-sufficiency) component (Table V.1).

5) Lower working-class boys see themselves as significantly lower in self-sufficiency than middle-class boys (Table V.4).

6) t tests for the significance of the differences between self-perception and parental ideals on the third component shows working-class boys as seeing themselves as significantly less self-sufficient than their parents would like them to be; while in the middle-class sample, the pattern is the reverse of this (Table V.6).

7) Middle-class mothers are seen as placing greater emphasis than in the working-class on their sons' being warm, kind, understanding, fair, dependable and easy to understand (Table V.2).

8) Fathers in the middle class are seen as emphasising more than their working-class counterparts, the value of being understanding,

sure of oneself, having "drive", having a strong personality, and being dependable (Table V.3).

9) Middle-class boys report themselves as significantly lower in the qualities of drive, and self-assurance than working-class sons, and also as more silent and hard to understand (Table V.5).

10) The matrix of intercorrelations on the three principal components, for the elements "self" and "mother's ideal" yield only two correlation coefficients which are significant at an acceptable level of confidence. There are no social-class differences in the magnitude of these correlations (Table V.7).

11) Five of the 9 correlations for the elements "self" and "father's ideal" are significant beyond the .05 level. All intercorrelations on the first component are significant. There are no significant social-class differences in the size of these coefficients (Table V.7).

12) There are no significant social-class differences in mean principal-component scores on the element "self-ideal" (Table IV.8).

13) By contrast with lower working-class boys, middle-class boys place more importance in their self ideal on the constructs "fair" and "lenient", and less on being easy to understand. The quality of fairness also discriminates between middle and skilled working-class boys, on this element, with middle-class boys again rating themselves as significantly higher in their identification with this norm (Table V.8). Lower working-class boys identify less with the norms of setting people at ease and being understanding, and more with that of having a strong personality, than do the other two classes. They also attach less importance to setting people at ease than boys from skilled working-class backgrounds (Table V.8).

- 14) There are significant intercorrelations in all social classes on all three components, between self-ideal and mother's ideal. There are no significant class differences in the size of these correlations (Table V.9).
- 15) There are significant intercorrelations in each social-class group on all three components, between self-ideal and father's ideal, with the exception of the intercorrelation on the third component in the lower working-class. Again, a comparison of the size of these correlations yields no significant class differences (Table V.9).
- 16) There appears to be a much weaker relationship between the self-concept and the self-ideal among middle than among working-class boys (Tables V.10-12).
- 17) The relationship between the self-concept and the self-ideal seems particularly strong in the skilled working class (Table V.10).
- 18) Middle-class boys seem more influenced by what they think their father would like them to be like, than by any ideals they have for their own behaviour, in their conceptions of themselves (Table V.12).

2. Social class and the perceptions of parental roles and behaviour

Hypothesis 2a - middle-class fathers will, on average, be seen as higher in qualities related to succorance and emotional support than will working-class fathers, whose perceived role will be more heavily related to the performance of instrumental than expressive functions within the family.

Tests of this hypothesis are presented in Tables V.13 and V.14. Table V.13 presents the mean perception of father in each social class, on the three principal components. Standard deviations are

TABLE V.13

Social-class differences in boys' perceptions of father:
principal component scores

Social Class Group	Component 1		Component 2		Component 3	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Middle	.080	.649	-.045	.792	-.254	1.207
Skilled w/cl	.022	.953	-.059	.896	.081	1.399
Lower w/cl	-.147	.796	.129	.959	.163	1.266
t for: 1 v 2	-		-		2.161	(p<.05)
1 v 3	2.319	(p<.05)	-		2.511	(p<.05)
2 v 3	-		-		-	

also presented, and the significance of social-class differences between these means has been computed.

Three of these differences are significant, and once again we find that these significant differences emerge from comparisons between middle and working-class boys, rather than within the working class itself. Lower working-class sons see their fathers as significantly higher on the evaluative component (component 1) than middle-class sons. Skilled working-class boys fall between these two extremes, although rather nearer the middle than the skilled working-class norm. There is no significant difference between the skilled working class and either of the other two groups on this first component. Middle-class boys see their fathers as significantly more self-sufficient than either working-class sample. As before, the scores form a trend from middle, through skilled to lower working class.

At first sight, the trends in Table V.14 do not exactly correspond to those in Table V.13. While there are 8 significant differences between the mean personal-construct scores of the middle and working-class samples, closer examination of Table V.14 indicates that the group which tends to be the "odd man out" in most of these comparisons is in fact the group of lower working-class boys. Thirteen of the comparisons involving the lower working-class sample are significant at the 5 per cent level. Lower working-class fathers are seen as significantly more approachable, meek, dependable and easy to understand than fathers from the middle or skilled working class. They are also perceived as significantly more fair, relaxed and strong in personality than their skilled working-class counterparts. Middle-

TABLE V.14

Social-class differences in boys' perceptions of father

Construct	Middle		Skilled working		Lower working		t value for		
	Mean	S.D.	Mean	S.D.	Mean	S.D.	1v2	1v3	2v3
Strict	2.966	1.384	2.887	1.449	3.066	1.570	-	-	-
Warm	2.310	1.296	2.716	1.501	2.368	1.360	2.439	-	1.983
Under- standing	2.435	1.402	2.446	1.518	2.207	1.355	-	-	-
Unsure of self	5.060	1.282	5.036	1.214	5.170	1.323	-	-	-
Fair	2.139	1.376	2.290	1.453	1.905	1.282	-	-	2.301
Kind	2.080	1.178	2.018	1.338	1.807	1.015	-	+	-
Appro- achable	2.325	1.451	2.296	1.545	1.970	1.152	-	2.032	1.997
Silent	3.931	1.193	4.311	1.388	4.358	1.468	2.475	2.369	-
Excitable	4.094	1.543	4.054	1.571	4.443	1.522	-	+	2.037
Domin- eering	2.336	1.035	2.363	1.373	2.737	1.607	-	2.190	1.984
Dependable	1.921	1.200	1.832	1.280	1.543	0.910	-	2.665	2.184
Hard to understand	4.145	1.584	4.243	1.737	4.762	1.596	-	2.893	2.536
Strong person- ality	1.829	0.836	2.012	1.190	1.664	1.070	-	-	2.513
Quick thinking	2.147	1.159	2.238	1.407	2.245	1.326	-	-	-
Sets at ease	2.363	1.270	2.313	1.371	2.160	1.320	-	-	-
Has drive	1.726	0.961	1.858	1.311	1.885	1.241	-	-	-
Dependent	4.786	1.437	4.616	1.548	4.481	1.889	-	-	-

⁺ p < .1

class boys, on the other hand, report their fathers to be significantly less talkative than either group of working-class boys; while skilled working-class fathers are judged to be significantly less warm than fathers from either of the other two groups. Nine of these constructs give a consistent progression in mean scores from middle to lower working class.

In explaining the discrepancy between Tables V.13 and 14, it needs first to be borne in mind that the skilled working-class mean on the first component in Table 13 is more or less identical to that of the middle class. Two other facts should also be noted. First, in Table 14, the standard deviations are on the whole larger in the skilled working-class sample than in either of the other two groups. Second, most constructs are of course very heavily loaded on the first component. Thus, while the middle and skilled working-class both show significant differences on the same 5 constructs from the lower working-class, the contribution made by the remaining 9 or so items which are also heavily loaded on the first component will give smaller amounts of variation in the average scores of the middle than of the skilled working class. In other words, the differences on these 5 constructs will not, in the middle-class group, be masked by substantial standard deviations on other constructs, and any non-significant trends will perhaps tend to reinforce these differences. In the skilled working class, on the other hand, these significant differences would appear to have been obscured by the larger standard deviations. This interpretation is supported by the figures in V.13, where the skilled working class have a considerably bigger standard deviation than the other two samples.

The difference between middle and working-class individuals on the third component obviously reflects the significant differences between these groups on the construct "silent-talkative", which has by far the highest loading on that component. Non-significant but consistent trends on the constructs "quick-thinking" and "independent" which are relatively highly loaded on the third component may also contribute to that difference.

Hypothesis 2a must therefore be discarded. The picture suggested by these data is almost the exact reverse of that predicted. The fathers of low working-class boys are seen as significantly more approachable, meek, dependable and easy to understand than middle-class fathers. They are also more talkative and less self-sufficient than the latter group. They are therefore seen as higher than their middle-class counterparts in qualities related to succorance and emotional support; their role is more heavily related to the performance of expressive than instrumental functions.

Skilled working-class fathers are on the whole seen as nearer to the middle-class than the lower working-class norm of succorance and emotional support. Indeed, they are seen as weaker, more excitable and less fair than lower working-class fathers, and as less warm than either of the other two groups. They are, however, seen as more talkative than middle-class fathers, and as such fall nearer to the pattern of the lower working class.

Hypothesis 2b - social-class differences in the perceived role of mother will emerge in respect of her role vis-a-vis father, rather than in respect of her role per se. In particular, the working-class mother will be seen as exercising more power

within the family relative to father, than will the mother within a middle-class family, where there will be a more even distribution of parental power.

Initial tests of this hypothesis are presented in Tables V.15 and 16. In Table 15, no significant social-class differences emerge on the first two components. On component 3, however, there is a difference between the middle and the skilled working-class which is significant ($t = 1.710$) at the 10 per cent level of confidence. With 9 comparisons in that Table, there is a strong likelihood of one chance difference being significant at the 10 per cent level. While this difference does indicate that middle-class mothers are somewhat more self-sufficient than skilled working-class mothers, it seems unlikely that this represents a significant trend.

Table V.16 gives a similar picture. Only one difference is significant at a normally-acceptable level of confidence. This suggests that middle-class mothers are significantly stronger in personality than skilled working-class mothers and a similar trend - though significant at only the .1 level - is apparent in respect of lower working-class mothers. However, in a Table containing 51 comparisons, 2-3 differences should normally prove through chance alone to be significant at the 5 per cent level. It is perhaps also worth noting that the 8 differences significant at or beyond the 10 per cent level, which are yielded by this Table, exceed by 3 the number that one would normally expect to occur by chance. But even on a conservative interpretation, Tables 15 and 16 would seem to confirm the prediction that class differences will not emerge in perceptions of the behaviour of mother per se. Perceptions of

TABLE V.15

Social-class differences in perceptions of mother:
principal component scores

Social Class Group	Component 1		Component 2		Component 3	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Middle	.043	.777	-.005	.771	-.137	1.278
Skilled w/cl	.007	.836	-.039	.852	.128	1.304
Lower w/cl	-.077	.854	.062	.942	.003	1.449
t for: 1 v 2	-		-		+	
1 v 3	-		-		-	
2 v 3	-		-		-	

⁺p < .1

TABLE V.16

Social-class differences in boys' perceptions of mother:
construct scores

Construct	Middle		Skilled working		Lower working		t values for		
	Mean	S.D.	Mean	S.D.	Mean	S.D.	1v2	1v3	2v3
Strict	3.795	1.259	3.882	1.592	3.896	1.661	-	-	-
Warm	1.632	0.956	1.769	1.058	1.613	1.050	-	-	-
Under- standing	1.880	1.095	2.012	1.305	1.904	1.283	-	-	-
Unsure of self	4.564	1.439	4.792	1.199	4.764	1.368	-	-	-
Fair	1.722	0.913	1.740	1.103	1.523	0.820	-	+	+
Kind	1.354	0.622	1.497	1.011	1.404	0.925	-	-	-
Appro- achable	1.658	0.990	1.633	1.027	1.552	0.919	-	-	-
Silent	4.402	1.228	4.648	1.282	4.556	1.517	+	-	-
Excitable	3.444	1.539	3.417	1.568	3.566	1.809	-	-	-
Domin- eering	3.206	1.200	3.155	1.406	3.291	1.591	-	-	-
Dependable	1.678	0.840	1.569	0.967	1.467	0.866	-	+	-
Hard to understand	4.692	1.326	4.604	1.540	4.953	1.533	-	-	+
Strong person- ality	2.410	1.125	2.804	1.240	2.710	1.432	2.792	+	-
Quick thinking	2.670	1.165	2.589	1.355	2.641	1.411	-	-	-
Sets at ease	1.756	0.951	1.940	1.209	1.707	0.963	-	-	+
Has drive	2.196	1.110	2.065	1.176	1.991	1.214	-	-	-
Dependent	4.222	1.454	4.329	1.551	4.349	1.785	-	-	-

⁺p < .1

TABLE V.17

Class-differences in perceptions
of mother relative to father:
principal component scores

Social Class Group	Component 1		Component 2		Component 3	
	Mean dist.	Std. error	Mean dist.	Std. error	Mean dist.	Std. error
Middle	-.0412	.0678	.0626	.1031	.1263	.1358
Skilled w/cl	-.0797	.0881	.0861	.1162	.0928	.1410
Lower w/cl	.0573	.0721	-.0462	.1000	-.1505	.1338
t for: 1 v 2	-		-		-	
1 v 3	-		-		-	
2 v 3	-		-		-	

mother therefore seem relatively stable across different social-class groups.

Further tests of hypothesis 2b are presented in Tables V.17 and 18. The former details the mean differences in each social class, between the perceptions of mother and father on all three principal components. As can be seen, no significant differences emerge in any of the 9 comparisons.

Table V.18 lists the means and standard deviations of the differences in perceptions between mother and father on all 17 personal constructs in each social-class group. Individual differences were calculated by subtracting the father's score from the mother's, and adding 6 (the maximum score possible on any construct) to make all values positive. The resulting scores ranged in value from 1 to 11, and the means and standard deviations were then calculated in the normal manner. Thus, the nearer a mean score is to 11, the more is father seen as possessing the quality specified in the construct-description than is mother, while a score nearer to one indicates the reverse.

The mean scores in Table V.18 are generally clustered around a value of 6, but there are fairly marked departures from this mean in all or most social classes on the constructs "strict", "warm", "excitable", "domineering" and "strong". It is noticeable that on none of the 17 constructs do any of the social-class groups fall on the different side of the theoretical mean of 6, from the others. This perhaps suggests that the same general cultural norms govern the behaviour of mother and father in each social class. However, the fact that significant differences exist between certain of these

TABLE V.18

Social-class differences in perceptions of mother relative to father: personal-construct scores

Construct	Middle		Skilled working		Lower working		t value for		
	Mean	S.D.	Mean	S.D.	Mean	S.D.	1v2	1v3	2v3
Strict	6.803	1.713	6.899	1.932	6.848	1.697	-	-	-
Warm	5.325	1.319	5.107	1.392	5.190	1.475	-	-	-
Under- standing	5.444	1.482	5.601	1.549	5.714	1.321	-	-	-
Unsure of self	5.504	1.215	5.775	1.092	5.581	1.215	-	-	-
Fair	5.590	1.154	5.449	1.285	5.619	1.228	-	-	-
Kind	5.424	1.033	5.472	1.382	5.579	0.891	-	-	-
Appro- achable	5.316	1.563	5.343	1.399	5.590	1.207	-	-	-
Silent	6.419	1.641	6.288	1.545	6.200	1.534	-	-	-
Excitable	5.350	2.061	5.373	1.488	5.095	1.735	-	2.216	2.838
Domin- eering	6.863	1.408	6.774	1.687	6.571	1.344	-	-	-
Dependable	5.769	1.140	5.714	1.088	5.924	0.829	-	-	+
Hard to understand	6.547	1.556	6.365	1.639	6.190	1.612	-	+	-
Strong person- ality	6.581	1.162	6.721	1.481	7.038	1.770	-	2.258	-
Quick thinking	6.556	1.336	6.423	2.637	6.425	1.701	-	-	-
Sets at ease	5.419	1.416	5.562	1.549	5.585	1.094	-	-	-
Has drive	6.436	1.249	6.152	1.351	6.095	1.632	+	+	-
Dependent	5.419	1.446	5.770	1.331	5.867	1.309	2.084	2.433	-

+ p < .1

means (the number of these differences again exceeding chance-expectation) also indicates that there are social-class variations from these cultural norms.

Thus, the perception of mother as more dependent than father, which is common to all three social classes, is significantly greater in the middle than in either working-class group. Similarly, lower working-class boys' perception of mother as more excitable than father, is significantly greater than those of middle and skilled working-class boys. While all three classes see father as stronger in personality than mother, this difference is perceived as more marked in classes 4 and 5 than in classes 1 and 2. Middle-class boys also see mother as more unsure of herself than father, to a rather greater extent than do boys from the skilled working class ($t = 1.932$; $p < .075$). Finally, a trend which produces differences significant at the 10 per cent level suggests that the perception of father as possessing more "drive" than mother is greater in the middle than in the working class.

It is rather difficult to relate these trends to hypothesis 2b. While, by contrast with the middle class, the mother in both working-class groups is seen as more independent than father, the lower working-class mother is also seen as weaker in personality in relation to her husband than her middle-class counterpart, and as more excitable than either the middle or skilled working-class mother. Part of this difficulty may stem from the fact that the instrument by which one is assessing parental behaviour comprises generalised descriptions of behaviour, rather than role-behaviour, so that these results may not relate specifically to the performance of roles within the family.

On the basis of these findings of Table 18, however, it would seem that one must reject that part of hypothesis 2b which predicts that working-class mothers will be seen as exercising more power within the family relative to father than will the mother in a middle-class family. Indeed, there is some indication that father is seen as exercising more power, at any rate in the lower working-class family.

The following would seem to be the principal conclusions relevant to hypotheses 2a and 2b.

Summary of results on perceptions of parental roles

- 1) Middle-class fathers are placed significantly lower on the first (evaluative) component than lower working-class fathers. Skilled working-class fathers do not differ significantly from either of the other two groups on this component, but fall rather nearer the middle than the lower working-class mean (Table V.13).
- 2) Middle-class fathers are seen as significantly more self-sufficient (component 3) than either of the working-class groups (Table V.13).
- 3) Lower working-class fathers tend to differ from the other two groups on their average construct scores. They are seen as more approachable, meek, dependable and easy to understand than fathers in the other two samples. They are seen as more fair, relaxed and strong than skilled working, and more talkative than middle-class fathers (Table V.14).
- 4) (Lower) working-class fathers would therefore seem to be higher than middle-class fathers in qualities of succorance and emotional support (Tables V.13 and 14).

- 5) There are no social-class differences in the perceived role of mother (Tables V.15 and V.16).
- 6) On the principal-components data, no appreciable class-differences appear in the role of mother vis-a-vis father (Table V.17).
- 7) Class-differences do appear in the perceptions of parents relative to each other on the personal-construct data. Working-class mothers emerge as significantly more independent and lower working-class mothers as less strong in personality when compared with their husbands than do middle-class mothers. Working-class mothers are also seen as significantly more excitable, when compared with the other two groups (Table V.18).

It will be recalled that one of the primary purposes of the present study is that differences in the significance attached to various modes of behavior will concern differences in the relationship between typical features of parental behavior and psychopathology in adolescent boys. It having been established that significant psychological differences do exist in the "total" perceptions boys hold of themselves and of their fathers, the existing literature will consider the relevance of these differences for psychopathology. We shall first study the relationship between psychopathology and the self-concept.

Hypothesis 10 - There will be a relationship between self-perceptions (and certain other variables) and psychopathology.

CHAPTER VI

The test of this hypothesis is presented in Table VI.

A significant correlation was to be seen to exist between the perception of self and certain other variables. In the anxiety scale, however, the only significant correlation with the variable of self-perception occurs in the first component; in the two remaining components, the correlation is virtually zero. If one regards the assessment of self as the first component of a measure of self-concept, hypotheses 10 to 12 are therefore confirmed. Boys with low self-esteem are better read, anxious, and neurotic.¹⁰

¹⁰ While interviewing-interviewing is included here, it is not strictly speaking a measure of psychopathology, and so will not be considered in the main analysis.

¹¹ It should be noted that correlations between these factors are: anxiety & neuroticism = .586; anxiety & interviewing = .477; neuroticism & interviewing = .511.

It will be remembered that one of the primary assumptions of the present study is that class-differences in the significance attached to various modes of behaviour will create differences in the relationship between typical patterns of parental behaviour and psychopathology in adolescent boys. It having been established that significant social-class differences do exist in the "modal" perceptions boys hold of themselves and of their fathers, the remaining chapters will examine the relevance of these differences for psychopathology. We shall first study the relationship between psychopathology and the self-concept.

Hypothesis 4a - there will be a relationship between self-perception (and particularly self-esteem) and psychopathology.

The test of this hypothesis is presented in Table VI.1.

A significant correlation can be seen to exist between the perception of self on all three principal components, and the extraversion* and neuroticism measures. On the anxiety scale, however, the only significant correlation with the variable of self-perception emerges on the first component; on the two remaining components, the correlation is virtually zero. If one regards the assessment of self on the first component as a measure of self-esteem, hypothesis 4a is therefore confirmed. Boys with low self-esteem are introverted, anxious, and neurotic.**

* While introversion-extraversion is included here, it is not strictly speaking a measure of psychopathology, and so will not be considered in the main analysis.

** It should of course be remembered that intercorrelations between these factors are: anxiety x neuroticism = .3163; anxiety x extraversion = -.2726; neuroticism x extraversion = -.6333.

TABLE VI.1

Correlations between psychopathology and self-concept
measures for total study-population (n= 392)

	Self Component 1	Self Component 2	Self Component 3
Extraversion	-. <u>3888</u>	-. <u>2579</u>	. <u>3843</u>
Anxiety	. <u>3055</u>	-.0054	.0100
Neuroticism	. <u>3043</u>	. <u>1948</u>	-. <u>2867</u>

The interpretation of these relationships is, however, a rather more difficult matter. There are at least four possible explanations of the correlations. First, assuming self-perception to be the primary element in the causal relationship, individuals who develop a low estimation of themselves as a result of processes such as those indicated in chapter II (pp 35-39), will become introverted, anxious and neurotic, or will behave in ways which will lead them to define themselves as such. This is of course the argument presented by Kaplan (op. cit.) and Rosenberg (op. cit.) and is one of the basic assumptions of the present investigation. Second, one or other of the personality variables, extraversion, anxiety or neuroticism, may be a basic (possibly genetically determined) trait of personality, which shapes the development of other personality traits and characteristics - among them self-esteem. Thus, a person who is anxious, for example, will, because of his anxiety, tend to put a low estimation on himself. Third, these variables may be related through the operation of a third (as yet unknown) variable or set of variables. Finally, the self-esteem and personality measures themselves may not be independent of each other. In other words, a definition of oneself as being difficult to understand and unsure of oneself, as lacking "drive", being undependable, making people feel ill-at-ease, and being unapproachable, may simply be a slightly different way of defining the behaviour-patterns which are typically associated with introversion, anxiety or neuroticism. It is obviously impossible to give a definite answer to this question at the present juncture, although some clues may emerge in the light of other results in this study.

It is also difficult to understand why extraversion and neuroticism should correlate significantly with the second and third components of the self-perception measure, while there is no relationship whatsoever between these two aspects of the self-concept and anxiety. Boys who define themselves as meek, lenient, warm and approachable tend to be introverted and/or neurotic, as are boys who perceive themselves as self-sufficient. Boys who define themselves in these terms do not tend to be anxious, however.

Let us now consider the extent to which these relationships are mediated by social class.

Hypothesis 4b - there will be social-class differences in the actual nature of this relationship. In the case of middle-class individuals, psychopathology will be related to a perception of oneself as dependent and unreliable, while in working-class persons, the relationship will be with a perception of oneself as unsociable.

The initial test of this hypothesis is presented in Table VI.2. As before, all correlations which are significant at or beyond the .05 level of confidence, have been underlined.

On the first component, all correlations are significant, with the exception of neuroticism in the lower working class. On the second component, there are no significant correlations with anxiety. Both extraversion and neuroticism correlate significantly with this component in the middle and skilled working class; but there is no significant correlation with either of these measures in the lower working class. In the case of the third component, there are again no significant correlations with the anxiety scale. Both of the other psychopathology measures are significantly correlated with the third component in all social-class groups, with the exception once

TABLE VI.2

Social-class differences in the relationship
between self-conception and psychopathology

Psychopathology x self: Component 1

Social class	Extra- version	Anxiety	Neuro- ticism
Middle	<u>-.4533</u>	<u>.4219</u>	<u>.5089</u>
Skilled w/cl	<u>-.3423</u>	<u>.2643</u>	<u>.2373</u>
Lower w/cl	<u>-.4048</u>	<u>.2391</u>	<u>.1636</u>
t for: 1 v 2	-	-	2.521
1 v 3	-	-	2.834
2 v 3	-	-	-

Psychopathology x self: Component 2

Social class	Extra- version	Anxiety	Neuro- ticism
Middle	<u>-.2608</u>	<u>.0324</u>	<u>.2692</u>
Skilled w/cl	<u>-.2960</u>	<u>.0068</u>	<u>.1767</u>
Lower w/cl	<u>-.1927</u>	<u>-.0657</u>	<u>.1370</u>
t for: 1 v 2	-	-	-
1 v 3	-	-	-
2 v 3	-	-	-

Psychopathology x self: Component 3

Social class	Extra- version	Anxiety	Neuro- ticism
Middle	<u>.4835</u>	<u>.1752</u>	<u>-.4852</u>
Skilled w/cl	<u>.3160</u>	<u>-.0869</u>	<u>-.2509</u>
Lower w/cl	<u>.3774</u>	<u>-.0189</u>	<u>-.1459</u>
t for: 1 v 2	-	2.179	2.166
1 v 3	-	-	2.757
2 v 3	-	-	-

again of the lower working class, where the correlation with neuroticism fails to reach significance.

A more detailed examination of Table VI.2 indicates that the correlations between self-perception and psychopathology are rather higher in the middle than in the working class, particularly in the case of neuroticism. Calculations of the significance of social-class differences in the magnitude of these correlation coefficients tends to confirm this impression. The correlation between self-conception and neuroticism is significantly greater in the middle than in either working-class group, on both components 1 and 3. The relationship between anxiety and self-perception on component 3 is also significantly bigger in the middle class than in the skilled working class, although neither correlation is statistically significant. The number of significant differences in Table VI.2 exceeds by four the number one would normally expect to occur by chance in the 27 comparisons involved.

Hypothesis 4b may therefore be regarded as confirmed, to the extent that there are social-class differences in this relationship in the case of neuroticism and anxiety. Most of these differences, however, have emerged in the magnitude, rather than in the nature of the relationship. To obtain a more detailed picture of these differences, correlation coefficients were calculated for each social class between scores on the 17 constructs for the element "myself as I really am", and the anxiety and neuroticism factors. These coefficients are presented in Tables VI.3 and 4.

Table VI.3 suggests that, among middle-class youths, anxiety is related to a perception of oneself as unsure, unfair, unkind, unapproachable, excitable, undependable, hard to understand, weak,

TABLE VI.3

Correlations between anxiety and personal-construct scores on "myself as I really am"

Personal constructs	Rho for			t for		
	Middle class	Skilled working class	Lower working class	1 v 2	1 v 3	2 v 3
Strict	-.0476	-.0445	.0352	-	-	-
Warm	.1903	.0549	.0789	-	-	-
Understanding	.1350	-.0742	<u>.2596</u>	*	-	2.709
Unsure of self	-. <u>3368</u>	-. <u>1963</u>	-. <u>2090</u>	-	-	-
Fair	<u>.2892</u>	<u>.2209</u>	.1148	-	-	-
Kind	<u>.2592</u>	-.0197	<u>.2896</u>	2.342	-	2.538
Approachable	<u>.2039</u>	<u>.1844</u>	<u>.2463</u>	-	-	-
Silent	.0215	.0304	-.0124	-	-	-
Excitable	-. <u>2670</u>	-. <u>2121</u>	-.1832	-	-	-
Domineering	.0077	-. <u>1933</u>	-.0441	*	-	-
Dependable	<u>.4914</u>	.1088	<u>.3343</u>	3.524	-	*
Hard to understand	-. <u>2662</u>	-. <u>2540</u>	-.1306	-	-	-
Strong	<u>.2968</u>	.0346	.1630	2.230	-	-
Quick-thinking	<u>.3756</u>	.0213	.0959	3.069	2.197	-
Sets at ease	.0764	.1128	<u>.3453</u>	-	2.088	1.973
Has drive	.1895	-.0418	.1657	*	-	*
Dependent	-. <u>2623</u>	-.1504	-.0462	-	-	-

slow-thinking and dependent. In the skilled working class, anxious boys define themselves as unsure, unfair, unapproachable, excitable, domineering and hard to understand; while in the lower working class, there are significant correlations between anxiety and a conception of oneself as lacking in understanding of other people, unsure of oneself, unkind, unapproachable, undependable, and making people feel ill-at-ease. On the whole, the correlation coefficients are rather greater in the middle class than in the working class. It should also be said that both the number of significant correlations, and the number of significant differences between these correlations, are far in excess of the number one would have expected to occur by chance.

There is thus a good deal of overlap between the three social classes, on those items which are significantly correlated with anxiety. This is obviously reflected in the significant correlations between anxiety and self-concept scores on the first principal component in all three classes. In the middle class, however, anxiety is also significantly correlated with a perception of oneself as weak, slow-thinking and dependent; and in the case of the two former items these correlations are significantly different from those in the working-class populations. Among lower working-class boys, on the other hand, anxiety correlates significantly with a self-perception of making people feel ill-at-ease, and lacking in understanding. The former correlation coefficient is significantly greater than that obtaining in the skilled working class.

These findings do offer a degree of support to hypothesis 4b. In the middle class, constructs indicative of dependency (dependent, weak, slow-thinking and unsure of self) are important constituents in the self-perception of anxious boys. The constructs undependable,

unfair and unkind, which are also significantly correlated with the anxiety scores of middle-class boys may give some support to the prediction that anxiety in the middle class would be correlated with a notion of oneself as unreliable. These qualities are, however, to some extent also correlated with anxiety in working-class boys; although more strongly so in the lower than the skilled working class. While in the skilled working class the construct meek, and in the lower working class, the constructs doesn't understand people and makes people feel ill-at-ease, are also significantly correlated with anxiety, these hardly substantiate the prediction that in the working class, anxiety would be correlated with a perception of oneself as unsociable, particularly since the construct approachable is significantly correlated with this psychopathology measure in all three classes.

Perhaps the main conclusion to be drawn from this Table, in conjunction with Table VI.2, is that the self-concept is rather more pervasively related to anxiety in the middle class than in the working class. In Table VI.3, nine middle-class correlation coefficients are statistically significant, as opposed to six each in the two working-class samples. In Table VI.2, the middle-class correlation coefficients are rather larger on the first and third components than is the case for the working-class samples. It also seems true that middle-class anxiety is related to a definition of oneself as unreliable.

It is rather more difficult to reconcile Table VI.2 with the trends apparent in Table VI.4. While, in Table VI.2, neuroticism is significantly correlated with self-perception on all three components in the first two social-class groups, this personality measure correlates significantly with only six constructs in the middle class,

TABLE VI.4

Correlations between neuroticism and personal-construct scores on "myself as I really am"

Personal constructs	Rho for			t for		
	Middle class	Skilled working class	Lower working class	1 v 2	1 v 3	2 v 3
Strict	-.0676	.0102	.0492	-	-	-
Warm	.1141	.0924	-.0062	-	-	-
Understanding	.0567	.0836	-.0690	-	-	-
Unsure of self	-. <u>2109</u>	-. <u>1947</u>	.0291	-	*	*
Fair	.1453	.0991	-.1236	-	1.992	*
Kind	.0785	.0002	-.0859	-	-	-
Approachable	.1488	.0251	.1586	-	-	-
Silent	-. <u>3613</u>	-.1664	-.1576	*	-	-
Excitable	-.0400	-.0339	-.1534	-	-	-
Domineering	. <u>3042</u>	.1334	.1406	-	-	-
Dependable	-.0458	.1562	.0700	*	-	-
Hard to understand	-.1474	-.0101	.0137	-	-	-
Strong	. <u>2457</u>	. <u>2981</u>	.1794	-	-	-
Quick-thinking	. <u>2792</u>	. <u>1940</u>	. <u>2319</u>	-	-	-
Sets at ease	.0444	.1213	-.0215	-	-	-
Has drive	-.0339	.1705	. <u>2236</u>	*	*	-
Dependent	-. <u>1996</u>	-.0773	.0769	-	2.055	-

three in the skilled working class, and two in the lower working class. Moreover, only two of these inter-class differences are significant at beyond the .05 level - both of them between the middle and the lower working class - despite the fact that significant differences appear between the middle-class and both working-class groups, on the first and third components in Table VI.2. In general, the level of these correlations is rather low in all three groups. This discrepancy in the magnitude of these coefficients, and the unexpectedly small number of significant correlations and significant differences between these correlations in Table VI.4 can presumably be ascribed to the fact that principal-component scores represent summations of weighted scores on all 17 constructs.

In the middle class, the more neurotic a boy is, the more he defines himself as silent, meek, weak, dependent, unsure of himself and slow-thinking. In the skilled working class, the salient correlations are on the constructs weak, slow-thinking and unsure of self. And in the lower working class, neuroticism is correlated with a view of oneself as slow-thinking and lacking in drive.

As in the case of anxiety, the relationship between neuroticism and the self-concept thus seems on the whole to be rather more pronounced in the middle than in the working-class sample. In Table VI.2, the middle-class correlations are bigger, and in Table VI.4 the correlations are both bigger and more numerous, than those for working-class boys.

With regard to hypothesis 4b, it again appears that psychopathology (as measured by the neuroticism factor) is, among middle-class boys, related to a perception of oneself as low on a set of attributes which indicate strength of personality and/or independence.

In both working-class populations, however, those constructs which show significant correlations in Table VI.4 tend also to suggest that neurotic boys in these social groups define themselves as lacking in strength of personality. While the middle-class sample gives a larger number of significant correlations on this component, there are only two significant differences in the size of these correlations as between middle and working class, and only one of these - dependent - supports the notion that qualities of independence are more significantly related to a lack of neuroticism in the middle class. Moreover, on neither of the two remaining predictions - that neuroticism will also be related to a self-definition as unreliable in the middle class, and as unsociable in the working class - do the data give any support to hypothesis 4b.

In the case of neuroticism, one must therefore conclude that the relationship with self-conception is more pervasive in the middle class; but that there is no substantial difference in the nature of this relationship, as between middle and working-class boys.

Psychopathology and perceptions of the distance between self and various "key" elements. At a preliminary stage of the analysis, Osgood's "d" statistic was used to calculate the difference between the perception of self and certain other key elements, on the various constructs used in the research. The "d" score is computed by subtracting the scores for the self from those for the relevant "key" figure on each construct for each individual case, squaring the differences to make all signs positive, then summing these squared differences and taking the square root of this total, to give a score for each individual. In the present study, the author inadvertently

divided the sum of the squared differences by 17 (the number of constructs used) before calculating the square root. This is of course simply an averaging procedure and makes no effective differences to the end-result, other than making individual scores smaller by a uniform factor. These "d" scores were then correlated with the anxiety and neuroticism measures. The resulting sets of coefficients are presented in Tables VI.5 and VI.6.

Table VI.5 presents the correlations between these "d" scores and anxiety. A number of interesting findings are contained in this Table. Thus, while there is a significant correlation between anxiety and the perceived distance between self and father in all social-class groups, in the case of the "d" score for self and mother, the correlations are significant only in the middle and the lower working class, the coefficient for the skilled working sample being virtually zero. Moreover, while the correlations for the self v father "d" score are rather greater than those for self v mother in the middle and skilled working class, in the lower working group the position is reversed, with the "d" score for self v mother giving a higher correlation. This pattern is to some extent reinforced in the correlations for the "d" scores between the self ideal and perceptions of parents, with the skilled working-class population showing a higher correlation between anxiety and the distance between self-ideal and father; while in the lower-working group, the higher correlation is that between self-ideal and mother. In none of these cases, however, are the differences in the magnitude of these coefficients significant at a normally acceptable level, although values significant at the 10 per cent level are obtained from the comparisons between the skilled working class and the other two groups,

TABLE VI.5

Correlations between anxiety and "d" scores
between self and various key elements

Social class group	Self/father	Self/mother	Ideal self/father	Ideal self/mother	Self/ideal self	Self/father sees	Self/mother sees	Self/father's ideal	Self/mother's ideal
Middle	<u>.3471</u>	<u>.2905</u>	<u>.1836</u>	<u>.1451</u>	<u>.5104</u>	<u>.2711</u>	<u>.2229</u>	<u>.4278</u>	<u>.4641</u>
Skilled working	<u>.2014</u>	<u>.0983</u>	<u>.2911</u>	<u>.1716</u>	<u>.1990</u>	<u>.1748</u>	<u>.0757</u>	<u>.2100</u>	<u>.2131</u>
Lower working	<u>.2113</u>	<u>.3062</u>	<u>.1655</u>	<u>.2029</u>	<u>.3531</u>	<u>.1246</u>	<u>.0554</u>	<u>.1598</u>	<u>.2091</u>
t for:									
1 v 2	-	*	-	-	2.968	-	-	2.004	2.351
1 v 3	-	-	-	-	-	-	-	2.177	2.133
2 v 3	-	*	-	-	-	-	-	-	-

on the correlations for the distance between self and mother.

In the correlation between anxiety and the self v self ideal "d" score, the skilled working-class group is again something of an odd man out, with a rho which, although significant, is palpably smaller than those for the middle and lower working-classes. The skilled working rho is in fact significantly less than that for the middle class.

A rather interesting pattern also emerges on the correlations between anxiety, and the difference between how boys perceive themselves and how they think their parents perceive them. Among middle-class boys, there is a significant correlation between this psychopathology measure and the difference between boys' self-perceptions and their perception of how both mother and father perceive them. The differences between these correlations and those for working-class boys are not significant, however, although in both working-class groups there is virtually no correlation between anxiety and the difference between self-perception and mother's perception of self.

When one looks at the extent to which anxiety correlates with the difference between self and father's and mother's perceived ideal for self, one finds a significantly greater relationship in the middle-class than in the two working-class populations. It should, however, also be noted that the correlations themselves are statistically significant in the working-class samples, with the exception of that with self v father's ideal in the lower working class.

These measures would therefore again appear to indicate that there are definite social-class differences in the relationship between anxiety and self-perception. Two caveats should, however, be entered. First, these "d" scores are obviously not sensitive to the direction

of the difference between the self-perception and the element with which it is being compared. Because the "d" score is calculated by squaring the differences on individual constructs and adding them together, all distances are made positive, so that a score of 3 on, for example, the difference between self-perception and father's perception of self could mean that the boy thinks his father views him as better than the boy feels himself to be, or equally that his father sees him as worse than he in fact thinks he is. While common sense suggests that the latter is more likely to correlate with anxiety, it is necessary to test this notion in a more rigorous fashion. This will be undertaken at an appropriate point in a later chapter.

Second, it is impossible to discern from these data whether it is the difference between the elements in question which correlates significantly with anxiety, or whether the correlation is due to the fact that one element varies systematically relative to anxiety, while the other remains fairly constant, so that the correlation is due to the variation in the first element itself, rather than to the nature of the difference between the two elements. Thus, the correlations for the difference between the perceptions of self and father's expectations of self may for example be entirely due to the correlations between the self-concept and anxiety noted earlier in this chapter, with the perception of father's expectations for the self varying only a little in relation to anxiety. Again, this point will be discussed in the light of subsequent analyses.

Table VI.6 presents the correlations between neuroticism and these various "d" scores. It is again noticeable that the correlations between neuroticism and these variables are on the whole

smaller than those for anxiety. Also noteworthy is the fact that five of the seven significant correlations in this Table occur in the middle class, and none in the lower working class.

In the case of distance between self and parents, there are significant correlations with neuroticism for both these sets of "d" scores among middle-class boys, while in neither working-class population do these correlations depart significantly from zero. This is of course in some contrast to the pattern for anxiety presented in Table VI.5. In the case of perceived distance between self and father, the difference in correlations between middle and lower working-class boys just fails to reach significance ($t = 1.947$; $p < .06$).

There are no significant correlations between neuroticism and the difference in the perception between self-ideal and either parent, but the correlation with distance between self and self-ideal is significant for both middle and skilled working-class, though not for lower working-class boys. The middle-class correlation is, moreover, significantly greater than that of either working-class population. The middle-class pattern is therefore very similar in this respect to that for anxiety outlined in Table VI.5. The lower working-class correlation, however, is markedly smaller for neuroticism than for anxiety, which yielded a significant correlation with this variable for lower working-class boys.

In the case of distance between self-perception and boys' perceptions of how either parent views them, there is only one significant correlation with neuroticism - that for skilled working-class boys on the scores for father's perception of self, where the smaller the distance between the two sets of perceptions, the greater

TABLE VI.6

Correlations between neuroticism and "d" scores
between self and various key elements

Social class group	Self/father	Self/mother	Ideal self/father	Ideal self/mother	Self/ideal self	Self/father sees	Self/mother sees	Self/father's ideal	Self/mother's ideal
Middle	.2145	.2011	-.0104	-.0714	.4175	.0859	.0567	.3541	.3976
Skilled working	.0857	-.0035	-.0408	-.0850	.1736	-.1719	-.1276	.0853	.0059
Lower working	-.0474	-.0048	-.0443	-.1171	.0852	-.1286	-.0238	.0800	.0660
t for:									
1 v 2	-	*	-	-	2.211	2.136	-	2.341	3.409
1 v 3	*	-	-	-	2.642	-	-	2.132	2.607
2 v 3	-	-	-	-	-	-	-	-	-

* = p < .1

is the boy's anxiety score. This suggests that the better a boy in this social class feels his father knows him, the more neurotic is the boy. This is again in some contrast to the pattern for anxiety, where - apart from the significant correlations for middle-class boys (q.v.) - the trend is for the anxiety-score to vary in direct proportion to the distance between the boy's perception of himself and of his parents' views of himself.

Finally, there is a strong correlation in the middle class between neuroticism and the distance between self-perception and boys' perceptions of their parents' expectations of them, which mirrors the pattern for anxiety in Table VI.5. In the two remaining social-class groups, the correlations are effectively zero for either variable. There are highly significant differences between the middle and working-class correlations. Again, this is similar to the pattern for anxiety, although the working-class correlations with anxiety are on the whole significant on these two variables.

The difficulties of interpreting correlations for such data have already been referred to above. It is hoped that material to be presented in chapter VIII will help cast light on at least some of these trends.

Summary of main results

The following would seem to be the major conclusions to be drawn in relation to hypotheses 4a and 4b.

- 1) There are definite relationships between self-perception and extraversion, anxiety and neuroticism. This relationship is particularly marked in the case of self-esteem (the perception of self on the first component), which correlates significantly with all three psychopathology measures (Table VI.1).

- 2) There are significant correlations between introversion and neuroticism respectively, and a perception of oneself as low in authoritarianism (component 2) and as self-sufficient (component 3). These self-definitions do not correlate with anxiety, however (Table VI.1).
- 3) There are significant correlations between self-esteem (self-perception on component 1) and the three second-order factors in all three social classes, with the exception of neuroticism in the lower working-class (Table VI.2). There are significant correlations between both introversion and neuroticism and a perception of oneself as self-sufficient, in the middle and skilled working, but not in the lower working-class (Table VI.2).
- 4) The constructs dependent, weak, slow-thinking and unsure of self are important constituents in the self-perception of anxious middle-class boys, and tend on the whole to be more strongly (although not more significantly) correlated with anxiety than in working-class boys (Table VI.3). In the lower working-class, on the other hand, anxiety is correlated with a perception of oneself as lacking in understanding of other people, and a tendency to make others feel ill-at-ease (Table VI.3).
- 5) The self-concept seems rather more pervasively related to anxiety and neuroticism in the middle than in the working class (Tables VI.2, VI.3 and VI.4).
- 6) The correlation between anxiety and the distance between self and self-ideal is substantially smaller in the skilled working class than in the other two classes (Table VI.5). The correlations of the distance between self and self-ideal with anxiety and neuroticism are substantially and on the whole significantly greater in the

middle class than in the other two groups (Tables VI.5 and VI.6).

7) The correlations between both anxiety and neuroticism and the perceived distance between self and parents' expectations for self are substantially and significantly greater among middle-class than working-class boys (Tables VI.5 and VI.6).

The present chapter outlines the findings relating to hypotheses 1a and 1b.

Hypothesis 1a - there will be social-class differences in the relationship between birth order and psychopathology.

As mentioned in chapter III, information was obtained on boys' order of birth in the family. In fact, information was not available for all boys, mainly because hypothesis 1a and 1b were not investigated until after the post-graduate had been completed in the schools, and the sample was as a result reduced to 197 cases for the purpose of this particular analysis. This comprised 114 middle-class, 35 skilled working-class, and 48 lower working-class boys. The absence of 5 middle, 91 skilled, and 24 lower working-class boys obviously reduces the findings in this chapter less representative than those relating to other hypotheses, it may be worth noting that

CHAPTER VII

SOCIAL-CLASS DIFFERENCES IN THE RELATIONSHIP BETWEEN BIRTH ORDER, PERSONALITY, AND THE SELF-CONCEPT

refusal to cooperate on the part of the boys. A detailed breakdown of these three populations, by birth order and family size, is presented in Table VII.1.

Results

For ease of presentation and discussion, findings are detailed for the four original groups only, i.e., first-born, late-born, boys from large families (four or more siblings) and boys from small families (two or three siblings) - plus only sons.

Mean (second-order) factor scores for the various birth-order family-size groups in each social class are presented in Table VII.2. Comparing the three social-class groups, it becomes quickly apparent

The present chapter outlines the findings relating to hypotheses 5a and 5b.

Hypothesis 5a - there will be social-class differences in the relationship between birth order and psychopathology.

As mentioned in chapter III, information was obtained on boys' order of birth in the family. In fact, information was not available for all boys, mainly because hypotheses 5a and 5b were not constructed until after the test-programme had been completed in two schools, and the sample was as a result reduced to 297 cases for the purposes of this particular analysis. This comprised 114 middle-class, 95 skilled working-class, and 88 lower working-class boys. While the absence of 3 middle, 92 skilled working, and 18 lower working-class boys obviously renders the findings in this chapter less representative than those relating to other hypotheses, it may be worth noting that any bias in these findings will stem from the fact that two schools are not included in this part of the analysis, rather than from any refusal to cooperate on the part of the boys. A detailed breakdown of these three populations, by birth order and family size, is presented in Table VII.1.

Results

For ease of presentation and discussion, findings are detailed for the four marginal groups only, i.e., first-born, late-born, boys from large families (four or more members) and boys from small families (two or three members) - plus only sons.

Mean "second-order" factor scores for the various birth-order/family-size groups in each social class are presented in Table VII.2. Comparing the three social-class groups, it becomes quickly apparent

TABLE VII.1

No. of boys in each birth-order/family-size group in:

Middle Class

	N
Only sons	12
1st-born in a small family	27
" " " " large family	6
Late-born in a small family	51
" " " " large family	18

Skilled Working

	N
Only sons	7
1st-born in a small family	28
" " " " large family	6
Late-born in a small family	20
" " " " large family	34

Lower Working

	N
Only sons	7
1st-born in a small family	20
" " " " large family	4
Late-born in a small family	22
" " " " large family	35

TABLE VII.2

Mean second-order factor scores for:

Middle Class

	N	Extra- version	Anxiety	Neuro- ticism
Only	12	39.500	52.917	22.417
First-born	33	38.424	54.242	20.879
Late-born	69	35.261	60.391	22.913
Large family	24	35.542	58.417	22.375
Small family	78	36.513	58.397	22.218
t for: 1st v late		-	2.153	-*
1st v only		-	-	-
only v late		-	-*	-
large v small		-	-	-

Skilled Working

Only	7	40.429	68.000	21.143
First-born	34	38.176	54.886	21.206
Late-born	54	37.611	58.037	20.759
Large family	40	37.725	56.619	20.357
Small family	48	37.917	57.340	22.082
t for: 1st v late		-	-	-
1st v only		-	2.484	-
only v late		-	-*	-
large v small		-	-	-

Lower Working

Only	7	33.286	68.429	22.000
First-born	24	36.000	58.333	21.458
Late-born	57	40.825	55.930	20.877
Large family	39	40.333	56.051	21.436
Small family	42	38.524	58.119	20.680
t for: 1st v late		2.414	-	-
1st v only		-	-	-
only v late		2.216	2.387	-
large v small		-	-	-

* = $p < .1$

All t tests in this and following tables are for small samples

that the relationship between birth order and the three factor scores operates somewhat differently within each social class. Thus, we find that the 24 first-born boys from lower working-class families are significantly ($p < .05$) more introverted than their late-born (i.e., second or subsequent in birth order) peers. Moreover, only boys from this social class are most introverted of all and, despite their small representation ($N=7$) are significantly more introverted than late-born boys. There are no significant differences in the middle-class group in the degree of extraversion of only, first and late-born boys. It is, however, of note that the trend of the mean scores is exactly the reverse of that of the lower working-class sample, with only boys being least, and late-born boys most introverted. The trend in the skilled working-class group is similar to that in the middle-class boys, though again no significant differences emerge.

Turning to the dimension of anxiety, we find that late-born middle-class boys are significantly more anxious than are the first-born from the same social class. Although only sons again fit the trend, being least anxious of all in this social-class group, the difference between these and the late-born only approaches significance ($t = 1.781$; $p < .1$, n.s.). While on this factor there is no consistent trend with birth order in social class III, only boys are significantly more anxious than first-born boys although not than late-born boys ($t = 1.978$; $p < .06$). In the lower working-class sample, however, only sons are significantly more anxious than late-borns, and the trend is again the reverse of that apparent in the middle-class group, with late-born least anxious through first-born to only sons, who are the most anxious.

On the neuroticism factor, the only social class group in which the trend runs consistent with birth order is the lower working class, where we see a progression from late-born (least) to only (most neurotic). Differences between these groups fail to even approach significance, however. In social classes I and II, first and late-born show a difference which almost reaches an acceptable level of significance ($t = 1.938$; $p < .06$, n.s.) with first-borns emerging as the least neurotic in this particular social class.

To summarise the results so far, there appears to be no marked relationship between birth order and these second-order factors in the social class III sample, although there is a slight tendency for only and first-born boys to be more extraverted, and a definite tendency for only boys to be more anxious. Trends in the middle-class and the lower working-class groups are on the whole antithetical to each other, with only or first-born status perhaps tending to favour the child of middle-class parents, and late order of birth operating to the possible advantage of a low working-class child. In none of the three social-class groups, moreover, does family size appear to have a bearing on these dimensions of personality.

In Table VII.3 are presented the mean scores for the other personality factors sub-divided again by social class, birth order and family size. The B factor was omitted from this analysis, since it is not specifically a personality factor.

Concentrating first on the skilled working-class sample, we find the higher level of anxiety among only sons in this group reflected in significant differences between this group and both first and late-born boys on factor D, which is one of the dimensions contributing to this second-order factor. Their significantly

TABLE VII.3

Mean Primary Factor Scores

Middle Class

	A	C	D	E	F	G	H	I	J	O	Q2	Q3	Q4
Only	10.250	11.167	9.417	9.000	10.500	11.250	10.417	8.250	7.500	9.583	10.750	10.917	8.750
First-born	9.455	9.750	10.870	10.182	10.394	11.970	10.780	7.636	9.303	9.667	11.424	11.061	8.667
Late-born	9.116	8.820	11.620	9.319	10.275	11.348	8.620	8.435	9.145	10.261	11.275	10.333	10.188
Large family	9.000	10.540	11.910	9.292	10.542	11.708	9.200	8.292	9.375	9.458	11.373	10.417	10.375
Small family	9.295	8.690	11.080	9.692	10.244	11.500	9.359	8.141	9.141	10.256	11.308	10.615	9.487
t for:													
lst v late	-	-	-	-	-	-	2.755	-	-	-	-	-	2.177
lst v only	-	-	-	-	-	-	-	-	-	-	-	-	-
only v late	-	2.007	-*	-	-	-	-	-	-*	-	-	-	-
large v small	-	2.270	-	-	-	-	-	-	-	-	-	-	-

* = p < .1

TABLE VII.3 (contd.)

Mean Primary Factor Scores

Skilled Working

	A	C	D	E	F	G	H	I	J	O	Q2	Q3	Q4
Only	10.714	9.000	14.000	10.857	11.714	10.143	9.714	6.571	8.429	11.429	10.571	8.286	11.429
First-born	9.971	9.500	10.118	10.353	10.235	11.029	10.118	7.147	8.618	9.794	11.500	10.500	9.029
Late-born	9.426	9.444	11.037	10.167	11.000	10.370	10.037	7.074	8.370	10.333	11.908	9.778	9.074
Large family	9.333	10.043	11.024	10.167	10.905	10.381	10.452	6.571	8.214	10.542	11.525	9.925	9.175
Small family	9.878	8.837	10.306	10.408	10.571	10.796	9.592	7.531	8.592	10.473	11.938	10.167	8.958
t for:	-	-	-	-	-	-	-	-	-	-	-	-	-
lst v late	-	-	-	-	-	-	-	-	-	-	-	-	-
lst v only	-	-	3.257	-	-	-	-	-	-	-	-	-	*
only v late	-	-	2.279	-	-	-	-	-	-	-	-	-	*
large v small	-	-	-	-	-	-	-	-	-	-	-	-	-

* = p < .1

TABLE VII.3 (contd.)

Mean Primary Factor Scores

Lower Working

	A	C	D	E	F	G	H	I	J	O	Q2	Q3	Q4
Only	8.429	7.143	12.857	10.000	11.286	8.286	7.286	7.429	10.143	12.429	12.286	7.429	10.571
First-born	9.583	9.833	11.292	10.000	9.833	10.583	10.167	7.083	8.458	10.292	12.583	8.667	9.708
Late-born	10.684	9.491	10.754	10.351	10.912	10.158	10.439	7.941	8.105	10.737	10.316	9.982	9.754
Large family	10.897	9.872	10.949	10.128	10.388	10.385	10.692	7.615	7.949	10.821	10.590	8.846	9.487
Small family	9.857	9.333	10.881	10.357	10.857	10.190	10.048	7.143	8.452	10.405	11.357	9.357	9.976
t for:	-	-	-	-	-	-	-	-	-	-	3.725	-*	-
lst v late	-	-	-	-	-	-	-	-	-	-	-	-	-
lst v only	-*	-*	-*	-	-	-	2.371	-	-*	-	-*	2.280	-
only v late	-	-	-	-	-	-	-	-	-	-	-	-	-
large v small	-	-	-	-	-	-	-	-	-	-	-	-	-

* = p < .1

higher score on this factor indicates that only sons of the skilled working class are more likely to be excitable, demanding and over-active than boys with siblings, who are of more phlegmatic temperament. No other significant differences appear, although there is a tendency - significant only at the .1 level - for only boys to score higher on Q_4 than either first or late-borns. Again, this factor contributes to anxiety, a high score indicating a boy who is tense, overwrought and fretful.

This pattern is to some extent repeated in the lower working class, where the higher anxiety and introversion of the only son are manifested in significantly lower levels of H and Q_3 . Cattell and Beloff (op. cit.) characterise the child low on factor H as shy, diffident and sensitive to threat; and low Q_3 scores as evidence of "poor self-sentiment formation", such persons being casual, heedless of social rules and following their own urges. Non-significant ($p < .1$) differences between only and late-born boys also emerge on factors A, C, J and Q_2 . First-born sons in this social class prove to be more self-sufficient (Q_2) than late-born boys and are slightly ($p < .1$) lower on Q_3 .

Turning to the middle-class sample, we first find that only sons score significantly lower on factor C than do late-borns and tend to score lower on J ($p < .1$). It seems noteworthy that in the lower working class these differences, though not significant ($p < .1$ in each case), again run in the opposite direction. High C scores indicate individuals who are more calm and emotionally stable; boys low on J are vigorous, zestful and liking group action. Also of some interest is the fact that boys coming from small (two or

three children) middle-class families are significantly higher on C than their social-class peers from large families. A further non-significant ($p < .1$) difference appears on factor D, between the only and late-born sons in this group, with the trend again running counter to the (highly-significant) differences on this factor in social class III. Late-borns in this group also score lower on H and higher on Q_4 than first-borns. High ergic tension (Q_4) manifests itself as tense, overwrought and fretful behaviour.

Perhaps as interesting as these detailed differences themselves, are the variations in the trends of the mean scores across the various birth-order groups. Looking only at those cases where there is a consistent progression from high to low or from low to high scores, from only, through first, to late-born boys, one discovers three (A, C and D) of the primary factors on which the direction of the trend is reversed in the middle and lower working-class samples. Add to this the two second-order factors (extraversion and anxiety) on which the trends are also antithetical, and there emerge five out of 16 factors which are possibly affected differently by birth order in these two groups.

When comparisons are conducted within each birth-order group across the three social classes, we find the patterns presented in Tables VII.4 and VII.5.

This analysis confirms the divergent trends noted above, and seems therefore to establish that the relationship between birth order and personality characteristics is affected by social class, with particularly marked variations emerging between the two groups at the extremes of the class spectrum. Thus, only sons in skilled and lower working-class families are significantly more anxious than

TABLE VII.4

Comparisons across social class of mean second-order factor scores for each birth-order group

Middle v Lower Working

	Extra-version	Anxiety	Neuroticism
only	-	2.379	-
1st	-	-	-
late	3.225	-*	2.542

Middle v Skilled Working

	Extra-version	Anxiety	Neuroticism
only	-	2.402	-
1st	-	-	-
late	-	-	2.567

Skilled v Lower Working

	Extra-version	Anxiety	Neuroticism
only	-	-	-
1st	-	-	-
late	2.088	-	-

* = $p < .1$

TABLE VII.5

Comparisons across social class of mean primary factor scores for each birth-order group

Middle v Lower Working

	A	C	D	E	F	G	H	I	J	O	Q2	Q3	Q4
only	-	2.50	2.11	-	-	2.31	-*	-	2.63	-	-	3.08	-
1st	-	-	-	-	-	-*	-	-	-	-	-*	2.61	-
late	2.64	-	-	-	-	2.20	2.88	-	-*	-	2.01	-	-

Middle v Skilled Working

	A	C	D	E	F	G	H	I	J	O	Q2	Q3	Q4
only	-	-	2.97	-	-	-	-	-	-	-	-	2.28	-*
1st	-	-	-	-	-	-	-	-	-	-	-	-	-
late	-	-	-	-	-	-*	2.23	2.27	-	-	-	-	-*

Skilled v Lower Working

	A	C	D	E	F	G	H	I	J	O	Q2	Q3	Q4
only	-	-	-	-	-	-	-	-	-	-	-	-	-
1st	-	-	-	-	-	-	-	-	-	-	-*	2.01	-
late	2.11	-	-	-	-	-	-	-	-	-	3.31	-	-

* = p < .1

only boys from middle-class homes. Late-born middle-class boys are, on the other hand, distinctly more neurotic than their (skilled or lower) working-class counterparts. Late-born lower working-class boys are also significantly more extraverted than late-born middle or skilled working-class subjects. Again, these figures seem to suggest that the only child is on the whole at an advantage in the middle-class and a disadvantage in the working-class family. Conversely, late-born status possibly favours the working-class (particularly the lower working-class) child.

In Table VII.5, nine out of a possible 26 differences between middle and lower working-class late-born and only sons prove to be significant at the 5 per cent level, or better. A further two (H for only, and J for late-borns) are significant at the 10 per cent level. The only lower working-class son emerges as emotionally less stable (C), more excitable and demanding (D), less mindful of social rules (G), more self-doubting (J), and less "integrated" (Q_3) than the middle-class child in a similar family situation. Late-born working-class boys are more outgoing (H), less sensitive to rules (G), less shy (H), and more inclined to participate in group activities (Q_2). The finding that only and late-born working-class boys score low on G should, however, be viewed alongside the fact that in Table IV.3 a significant difference was discovered on this factor, between middle and working-class boys.

The comparison between the middle and skilled working-class subjects again highlights the contrast between only and late-born status in the two groups, but elicits a smaller number of significant differences. Only sons of middle-class parents are more phlegmatic (D) and more self-disciplined (Q_3); while late-born boys from

skilled working-class families are less shy (H) and more tough-minded (I). Moving to the final set of comparisons, lower working-class late-borns are more outgoing (A) and more oriented to group activity (Q_2) than their skilled working-class counterparts. One significant difference is also apparent among the first-borns, with lower working-class subjects emerging as less integrated (Q_3).

Hypothesis 5b - there will be social-class differences in the way in which birth order is related to self-conception.

The test of this hypothesis is presented in Tables VII.6 and VII.7. Table VII.6 indicates that only sons from lower working-class families see themselves as significantly higher on component 1 (i.e., evaluate themselves less highly) than their late-born peers. The difference between only and first-born boys also approaches significance. In neither of the other two social classes do significant birth-order differences emerge on this first component. The trends in both working-class samples are consistent across birth order, with only sons lowest and late-born boys highest in self-esteem. There is no consistent pattern in the middle-class population, however.

The second and third components yield no significant differences in Table 6, although there are consistent trends in the middle and skilled working class on component 2. Component 3 gives a consistent trend across birth order in the lower working class. With nine possible comparisons in each section of this Table, one would expect to find one difference which was significant at the 10 per cent level.

Table VII.7 gives details of between-class comparisons on the mean principal component scores for each birth-order group. These

TABLE VII.6

Social class differences in the relationship
between birth order and self-perception

Component 1

Birth Order	Middle Class		Skilled Working Class		Lower Working Class	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
only	.1448	.6536	-.2662	.7814	.7159	1.6765
1st	-.0047	.8749	-.1336	1.1552	-.0371	.7104
late	.2899	1.0256	.0076	.7711	-.2227	.7655
t for: 1v2	-	-	-	-	*	-
1v3	-	-	-	-	2.627	-
2v3	-	-	-	-	-	-

Component 2

only	-.0145	.5575	-.1672	.3452	-.1018	1.4272
1st	.0192	.8681	-.0817	.7287	.1262	1.1368
late	.1712	.7929	.0875	.7652	-.0487	.9922
t for: 1v2	-	-	-	-	-	-
1v3	-	-	-	-	-	-
2v3	-	-	-	-	-	-

Component 3

only	-.1585	1.0870	.0451	1.4418	-.5567	2.4656
1st	-.1006	1.2274	.4101	1.3525	.3308	1.1698
late	-.4381	1.4284	.0180	1.3111	.1924	1.4058
t for: 1v2	-	-	-	-	-	-
1v3	-	-	-	-	-	-
2v3	-	-	-	-	-	-

All t tests in this table are for small samples

that late-born lower working-class boys are significantly higher in self-esteem than middle-class boys of the same birth-order, with the difference between middle and skilled working-class boys approaching significance. Similarly, late-born middle-class boys define themselves as significantly more self-sufficient than lower working-class boys born second or later in the family. Again, the middle/skilled working-class comparison approaches significance. No significant differences emerge on the second component. As before, one would expect one difference to emerge as significant at the 10 per cent level of confidence in each section of this Table.

In interpreting these differences it must, however, be borne in mind that significant social-class differences have already been found to exist in mean "self" scores on the first and third components (see Table V.4). It therefore seems likely that the significant differences between late-born boys in the respective social-class groups simply reflect these social-class differences. By the same token, however, it is possible that significant social-class differences fail to appear between only children because of the general tendency of middle-class boys to evaluate themselves lower, and to see themselves as more self-sufficient than working-class boys, although it should also be noted that the standard deviations on these components are rather large for the only lower working-class boys.

In the lower working-class population, therefore, the findings on the first component are congruent with those for the psychopathology measures - only boys of lower working-class parents being significantly lower in self-esteem than those from families with two or more children. Data for middle and skilled working-class boys,

TABLE VII.7

Comparisons across social class of mean principal component scores on "self as am" for each birth-order group

First Component

Birth Order	Middle class v Skilled w/cl	Middle class v Lower w/cl	Skilled v Lower w/cl
Only	-	-	-
First	-	-	-
Late	*	3.208	-

Second Component

Birth Order	Middle class v Skilled w/cl	Middle class v Lower w/cl	Skilled v Lower w/cl
Only	-	-	-
First	-	-	-
Late	-	-	-

Third Component

Birth Order	Middle class v Skilled w/cl	Middle class v Lower w/cl	Skilled v Lower w/cl
Only	-	-	-
First	-	-	-
Late	*	2.488	-

however, are not consistent with the personality-findings. Significant differences do appear between the three social-class groups, but it is difficult to interpret these because of the over-all class differences which have already been found to exist in self-perceptions.

The following would therefore seem to be the major findings of this chapter.

Summary of findings on birth-order, psychopathology and self-concept

- 1) Late-born middle-class boys are significantly more anxious than first-borns, while the difference between only and late-born boys approaches significance - the latter again being more anxious. Late-born boys are also somewhat more neurotic than first-borns in the middle class (Table VII.2).
- 2) In the skilled and lower working-class, only sons are significantly more anxious than first or late-borns respectively. In the lower working class, late-born boys are more extraverted than first or only sons (Table VII.2).
- 3) Only sons of skilled and lower working-class families are significantly more anxious than their middle-class counterparts (Table VII.4).
- 4) Working-class late-borns are significantly less neurotic than middle-class late-borns. Lower working-class late-borns are significantly more extraverted than those from the middle class (Table VII.4).
- 5) Lower working-class late-borns are significantly higher in self-esteem than only children from the same class background. There are no significant birth-order differences in self-concept scores

in the other two classes (Table VII.6).

6) Birth-order differences consistent with these findings appear between the social classes, but it is difficult to interpret these because of class-differences in mean self-concept scores (Table VII.7).

In this chapter, we shall outline the research which is being carried out in the field of the relationship between parental behaviour and the child's self-concept. It will be seen that, on the basis of the primary assumptions of the research, that a "day" of the parent is an essential factor in the child's self-concept. It is, therefore, of interest to note that, in the study of the relationship between parental behaviour and the child's self-concept, the child's self-concept is being studied in relation to the parent's behaviour. This is done in order to see if there is any relationship between the two. It is also of interest to note that, in the study of the relationship between parental behaviour and the child's self-concept, the child's self-concept is being studied in relation to the parent's behaviour. This is done in order to see if there is any relationship between the two.

CHAPTER VIII

PARENTAL BEHAVIOUR, SELF-CONCEPTION AND PSYCHOPATHOLOGY

Table VIII.1 gives the correlations between parental behaviour and the child's self-concept. It is striking that the child's self-concept is significantly correlated with the parent's behaviour. This is done in order to see if there is any relationship between the two. It is also of interest to note that, in the study of the relationship between parental behaviour and the child's self-concept, the child's self-concept is being studied in relation to the parent's behaviour. This is done in order to see if there is any relationship between the two.

In this chapter, we shall examine those findings relevant to hypotheses 3a and 3b. It will be remembered that it was predicted, on the basis of the primary assumptions of the research, that a "key" role performed in an identical manner in different social-class groups will, because of the different expectations attached to behaviour, have different effects on individuals involved in constant interactions with persons performing that role. This gave rise to two more specific sets of predictions, of which the first were contained in hypothesis 3a - within working-class families, psychopathology

will be related to a perception of mother as a less powerful or dominant figure than father within the home, while in middle-class families, psychopathology will be associated with a perception of father as less dominant than mother.

Using anxiety and neuroticism as the indicators of psychopathology, the first test of this hypothesis is presented in Tables VIII.1 and 2. Table VIII.1 gives the correlations for each social class, between anxiety and boys' perceptions of either parent. It is striking that only in social class 3 (the skilled working class) does anxiety correlate directly with the perceived behaviour of either mother or father. Thus, a perception of mother as low on the highly-valued qualities contributing to component 1 is significantly correlated with anxiety in the skilled working class, but in neither of the other two populations. Similarly, anxiety is significantly correlated, in social class 3, with a perception of father as low in the valued qualities on component 1. This correlation is significantly greater than that for lower working-class boys. In the skilled working class, anxiety also correlates significantly with a perception of father as self-

TABLE VIII.1

Social-class differences in correlations between anxiety and boys' perceptions of their parents

Anxiety x perception of mother

Social Class	rho x component		
	1	2	3
Middle	.1547	-.1088	-.0115
Skilled Working	<u>.2057</u>	.0395	-.1178
Lower Working	.0436	.0019	.0261
t for:			
1 v 2	-	-	-
1 v 3	-	-	-
2 v 3	-	-	-

Anxiety x perception of father

Social Class	rho x component		
	1	2	3
Middle	.1320	.0061	.0830
Skilled Working	<u>.3029</u>	.0379	<u>-.1763</u>
Lower Working	.0324	-.0779	-.1305
t for:			
1 v 2	-	-	2.149
1 v 3	-	-	-
2 v 3	2.237	-	-

sufficient, and this correlation is significantly greater than that for the middle-class sample. These findings would therefore suggest that there are social-class differences in the relationship between anxiety and perceived parental behaviour, although the findings themselves are not entirely consonant with the predictions in hypothesis 3a.

Table VIII.2 presents data on the relationship between neuroticism and perceived parental behaviour. None of the 18 coefficients appearing in that Table are significant at an acceptable level of confidence. In the middle-class sample, the correlation between neuroticism and father's perceived behaviour on component 2 does approach significance (the more neurotic a boy is, the less authoritarian does he perceive his father to be), and this coefficient is significantly different from that for the skilled working class. The difference in the skilled and lower working-class correlations on the second component for mother also approaches significance. All in all, however, these findings suggest that no effective relationship exists between parental behaviour and neuroticism (as measured by the H.S.P.Q.) in adolescent boys of any social class, and that only slight differences exist in this relationship as between social classes.

The trends in Tables 1 and 2 are examined at a more detailed level in Tables VIII.3 to 6. Table VIII.3 specifies social-class trends in the relationship between anxiety and the perception of mother on the personal-construct material. Seven of these coefficients are significant at or beyond the .05 level, so exceeding by four or five, the number that would emerge by chance.

In the middle class, there is a positive correlation between anxiety and a perception of one's mother as unfair, undependable, making people feel ill-at-ease, and lacking in "drive". In the skilled working class,

TABLE VIII.2

Social-class differences in the relationship between neuroticism and boys' perceptions of their parents

Neuroticism x perception of mother

Social Class	rho x component		
	1	2	3
Middle	.0204	-.1121	.0525
Skilled Working	-.1291	.0737	.1382
Lower Working	-.1612	-.1351	-.0039
t for:			
1 v 2	-	-	-
1 v 3	-	-	-
2 v 3	-	*	-

Neuroticism x perception of father

Social Class	rho x component		
	1	2	3
Middle	.0455	.1572	.0201
Skilled Working	.0115	-.0859	-.1006
Lower Working	-.0084	-.0431	-.0272
t for:			
1 v 2	-	2.007	-
1 v 3	-	-	-
2 v 3	-	-	-

anxious boys see their mother as silent, excitable and hard to understand. There are no significant correlations in the lower working-class sample. When one looks at the differences between these correlations in the three social classes, no significant trends are apparent, although six of the differences are significant at the 10 per cent level. This is, however, no more than would be expected to occur by chance.

On the whole, these data are congruent with those in Table VIII.1. The fact that the four significant correlations on these personal construct data in the middle class are not translated into a significant correlation on component 1 in Table VIII.1 is probably due to the weights ascribed to other (non-significant) constructs. All in all, however, no strong social-class differences appear in either Table. The significant correlations in Table VIII.3 may indicate that anxiety in middle-class boys is related to a lack of the qualities of succorance (fairness, dependability and having the ability to set people at ease) and drive in the mother. In the skilled working class, the cluster of significant correlations suggests that anxious boys see their mother as an unpredictable figure. Individually, the correlations are rather small and it is of course impossible to tell at this stage whether and in what way these variables are causally connected.

Table VIII.4 presents correlations between anxiety and perceptions of father on personal-construct data. As in Table 3, there are no significant correlations in the lower working class. In the middle class, anxiety is correlated with a perception of father as excitable and lacking in understanding. In the skilled working class, anxiety is significantly correlated with no less than nine out of the seventeen constructs listed. These correlations - on warm, understanding, fair,

TABLE VIII.3

Correlations between anxiety and boys' perceptions of mother:
personal-construct scores

Mother scores on:	Middle Class	Skilled Working Class	Lower Working Class	t for:		
				1 v 2	1 v 3	2 v 3
Strict	-.0978	.0716	-.0237	-	-	-
Warm	.1587	.0311	-.0603	-	*	-
Understanding	.1253	.1193	-.0449	-	-	-
Unsure of self	-.0079	-.1600	-.0269	-	-	-
Fair	<u>.2760</u>	.1422	.1024	-	-	-
Kind	.1653	.0855	.0350	-	-	-
Approachable	.1676	.0952	.1148	-	-	-
Silent	.0330	<u>-.1796</u>	.0213	*	-	*
Excitable	-.0787	<u>-.1912</u>	-.1084	-	-	-
Domineering	-.0058	-.0147	-.0025	-	-	-
Dependable	<u>.2519</u>	.1403	.0320	-	*	-
Hard to understand	-.1190	<u>-.1680</u>	-.0179	-	-	-
Strong personality	.1639	-.0052	.1614	-	-	-
Quick-thinking	.0559	-.0036	.0333	-	-	-
Sets at ease	<u>.2487</u>	.0800	.1514	-	-	-
Has drive	<u>.2077</u>	.0693	-.0173	-	*	-
Dependent	.0796	-.1193	-.1109	*	-	-

TABLE VIII.4

Correlations between anxiety and boys' perceptions of father:
personal-construct scores

Father scores on:	Middle Class	Skilled Working Class	Lower Working Class	t for:		
				1 v 2	1 v 3	2 v 3
Strict	-.0172	-.0243	-.0667	-	-	-
Warm	.1739	<u>.1991</u>	.0365	-	-	-
Understanding	<u>.2268</u>	<u>.2435</u>	.0795	-	-	-
Unsure of self	-.0017	-.0318	.0048	-	-	-
Fair	.1657	<u>.2730</u>	.1113	-	-	-
Kind	.0988	<u>.2575</u>	.0736	-	-	-
Approachable	.1381	<u>.3407</u>	.1117	*	-	*
Silent	.1058	-.0671	-.1508	-	*	-
Excitable	<u>-.2533</u>	<u>-.3305</u>	.0451	-	2.239	3.098
Domineering	-.0469	-.1663	-.0309	-	-	-
Dependable	.1649	<u>.2741</u>	-.0240	-	-	2.432
Hard to understand	-.1623	<u>-.3576</u>	.0053	*	-	3.025
Strong personality	.1006	.0500	-.1069	-	-	-
Quick-thinking	.1685	.0914	-.0144	-	-	-
Sets at ease	.1606	<u>.3404</u>	.1396	-	-	*
Has drive	.0513	.1548	-.0392	-	-	-
Dependent	-.1013	-.1154	-.0721	-	-	-

kind, approachable, relaxed, dependable, easy to understand and sets people at ease, on all of which anxiety is negatively correlated - suggest that the fathers of anxious boys in this social group are rather unpredictable individuals, who are not at ease in social relationships. The number of significant differences between these correlations exceeds by one or two, the number attributable to chance. A further five differences are significant at the 10 per cent level, with one of these - between skilled and lower working-class boys on the construct "approachable" - just failing to reach significance ($t = 1.937$; $p < .06$).

A very strong relationship would therefore seem to exist between anxiety and (the perception of) father's behaviour in the skilled working class - as is borne out in the number of significant correlations in Table 4, and the correlations on components 1 and 3 in Table 1. The relationship in the other two groups is much less marked - indeed, it seems non-existent in the lower working class. Moreover, social-class differences seem to exist in the strength and/or direction of these relationships, though the differences are themselves fairly moderate in size. This again emerges in Table 4 and (perhaps more strongly) in Table 1.

Tables VIII.5 and 6 present correlations between neuroticism and perceptions of mother and father respectively, on personal-construct scores. Both Tables are notable for the generally very low levels of correlation they display - in which, of course, they reflect the trends in Table VIII.2. In Table 5, only one correlation is statistically significant - two or three would occur by chance alone. In the lower working-class, neuroticism is significantly correlated with a perception of mother as lacking in understanding.

TABLE VIII.5

Correlations between neuroticism and boys' perceptions of mother:
personal-construct scores

Mother scores on:	Middle Class	Skilled Working Class	Lower Working Class	t for:		
				1 v 2	1 v 3	2 v 3
Strict	-.1800	-.0110	-.0669	-	-	-
Warm	.0123	-.1002	-.0329	-	-	-
Understanding	-.0063	-.1039	<u>-.2106</u>	-	-	-
Unsure of self	.1088	.0672	.0893	-	-	-
Fair	-.0725	-.0913	.0892	-	-	-
Kind	-.1402	-.1029	.0838	-	*	-
Approachable	.0726	-.0335	.0781	-	-	-
Silent	-.1417	.0872	.0161	+	-	-
Excitable	.0594	-.1449	.0866	*	-	+
Domineering	-.1234	-.0471	-.1224	-	-	-
Dependable	.0652	-.0891	-.0298	-	-	-
Hard to understand	-.1165	.1387	.0790	2.114	-	-
Strong personality	-.0726	.1652	-.1717	1.971	-	2.718
Quick-thinking	.0172	.0521	-.0297	-	-	-
Sets at ease	-.0374	.1246	.0742	-	-	-
Has drive	-.1554	.0963	-.1454	2.077	-	+
Dependent	.1705	.0182	.1045	-	-	-

+ = p < .075

TABLE VIII.6

Correlations between neuroticism and boys' perceptions of father:
personal-construct scores

Father scores on:	Middle Class	Skilled Working Class	Lower Working Class	t for:		
				1 v 2	1 v 3	2 v 3
Strict	.0244	-.1091	.0771	-	-	-
Warm	-.1241	-.1253	.0309	-	-	-
Understanding	-.0132	-.0331	.0448	-	-	-
Unsure of self	.0157	.0872	-.0302	-	-	-
Fair	.0449	.0996	-.1104	-	-	*
Kind	-.0221	.0735	.0260	-	-	-
Approachable	.0602	.1006	-.0090	-	-	-
Silent	-.0444	-.1054	.0034	-	-	-
Excitable	-.0702	.0482	.0369	-	-	-
Domineering	.0531	-.1433	.0024	*	-	-
Dependable	-.0722	.0817	.0283	-	-	-
Hard to understand	-.1625	.0126	.0942	-	*	-
Strong personality	.1428	.0573	.0001	-	-	-
Quick-thinking	.0061	-.1038	-.0144	-	-	-
Sets at ease	-.1119	.0469	-.0172	-	-	-
Has drive	<u>-.1903</u>	-.0555	.0782	-	1.990	-
Dependent	-.0072	.0428	.0385	-	-	-

Four of the differences between these correlations are significant - one or two more than the chance figure - and a further five are significant at the 10 per cent level; but it seems rather pointless to interpret these, in view of the general lack of correlation between the two variables in this Table. It may however be worth noting that three of the differences between groups 1 and 2 are significant in Table 5, but that no significant difference appears between these groups in the relevant part of Table 2.

In Table 6, again only one coefficient is statistically significant: neurotic middle-class boys tend to see their fathers as lacking in drive. This is one or two fewer than the number of significant correlations one would expect to be yielded by chance. Only one of the differences between the coefficients is significant at the 5 per cent level, with a further three exceeding the 10 per cent level. Again, however, this is no more than the figure one would expect to occur by chance.

On the whole therefore, one would seem justified in concluding that there is no relationship between neuroticism (as measured by the H.S.P.Q.) and perceived parental behaviour.

As yet, no direct attempt has been made to examine the relationship between psychopathology and the differential perception of parents which is postulated in hypothesis 3a. The next set of Tables present data more specifically related to this hypothesis.

Table VIII.7 gives details of the relationship between anxiety and the boys' perceptions of mother vis-a-vis father. This was done by first dividing the sample into three groups, on the basis of anxiety scores. The average anxiety score for the whole sample was 57; the standard deviation was approximately 14. By treating those boys whose

TABLE VIII.7

Social-class differences in the relationship between anxiety and boys' perceptions of mother in relation to father: principal component scores

1st Component

Anxiety Score	Middle Class		Skilled Working Class		Lower Working Class	
	Mean	s.e.m.	Mean	s.e.m.	Mean	s.e.m.
High	-.0544	.1220	-.1671	.1676	.0531	.1612
Average	.0593	.1109	-.1501	.1503	.0589	.0979
Low	-.1379	.1144	.1363	.1166	.0394	.1161
H v A	-		-		-	
H v L	-		-		-	
A v L	-		-		-	

2nd Component

Anxiety Score	Middle Class		Skilled Working Class		Lower Working Class	
	Mean	s.e.m.	Mean	s.e.m.	Mean	s.e.m.
High	-.0203	.1637	-.0362	.2765	.2388	.2133
Average	.0801	.1688	.1771	.1640	-.1826	.1469
Low	.0829	.2092	.0450	.1688	-.1258	.1252
H v A	-		-		*	
H v L	-		-		-	
A v L	-		-		-	

3rd Component

Anxiety Score	Middle Class		Skilled Working Class		Lower Working Class	
	Mean	s.e.m.	Mean	s.e.m.	Mean	s.e.m.
High	-.0575	.1808	.1024	.3217	.2601	.3122
Average	.1209	.2549	.1542	.2572	-.1417	.1476
Low	.3175	.2814	-.0172	.2420	-.4346	.2267
H v A	-		-		-	
H v L	-		-		*	
A v L	-		-		-	

anxiety score fell more than half a standard deviation below the mean (i.e., with a score of 50 or less) as the "low" anxiety group, those with a score of 64 or more (i.e., falling more than half a standard deviation above the mean) as the "high" anxiety group, and those whose score fell within half a standard deviation on either side of the mean as the "average" anxiety group, it was possible to divide the entire sample into three fairly evenly-sized groups. The middle-class high, average and low anxiety groups numbered 41, 40 and 36; The skilled working-class groups 54, 66 and 49; and the lower working-class groups 32, 43 and 31, respectively. For each of these anxiety groups in each social class, the significance of the difference between boys' perceptions of mother and father on each component was then calculated, using the "t" test of the difference between correlated means detailed in chapter V. The mean difference and the standard error of the mean for each group are outlined in Table 7. In this and other similar Tables, mean differences significant at the 5 per cent level of confidence will be underlined.

Student's t tests were also calculated on the significance of the difference in these mean scores between each anxiety group within each social class, using the formula specified in chapter V. These "t" values are provided in the lower half of each of the sub-tables in Table 7.

Finally, "t" values were calculated on the significance of the difference of these mean differences as between boys with high, average and low anxiety scores in the different social-class groups. To avoid complicating Table 7 still further, reference will be made at appropriate points in the text, to the results of this last set of calculations.

Perhaps the first thing of note in Table 7 is the fact that none of the mean differences are underlined. In other words, in none of the anxiety groups in any social class is mother perceived as significantly different from father on any of the three components.

Second, within each social class, there are no acceptably-significant differences between the high, average and low anxiety groups. Within the lower working class, however, two differences emerge as significant at the 10 per cent level: boys with high anxiety scores see father as more authoritarian than mother, whereas, among boys of average anxiety, the trend is the reverse (component 2); they also see father as more self-sufficient than mother, while boys with low anxiety scores see mother as more self-sufficient than father (component 3). It is also noticeable that these differences form a consistent trend from high, through average to low anxiety on the third component in the lower working class, while in the middle class, mean differences on the third component form a consistent trend in the opposite direction. When comparisons are made between groups with the same anxiety level in different social classes, the difference on the third component between middle-class and lower working-class boys with low anxiety scores proves significant at the 5 per cent level of significance ($t = 2.038$).

What emerges from this Table is accordingly a series of suggestive trends, rather than any hard-and-fast indicators. The data offer only tentative support for the hypothesis that among (lower) working-class boys, anxiety is related to a perception of father as a more dominant figure than mother, with none of the comparisons between the various anxiety groups within each social class yielding any differences which are significant at a normally-acceptable level of confidence. Even

the two differences which emerge as significant at the 10 per cent level do not depart significantly from the number one would have expected to occur by chance alone. The fact that these trends are relatively consistent within the lower working-class does however perhaps justify one in treating these as slightly more than random differences.

Table VIII.8 presents coefficients of the correlation between anxiety and perceptions of mother vis-a-vis father, on the various personal-construct items in each social class. Personal-construct measures of the differences between the perceptions of mother and father were calculated in the manner specified in chapter V, by subtracting the score for father from that for mother - thus giving a range of scores from +5 to -5 - and adding 6 to this resultant difference, to make all scores positive and give a final score-range from +1 to +11. A low score would therefore indicate that father was seen as lower than mother on the construct specified, while a high score means the reverse. As usual, correlations which are significant beyond the .05 level have been underlined.

The group with the largest number of significant correlations in Table 8 is the skilled working-class group. Here, anxiety correlates significantly with a perception of mother as more warm than father, as more fair than father, and as more kind, approachable, dependable, easy to understand and able to set people at ease than father. It is difficult to see how these did not reflect themselves in a significant difference for this social class on the first component in Table 7. As before, this discrepancy may be due to the behaviour of items with high loadings on the first component and low (or possibly inconsistent) correlations in Table 8. We have, of course, already

TABLE VIII.8

Social-class differences in the relationship between anxiety and boys' perceptions of mother in relation to father: personal-construct scores

Mother v Father scores on:	Middle Class	Skilled Working Class	Lower Working Class	t for:		
				1 v 2	1 v 3	2 v 3
Strict	-.0872	.0677	.0405	-	-	-
Warm	-.0477	<u>-.2206</u>	-.0817	-	-	-
Understanding	-.1355	-.1425	-.0324	-	-	-
Unsure of self	-.0047	-.1403	-.0424	-	-	-
Fair	-.0164	<u>-.2002</u>	-.0316	-	-	-
Kind	-.0116	<u>-.1885</u>	-.0909	-	-	-
Approachable	-.0028	<u>-.3605</u>	-.0107	3.080	-	2.924
Silent	-.0395	-.0772	.1695	-	-	1.983
Excitable	<u>.1993</u>	.0436	<u>-.2134</u>	-	3.080	2.073
Domineering	-.0058	.0453	.0803	-	-	-
Dependable	.0092	<u>-.2151</u>	.0851	*	-	2.417
Hard to understand	.1199	<u>.2217</u>	.0026	-	-	*
Strong personality	.0660	-.0528	<u>.2089</u>	-	-	2.110
Quick-thinking	-.1084	-.0485	.1222	-	*	-
Sets at ease	-.0171	<u>-.2715</u>	-.0091	2.149	-	2.148
Has drive	.1270	-.1131	-.0212	1.982	-	-
Dependent	.1738	.0041	<u>-.2183</u>	-	2.928	*

observed a strong relationship in Table VIII.4 between anxiety and the perception of father, and a rather low relationship in Table VIII.3 between anxiety and the perception of mother. It is of some interest, however, that the pattern of correlations seen in Table VIII.4 should remain relatively constant when father and mother are viewed in relation to each other. These correlations tend to reinforce the impressions made by the two earlier Tables, and indicate that the father is the crucial figure in the genesis of anxiety in skilled working-class boys, with the lack on father's part of such expressive qualities or styles of behaviour as warmth, kindness and approachability apparently rendering the boy particularly vulnerable to anxiety.

Only one correlation emerges as significant in the middle-class sample. Apparently, anxious boys in the middle class see father as a more excitable person than mother. In the lower working class, three significant correlations appear. The first of these is the direct opposite of that just cited for the middle class. In social classes 4 and 5, anxiety is correlated with a perception of mother as more excitable than father. In this group, anxiety also correlates significantly with a perception of mother as weaker and more dependent on other people than is father.

These findings complement to some extent the (non-significant) trend apparent in the lower working-class sample in Table VIII.7. When mother is seen as less self-sufficient (or, perhaps, as less endowed with instrumental qualities than father), the boy is anxious; when mother is more self-sufficient than father, the boy is not anxious. The fact that the difference between the high and low anxiety groups is not significant on the third component may be due

to the fact that the construct "silent-talkative", which has an overwhelmingly high loading on this third component, fails to correlate significantly with anxiety in Table 8 - although the coefficient is significant at the 10 per cent level of confidence. Alternatively, it may reflect the lack of a third component in the lower working-class sample, as already reported in chapter IV.

In all, there are eleven significant - though modest - correlation coefficients in this Table. This exceeds chance expectation. Eleven of the differences between these correlations are also significant beyond the .05 level. Again, this exceeds by eight or nine, the number that could be attributed to chance.

There are significant differences between middle and lower working-class boys on the constructs "excitable" and "dependent", which correspond to the trends already indicated in the analysis of the coefficients themselves. In addition, there is a 10 per cent significant difference between these groups on the construct "quick-thinking". Again, the indication is that in the lower working class, anxiety correlates with a perception of father as higher on this (instrumental?) quality than mother; whereas in the middle class, the pattern is the reverse of this.

By contrast with anxious middle-class boys, anxious boys in the skilled working class tend to see mother as significantly more approachable, possessed of "drive", and capable of setting people at ease than father. When skilled and lower working-class correlations are compared, we find that anxiety correlates significantly more in the former than the latter group, with a perception of mother as more approachable, dependable and able to set people at ease than father; while - as compared with their skilled working-class counterparts -

anxious lower working-class boys see father as more silent, relaxed, strong and (at the 10 per cent level) independent than mother.

Table 8 therefore suggests more strongly than Table 7 that social-class differences do exist in the association between anxiety and the behaviour of parents in relation to each other. A more detailed interpretation of the meaning of these trends will be undertaken below.

Table VIII.9 details the relationship between neuroticism and boys' perceptions of mother in relation to father on the principal components data. The three neuroticism groups were again distinguished by taking cut-off points half a standard deviation on either side of the mean for neuroticism. Taking the mean and standard deviation as approximately 21.5 and 5.0 respectively, this meant that all boys with a neuroticism score of between 20 and 23, inclusive, fell into the average neuroticism group; those with 19 or less into the low, and those with 24 or above the high neuroticism group. The numbers in the high, average and low neuroticism groups in the middle, skilled and lower working-class groups respectively were 32, 43 and 42; 55, 65 and 49; and 44, 35 and 27. The social-class discrepancies in the proportions contained within each of these neuroticism groups obviously reflects the (almost significant) difference between the middle and lower working-class mean neuroticism score reported in Table IV.2.

None of the nine divisions in this Table contains a trend that progresses consistently in any social-class group, from low to high neuroticism. On the second and third components, however, there are significant differences between the high and average neuroticism groups in the middle and skilled working-class respectively.

TABLE VIII.9

Social-class differences in the relationship between neuroticism and boys' perceptions of mother in relation to father: principal component scores

First Component

Neuroticism Score	Middle Class		Skilled Working Class		Lower Working Class	
	Mean	s.e.m.	Mean	s.e.m.	Mean	s.e.m.
High	-.1538	.1063	-.1816	.1627	-.1394	.1303
Average	.1670	.1264	.1329	.1303	.2149*	.1228
Low	-.0800	.1135	-.1763	.1679	.0069	.1178
H v A	*		-		*	
H v L	-		-		-	
A v L	-		-		-	

Second Component

High	-.2660	.1552	.1222	.1997	.0151	.2181
Average	.3400	.1552	-.1518	.1769	-.1627	.1843
Low	.0676	.2426	.3337	.2360	.0448	.1496
H v A	2.761		-		-	
H v L	-		-		-	
A v L	-		-		-	

Third Component

High	.2503	.2289	.4927	.2551	.0068	.2244
Average	-.2298	.2473	-.2521	.2513	-.2309	.2046
Low	.4085	.2353	.0816	.3209	-.1185	.2304
H v A	-		2.043		-	
H v L	-		-		-	
A v L	*		-		-	

* = p < .1

Differences significant at the 10 per cent level are also discernible on the first component between high and average neurotics in the middle and lower working class. (In the case of the middle-class groups, $t = 1.938$; $p < .075$). In the middle class, there is also a difference which is significant at the 10 per cent level between average and low neuroticism groups on the third component.

When one looks at the individual mean differences themselves, one - for average neurotics in the middle class, on the second component - proves significant at the .01 level. The mean difference of the perception of mother relative to father in the lower working class is also significant at the 10 per cent level on the first component among boys with average neuroticism scores.

Although the number of significant differences is above chance-expectation, it is rather difficult to interpret these findings, because of the lack of any consistent trend across neuroticism in the various social classes. However, middle-class boys with average levels of neuroticism see father as significantly more authoritarian than mother, while highly-neurotic boys see mother as rather more authoritarian than father (component 2). In social class 3, neurotic boys see father as somewhat more self-sufficient than mother, while averagely-neurotic boys see mother as rather more self-sufficient than father (component 3). In social classes 1 and 2, there is also a suggestion that neurotic boys tend to evaluate mother more highly than father, whereas the reverse trend operates among boys of average neuroticism; and that boys with low neuroticism scores see father as more self-sufficient than mother, while among averagely-neurotic boys the opposite tendency prevails.

Finally, the difference between the mean difference scores of averagely-neurotic middle-class and lower working-class boys is significant ($t = 2.101$; $p < .05$) on the second component. In this same section of the Table, the difference between middle and skilled working-class boys yields a t of 1.955, which is significant at the .06 level of confidence. The difference between highly-neurotic middle and skilled working-class boys also approaches significance on the third component ($t = 1.931$; $p < .075$).

Table VIII.10 presents the correlations between neuroticism and boys' perceptions of mother against father on the individual constructs, these latter being the same as were computed for Table VIII.8. Five of these coefficients are significant in the middle-class sample, one in the lower working-class sample, and none among skilled working-class boys. The six significant correlations exceed chance expectation by three or four.

In the middle class, neuroticism correlates significantly with a perception of mother as more strict, more cold, more sure of self, more strong in personality and more independent than father. While the correlations are individually rather small, when considered in combination they do suggest that neuroticism in middle-class boys is related to a perception of mother as higher than father in the possession of instrumental qualities. In the case of lower working-class boys, neuroticism tends to be connected with a perception of mother as more understanding than father. The size of the coefficients in social class 3 indicates a virtually-negligible correlation between the two sets of variables.

The nine significant social-class differences in the magnitudes of these correlations again exceeds the number that one would expect

TABLE VIII.10

Social-class differences in the relationship
between neuroticism and boys' perceptions
of mother in relation to father: personal construct scores

Mother v Father scores on	Middle Class	Skilled Working Class	Lower Working Class	t for		
				1 v 2	1 v 3	2 v 3
Strict	<u>-.2408</u>	.0782	-.0996	2.673	-	-
Warm	<u>.2079</u>	-.0021	-.0256	*	*	-
Understanding	.0395	-.0660	<u>-.2524</u>	-	2.192	-
Unsure of self	<u>.1947</u>	-.0110	.1322	*	-	-
Fair	.1435	-.0963	.1722	1.987	-	2.161
Kind	.0829	-.0820	-.0024	-	-	-
Approachable	-.0139	-.1068	.0640	-	-	-
Silent	-.0308	.1489	-.0180	-	-	-
Excitable	.1618	-.1013	.0454	2.172	-	-
Domineering	-.1656	-.0601	-.0886	-	-	-
Dependable	.0451	-.1212	-.0944	-	-	-
Hard to understand	-.0068	.1353	-.0101	-	-	-
Strong personality	<u>-.2130</u>	.0463	-.1112	2.157	-	-
Quick-thinking	-.0706	.1064	-.0065	-	-	-
Sets at ease	.0966	.1138	-.1362	-	*	2.002
Has drive	-.0836	.0250	-.1553	-	-	-
Dependent	<u>.3391</u>	.0177	.0616	2.758	2.145	-

to be yielded by chance alone. Seven of the significant differences occur between the middle and working-class groups, with five of these stemming from comparisons between the middle and skilled-working class. Two of these nine significant differences, however, arise from correlations on the construct "fair" which are themselves insignificant. Perhaps the most interesting finding in this section of the Table is the fact that the correlation in the middle class between neuroticism and a perception of mother as more independent than father is significantly greater than in either working-class sample, where the correlations are virtually zero. The significant differences between the middle and skilled working class on the constructs "strict", "fair", "excitable", "strong" and "dependent" suggests that there is a genuine difference between the two groups in the relationship between neuroticism and the perception of the instrumentality of mother in relation to father. Caution should, however, be exercised in interpreting these trends, in view of the fact that there are no significant differences in Table VIII.9 between groups of high or low neuroticism, but only between high and average neuroticism. Moreover, not one of the nine divisions in that Table gives a consistent trend in the magnitude of mean principal-component scores, from low through average to high neuroticism.

When these results are viewed alongside those presented in Table V.18, it is interesting to note that the perceptions of mother relative to father on the constructs "dependent", "excitable" and "strong", which have yielded significant social-class differences - particularly between the middle and lower working class - in their correlations with both anxiety and neuroticism, also yielded significant class differences in the extent to which boys see them as typical within

their own families - as indicated by the trends in Table V.18. An attempt will be made to examine the respective implications of these findings in the discussion in chapter X.

Hypothesis 3b - there will be social-class differences similar to those predicted for psychopathology, in the relationship between self-conception and the perception individuals have of their parents.

The tests of this hypothesis will be restricted to the principal-components data, with boys' perceptions of self on the first component being used as the self-concept measure.

Table VIII.11 shows the straight correlations in all three social classes, between the boys' self-conception (as reflected in "self" - scores on the first component), and their perceptions of their parents on all three components. In each group, there are significant correlations between self-conception (or self-esteem) and perceptions of both mother and father on the first and third components. Thus, a boy who sees either parent as high on the first component (i.e., evaluates them low) tends also to see himself as low on the valued qualities which are weighted heavily on the first component. There are no significant differences between the classes in the size of these correlation coefficients, although the difference between the skilled and the lower working class is significant at the 10 per cent level on the perception of mother. However, this is the only difference which even approaches significance in this Table, and is no more (perhaps even less) than the number of significant differences one would expect to emerge at this level, in a Table containing 18 comparisons. On the third component, the indication is that a perception of either parent as self-sufficient is related to low

TABLE VIII.11

Relationship between self-concept and perceptions of mother and father

a) Self-conception x perception of father

Social Class	Father - component:		
	1	2	3
Middle	<u>.3963</u>	.1259	<u>-.1850</u>
Skilled Working	<u>.4065</u>	-.0006	<u>-.2227</u>
Lower Working	<u>.2795</u>	.0322	<u>-.2004</u>
t for: lv2	-	-	-
lv3	-	-	-
2v3	-	-	-

b) Self-conception x perception of mother

Social Class	Mother - component:		
	1	2	3
Middle	<u>.3739</u>	.0672	<u>-.2286</u>
Skilled Working	<u>.4278</u>	.1280	<u>-.3091</u>
Lower Working	<u>.2247</u>	.0189	<u>-.2325</u>
t for: lv2	-	-	-
lv3	-	-	-
2v3	*	-	-

self-evaluation. There are no significant social-class differences in the size of these coefficients.

This Table would therefore seem to indicate that the relationship between self-conception and parental behaviour is not subject to the same processes as govern the relationship between psychopathology and parental behaviour. There is a definite relationship between parental behaviour and self-conception in all social classes, whereas the only perceptible relationship between parental behaviour per se and psychopathology appears to be in the skilled working class - and that only in the case of anxiety. This perhaps suggests that the causal sequence in the relationship between the three variables is for parental behaviour to give rise (for whatever reason) to a particular evaluation of self, self-evaluation in turn giving rise (in some such manner as that outlined in chapter II) to a greater or lesser degree of psychopathology in the individual.

This notion was tested by calculating for each class group the partial correlation coefficient between parental behaviour and psychopathology, holding self-evaluation constant. For ease of analysis, parental behaviour and self-evaluation were measured in terms of the respective scores on the first principal component, and anxiety was used as the measure of psychopathology, since this on the whole yielded the strongest correlations with parental behaviour and might therefore provide the most stringent test of this hypothesis. The formula used was the same as that specified in chapter V.

Results are detailed in Tables VIII.12 and 13. The first section in both Tables shows that, when self-evaluation is held constant, the correlation between parental behaviour and anxiety is reduced to a minuscule level, with the exception of the skilled

TABLE VIII.12

Partial correlation coefficients between self-evaluation, anxiety and perception of mother

Perception of mother x anxiety, holding self-evaluation constant

	Middle Class	Skilled Working Class	Lower Working Class
Partial coefficient	.0008	.1112	.1029
t	-	-	-

Perception of mother x self, holding anxiety constant

	Middle Class	Skilled Working Class	Lower Working Class
Partial coefficient	.3446	.3951	.2209
t	3.919	5.541	2.298

Self-evaluation x anxiety, holding perception of mother constant

	Middle Class	Skilled Working Class	Lower Working Class
Partial coefficient	.3973	.1993	.2355
t	4.622	2.620	2.459

TABLE VIII.13

Partial correlation coefficients between self-evaluation, anxiety and perception of father

Partial coefficient for perception of father and anxiety, holding self-evaluation constant

	Middle Class	Skilled Working Class	Lower Working Class
Partial coefficient	-.0423	.2082	-.0369
t	-	2.743	-

Partial coefficient for perception of father and self, holding anxiety constant

	Middle Class	Skilled Working Class	Lower Working Class
Partial coefficient	.3563	.3552	.2795
t	4.071	4.896	2.954

Partial coefficient for self-evaluation and anxiety, holding perception of father constant

	Middle Class	Skilled Working Class	Lower Working Class
Partial coefficient	.4061	.1536	.2397
t	4.745	2.003	2.506

working class, where the partial correlation between anxiety and perception of father is significant beyond the .01 level. In the two remaining sections in both Tables, all the coefficients are significant, most of them well beyond the .01 level. This accordingly suggests that the important relationships are between self-evaluation and anxiety - at any rate, in the middle and lower working classes. Since self-evaluation forms the link between the two sets of correlations, one is tempted to argue that (perceived) parental behaviour generates a particular level of self-evaluation, which in turn creates a particular degree of anxiety. However, the causal flow could equally well be in the opposite direction, or self-evaluation could itself give rise to anxiety and a particular view of one's parents. This analysis cannot therefore be said to have answered the question which provoked it. It does, however, confirm the strength of the association between paternal behaviour and anxiety in the skilled working class, and of the remaining sets of correlations in all three groups. It is also of some interest that, in the skilled working class, while the relationship between self-evaluation and anxiety holding perception of father constant is significant, it is considerably smaller than that for the two other groups, and is also somewhat smaller than the correlation appearing in the same class group, between perception of father and anxiety, holding self-evaluation constant. Finally, it should be noted that while the lack of any correlation between anxiety and parental behaviour per se has been confirmed for the middle and lower working class, it has been impossible to allow for the association between anxiety and the perception of parents relative to each other, the principal components measure for the latter variable not having been calculated

in a way which would allow a correlation analysis to be undertaken.

This brings us quite logically to Table VIII.14. In line with hypothesis 3a, hypothesis 3b predicted that within working-class families a poor self-concept would be related to a perception of mother as a less powerful or dominant figure than father within the home; whereas in middle-class families, the pattern would be the reverse. This prediction is tested in Table 14.

Self-evaluation was again measured in terms of boys' scores on the first component for the element "myself as I really am". The mean score on this element for the total population had been 0.002, with a standard deviation of .911. Taking scores more than half a standard deviation above or below the mean (i.e., +.458 or more; and -.454 or less) as indicating "low" and "high" self-evaluation respectively, a t test for correlated data was used to calculate the significance of the difference in the mean perception on all three principal components of mother in relation to father in groups with "high", "average" and "low" self-evaluation. The numbers of boys with these varying levels of self-evaluation in the middle, skilled and lower working classes were 30, 45 and 42; 56, 60 and 53; and 40, 44 and 22, respectively. Where a mean difference is significant at the 5 per cent level or better, it has been underlined.

Perhaps the first thing to note in this Table is that there are only three consistent trends from low, through average, to high self-evaluation. There are two very slight trends in the middle class, on the first component, and in the lower working class, on the second component. In the lower working class, there is also a very definite trend on the third component which yields a significant difference ($p < .05$) between the high and low self-evaluation groups. The trend

TABLE VIII.14

Relationship between self-evaluation and perceptions of parents in relation to each other

First Component

Self-Evaluation	Middle Class		Skilled Working Class		Lower Working Class	
	Mean	s.e.m.	Mean	s.e.m.	Mean	s.e.m.
High	-.0457	.1334	.1300	.1395	.1712	.1087
Average	-.0422	.1037	<u>-.3547</u>	.1745	-.0110	.1051
Low	-.0349	.1210	.1103	.1539	.0390	.1956
H v A	-	-	2.151		-	-
H v L	-	-	-		-	-
A v L	-	-	1.975		-	-

Second Component

Self-Evaluation	Middle Class		Skilled Working Class		Lower Working Class	
	Mean	s.e.m.	Mean	s.e.m.	Mean	s.e.m.
High	.0152	.2200	.1719	.1537	-.0737	.1542
Average	-.0371	.1798	-.1271	.2511	-.0311	.1395
Low	.0969	.1454	.2179	.1834	-.0268	.2635
H v A	-	-	-	-	-	-
H v L	-	-	-	-	-	-
A v L	-	-	-	-	-	-

Third Component

Self-Evaluation	Middle Class		Skilled Working Class		Lower Working Class	
	Mean	s.e.m.	Mean	s.e.m.	Mean	s.e.m.
High	.1508	.2483	-.0468	.1787	<u>-.4502</u>	.2116
Average	-.0072	.2151	.4913	.3230	<u>-.1958</u>	.1964
Low	.1453	.2319	-.2556	.3173	.3339	.3737
H v A	-	-	-	-	-	-
H v L	-	-	-	-	2.007	
A v L	-	-	-	-	-	-

itself indicates that boys with high self-esteem see mother as more self-sufficient than father, whereas among self-derogatory boys father is seen as more self-sufficient than mother. Moreover, the mean difference is significant in the high self-esteem group. This echoes the trend discovered in Table VIII.7, where, it will be remembered, boys with low anxiety scores saw mother as more self-sufficient than father, while this trend was reversed in boys with high levels of anxiety. This trend, of course, only approached significance. These two sets of findings, however, in conjunction with those in Table VIII.8, do suggest that the relative extent to which mother and father display instrumental behaviour within the family is a significant factor in the aetiology of psychiatric predispositions among lower working-class boys.

There is one other significant mean difference in Table 14. In social class 3, boys with average self-esteem scores evaluate mother more highly than father ($t = 2.03, p < .05$). By contrast with both the high and low self-esteem groups, these boys also evaluate mother significantly more highly than father. However, because these differences emerge from comparisons between boys with average self-esteem and the other two groups, it is difficult to interpret the meaning of this trend.

There are no significant social-class differences in Table 14, in the perceived distance between mother and father among boys with the same level of self-evaluation.

In all, therefore, these Tables indicate that there is a virtually identical relationship in all social classes, between parental behaviour per se and self-evaluation. It is of course impossible to tell whether this indicates that some process of

identification or "modelling" is taking place, or whether the correlations in Table 11 are attributable to processes arising from the parent-child relationship itself. Similarly, the fact that there are no significant social-class differences within the three self-esteem groups in Table 14 indicates that broadly the same processes are implicated in all three social classes, in the genesis of attitudes toward the self. There does, however, seem to be a certain amount of social-class variation within this overall pattern, as is perhaps particularly indicated by the differences on the third component, between the high and low self-esteem groups in the lower working class.

A final test of social-class differences in the relationship between parental behaviour, self-conception and psychopathology is presented in Tables VIII.15 and 16. It will be remembered that in Table VI.5 significant social-class differences were discovered in the correlation with anxiety of the "d" score between self and the perceived ideals of both parents. This relationship is tested further in Tables 15 and 16, by working out the mean difference score for each of the anxiety groups in the three social classes, between boys' perceptions of themselves and their perceptions of what either parent would like them to be like. As in Tables VIII.11-14, scores on the first component for the appropriate element were used as the measures of self perception, and of boys' perceptions of their parents expectations of them. The findings in Table 15 are presented in the same way as in previous Tables.

Perhaps the most notable feature of this Table is the fact that among highly anxious middle-class boys the perceived difference between self and the expectations of both mother and father is significant

TABLE VIII.15

Social-class variations in relationship between anxiety and differences between boys' self-perceptions and perceptions of parents' expectations

Self v Mother's Ideal

Anxiety Score	Middle Class		Skilled Working Class		Lower Working Class	
	Mean	s.e.m.	Mean	s.e.m.	Mean	s.e.m.
High	.8479	.1984	.1080	.2627	.1263	.2880
Average	.1407	.1552	-.2665	.1907	-.2268	.2016
Low	.1392	.1506	-.2870	.1356	-.3154	.2125
H v A	2.799		-		-	
H v L	2.785		-		-	
A v L	-		-		-	

Self v Father's Ideal

Anxiety Score	Middle Class		Skilled Working Class		Lower Working Class	
	Mean	s.e.m.	Mean	s.e.m.	Mean	s.e.m.
High	.7346	.2004	.2279	.2173	.1124	.2537
Average	.1912	.1262	-.2108	.1354	-.4747	.1988
Low	.2766	.1590	-.2822	.1806	-.2591	.1639
H v A	2.282		*		*	
H v L	*		*		-	
A v L	-		-		-	

* = p < .1

($t = 4.273, p < .001$; $t = 3.666, p < .001$, respectively). Anxious middle-class boys would therefore seem to see themselves as falling short of the expectations of their parents - an interpretation which is supported by the fact that in this class group the distance between self-perception and mother's ideal is significantly greater in the high than in either the average or the low anxiety-groups. In the case of distance between self and father's ideal, the difference between the highly and averagely-anxious boys is significant at the 5 per cent level, but that between high and low anxiety only at the 10 per cent level.

In neither of the two remaining class groups do significant differences appear as between high, average and low-anxiety groups. In skilled working-class boys, however, those with a low level of anxiety see themselves as exceeding their mothers' expectations to a significant degree. Averagely-anxious lower working-class boys see themselves as better than they think their fathers wish them to be. Differences significant at the 10 per cent level appear in comparisons between boys with high anxiety-scores and those with average and low anxiety-scores in the skilled working class, and between the high and average anxiety-groups in the lower working class, these three differences all appearing in contrasts between scores for the mean difference between self-perception and father's ideal.

Four of the six sections in this Table give consistent trends in the magnitude of these mean difference scores from low, through average, to high anxiety. All three social classes give consistent trends on the difference scores between self and mother's ideal. Only the skilled working class shows a consistent trend in the

differences between self and father's ideal.

Also noticeable is the fact that the difference between self-perception and the perceived ideals of both parents is virtually the same in middle-class boys with low anxiety scores as it is in either group of working-class boys with a high anxiety score. This obviously reflects the significantly lower self-evaluation and significantly higher perceived parental expectations of self which were detailed in chapter IV, and elaborated in subsequent discussions. It is interesting, however, that this difference should remain when anxiety is held constant, and again indicates that there are genuine social-class differences in the way in which the processes implicated in this variable relate to the development of anxiety in the individual. Also of some interest is the fact that the distance between self-conception and parental expectation is significantly large in the high anxiety group in the middle class, whereas when significant distances appear in the working-class groups, it is in the low and average anxiety groups that they are found.

Table VIII.16 gives confirmation of these social-class differences. Eight significant differences in the perceived mean distance between self and parents' expectations of self, appear between groups with the same level of anxiety but belonging to different social classes. All of these significant differences appear in comparisons between the middle and the working class. All indicate that, when level of anxiety is held constant, middle-class boys see themselves as significantly farther away from their parents' expectations than do working-class boys.

The conclusions to be drawn from these two Tables would therefore seem to be, first, that among middle-class boys anxiety is very strongly

TABLE VIII.16

Significance of differences between groups with same level of anxiety, in different social classes, in perceived mean distance between self and parents' expectations of self

Self v mother's ideal

Anxiety Score	Middle Class v Skilled Working Class	Middle Class v Lower Working Class	Skilled Working Class v Lower Working Class
High	2.128	2.127	-
Average	-	-	-
Low	2.087	*	-

Self v father's ideal

Anxiety Score	Middle Class v Skilled Working Class	Middle Class v Lower Working Class	Skilled Working Class v Lower Working Class
High	2.011	1.952	-
Average	-	2.781	-
Low	2.226	2.338	-

related to processes of interpersonal perception, involving boys' views of themselves and of what their parents would like them to be like, while this relationship is much more tenuous among working-class boys. Again, it is of course impossible to say whether this gap in perceptions creates anxiety or vice-versa; or whether the two are related through the operation of some preceding or intervening variable. Second, Tables 15 and 16 indicate that there are definite social-class differences in the nature of this relationship.

Summary of findings on parental behaviour, self-conception and psychopathology.

The following would seem to emerge as the major findings of this section of the analysis.

- 1) Only in the skilled working class does the perception of parental behaviour per se correlate with anxiety. This trend is particularly marked in the case of perceptions of father's behaviour, where significant differences appear between the skilled working class and the other two groups (Tables VIII.1, 3 and 4). The content of these correlations suggests that anxious skilled working-class boys see father as lacking in succorance.
- 2) There appears to be no relationship between neuroticism and the perceived behaviour of parents in any of the three social classes (Tables VIII.2, 5 and 6).
- 3) On the principal-components data, there is a (non-significant) tendency for anxiety to be related to a perception of father as more self-sufficient than mother in the lower working class, with unanxious boys seeing mother as more self-sufficient than father. In this respect, the trend for unanxious lower working-class boys is significantly different from that for unanxious middle-class boys (Table VIII.7).

4) In the middle class, anxiety is correlated with a perception of father as more excitable than mother. In the lower working class, it correlates with a perception of mother as more excitable, weak and dependent than father. In the skilled working class, anxiety correlates with a perception of mother as less warm, fair, kind, approachable, dependable, easy to understand, and capable of making people feel at ease than father (Table VIII.8). There is a large number of significant differences between the social classes in the magnitude and direction of these correlations, with a particularly large number appearing in comparisons between the skilled and lower working class (Table VIII.8).

5) The trends in the relationship between neuroticism and the perception of mother vis-a-vis father on the principal-components data are rather inconsistent and hard to explain (Table VIII.9).

6) On the personal-construct data, neuroticism in the middle class is correlated with a perception of mother as more strict, cold, sure of self, strong and independent than father. Again, a large number of significant social-class differences appear in the strength and direction of these correlations (Table VIII.10).

7) In all three social classes, self-esteem is correlated with a perception of both mother and father as high in valued qualities and low in self-sufficiency. There are no significant social-class differences in these correlations (Table VIII.11).

8) A partial-correlation analysis suggests that in the middle and lower working class, but less so in the skilled working class, the correlation between parental behaviour and self conception/esteem is more important than that between parental behaviour and anxiety (Tables VIII.12 and 13).

- 9) Lower working-class boys with high self-esteem see mother as significantly more self-sufficient than father, and this trend is significantly different from that for boys with low self-esteem, where the trend is the reverse (Table VIII.14). No significant social-class differences appear within these trends, however.
- 10) Anxious middle-class boys evaluate themselves significantly lower than they think either of their parents would like them to be like. These differences are significantly greater than those for middle-class boys with lower anxiety scores. There are no significant trends in the working-class groups in the relationship between these two sets of variables (Table VIII.15).
- 11) There are significant differences in the magnitude of these differences between middle and working-class boys with the same level of anxiety (Table VIII.16).

SECTION III

DISCUSSION

The investigation described in the preceding pages was based on the model of an epidemiological enquiry, in which social class was treated as an independent variable to assess its effects on the relationship between parental behaviour, self-conception and psychopathology in a population of 392 adolescent boys. It is felt that the use of an epidemiological model has been justified by the results reported in chapters IV to VIII although - as was stated in chapter III - these findings obviously require to be verified in a comparison of criterion groups of "normals" and individuals with some diagnosed psychiatric condition. The information obtained from the present type of investigation could also be expanded on by obtaining more direct and detailed information through interviews with boys and their parents to enable one to examine such things as the accuracy of interpersonal perceptions, and parents' reports of their own behaviour towards their sons.

The effectiveness of the kind of study reported in this dissertation is, however, obviously dependent on the quality of the measures used to test the main hypotheses. It may therefore be useful to precede a discussion of the major findings by an evaluation of the measures used in the study. This should enable one to highlight not only those factors which need to be borne in mind in interpreting any findings, but also any improvements which might be effected in the methodology of similar investigations in the future. We shall consider in turn the measures used to control the variables of social class, psychopathology, and the perception of behaviour.

1) Social class as a research variable

In analyses of the relationship between social status and human behaviour, there is something of a tendency to view classes as homogeneous entities. This tendency has obviously reflected itself throughout the present investigation.

There is a certain amount of justification for such a practice. The notions that individuals can be divided into sub-groups which bear to each other a relationship of social inequality, and that individuals who occupy similar positions in this hierarchy share certain common values, preferences and modes of behaviour, are not only traditional assumptions of sociology, but are also supported by a substantial research-literature in such fields as education and child-rearing. It may be remembered that Davis and Havighurst (op. cit.), for example, found social class to be a more powerful predictor of parents' child-rearing behaviour than ethnic-group membership. At the end of his discussion of the use of social class as a research variable, Melvin Kohn (1963, p. 472) also concludes that:

"even when all such considerations are taken into account, the empirical evidence clearly shows that being on one side or the other of the line that divides manual from non-manual workers has profound consequences for how one rears one's children."

For the researcher this practice obviously has a heuristic value, in that it allows him to make ready comparisons between different groups, and to generalise from one set of research-findings to another - even when these findings are derived from completely different populations, and from studies which use rather different methods of classification. This tendency has been very much apparent for example in chapter II of the present study.

It is, however, important that this should be recognised as a heuristic, and not as an accurate reflection of reality. In the first place, social status is measured by a number of rather crude indices based mainly on occupation which, although it is strongly associated with other such aspects of total socio-economic status as educational level, income, heredity and style of life, is by no means perfectly correlated with them. On these grounds alone, one would therefore expect a fair amount of diversity within any group which is defined in terms of the occupational status of the male breadwinner alone. Cultural differences may also introduce differences between groups sharing the same general occupational level, but living in different geographical areas (see, for example, Klein, op. cit.). In the case of the present study, a further caveat must perhaps be entered, since in the interests of ease and clarity in the analysis, the five social-class groups in the Registrar General's classification were reduced to three.

Second, it should be noted that while the differences which various studies have elicited in the average reported behaviour of individuals from different social-class groups have been statistically significant, the actual magnitude of these differences is in general rather small. This of course means that there is a considerable degree of overlap between the classes themselves in the behaviours on which significant differences have emerged. This point can, for example, be made with reference to the work of Kohn. It is certainly apposite to the present study. It is difficult to correct this tendency, beyond entering appropriate caveats into one's interpretations of such findings. The problem itself obviously arises from the fact that, while social-science data are the probabilistic

data of statistics, these must be interpreted within the positivistic model which has been chosen as the paradigm of scientific procedure in the study of human behaviour.

2) Psychopathology

Psychopathology was chiefly measured by the "second-order" factors of anxiety and neuroticism in the High School Personality Questionnaire. In retrospect, this presented certain practical difficulties which may to some extent have detracted from its usefulness as a research-instrument.

The H.S.P.Q. proved relatively time-consuming both for subjects to complete, and for the researcher to score and analyse. To take the latter point first, it was necessary to score all 14 "first-order" factors, in order that the "second-order" factors could be derived from them; and while the H.S.P.Q. answer-sheet is so arranged that all 14 first-order factors can be plotted from two ingeniously-devised stencils, when this procedure was repeated over 392 subjects, it took a considerable amount of time. The second-order factors were then calculated by adding and subtracting a set of weightings based on these first-order factors (see Appendix II), which again proved relatively demanding in terms of time. In fact, the neuroticism factor involved three stages, since the anxiety score was included in the calculation for this measure. For the relatively large numbers involved in this investigation, it may therefore have been more convenient - all things being equal - to have used a more direct* measure of psychopathology, such as the Taylor Manifest Anxiety Scale, or the junior version of the M.P.I. This argument

* In the sense that the psychopathology score is obtained in one, rather than two or three stages.

is perhaps reinforced by the fact that the first-order factors were hardly ever used in the analysis. Indeed, one was in danger of being swamped by the amount of information one had at one's disposal for each boy.

A more important practical consideration relates to the motivation of the subjects. The reliability and validity of any questionnaire depend on the interest and cooperation of the subject. On average, the time required for completion of the test was 35-40 minutes and while the great majority of the subjects seemed interested and cooperative in the test-situation, it is likely that a number (unknown) of boys would lose concentration, and their responses to questions in the latter sections of the test become less reliable. This seems particularly likely to be a problem among the less academically able or literate members of the sample, and since there is a lot of evidence to suggest that these are also likely to come from working-class - and particularly lower working-class - backgrounds, one must allow for the possibility of test-bias in the results. It could for example be argued that the lower correlations between neuroticism and the self-concept in the working-class samples reflect a less consistent use of words in these groups. On these grounds also, therefore, the Taylor Manifest Anxiety Scale, or the junior M.P.I. may have been more appropriate for the present investigation, since both take less time to complete.

But having said that, it should also be noted that the test was specifically designed for children of the age-group included in the research, that the questions have been reviewed and tested in a number of validation studies, to make them comprehensible

to children of all levels of literacy, and that there were no requests to have the meaning of questions clarified, despite periodic instructions by the author throughout each test-situation that boys should indicate whether they were "not quite sure" of the meaning of any question.

3) Perceptual measure

A semantic differential/repertory-grid type of measure such as that used in the present study would seem to be a useful instrument for measuring perceptions of self and significant others. The fact that a number of findings correspond roughly to prediction is particularly encouraging, although these obviously need to be checked in studies of actual behaviour within the family, and of parents' perceptions of and preferences for the behaviour of their teenage sons in different social-class groups. The actual test-format adopted in the present investigation - specifying the construct at the top of the page, and asking subjects to rate a number of key figures on that construct - seems also to have been relatively successful. This is particularly the case for those findings relating to the perception of parents relative to each other where it seems reasonable to assume that, since it is possible for subjects to make direct comparisons between elements in assigning a rating to each, data derived from the present type of measure are more valid indicators of differential perceptions than would be those obtained from a more conventional type of rating-instrument, where no direct comparisons are involved; although it should also be noted that this advantage did not exist in comparisons between self-perceptions and views of parents' perceptions of self, and of parents' expectations

of self, since these latter elements had to be rated in the conventional manner on separate sheets.

A number of improvements might, however, be made on the present measure, in any similar studies carried out in the future. Perhaps the basic criticism of the measure used in the study is that it generated too much information which created several problems in the analysis of the data.

In particular, the instrument contained too many elements. It may be remembered that additional elements such as "my best friend" and "the person I dislike most" were originally included for two basic reasons. First, it was felt that such elements were likely to elicit opposite responses on individual constructs, and thereby produce a more definite factor-structure. Second, it was thought it might prove interesting to carry out comparisons between (perceptions of) mother or father, and such figures as the person a boy disliked or admired most. This latter point obviously remains a possibility, but was not pursued in the present study beyond the comparison of mean scores presented in Table IV.8, simply because of the large amount of extra work which would have been caused by such an analysis. Indeed, a number of additional analyses which could also have been carried out on variables more directly related to the main hypotheses of the research were not undertaken for the same reason.

The first point raises rather more substantial issues. The factors which emerged from the principal components analysis seemed considerably more stable than one would normally expect, and in particular gave an overwhelming proportion of the total variance in the test to the first (evaluative) component. Had a smaller range of elements been used, it seems likely that a more varied factor-

structure would have emerged, with perhaps a smaller portion of the variance being accounted for by the first component.

Whether the problem of the large numbers of constructs which had relatively low weights on the second and third components - so introducing the possibility of distortion of individual component scores - arose from the number of elements or constructs used in the measure is an open issue. The converse of this was that the construct "silent" had an overwhelmingly large loading on the third component, and so made it possible for the contributions of constructs like "excitable" and "independent", which had relatively high loadings on the same component, to be masked. This problem was perhaps particularly evident in the discrepancies between Tables 7 and 8, and 9 and 10 respectively in chapter VIII. The problem was of course dealt with by conducting separate analyses for the construct and the principal-component scores. But if a smaller number of elements and/or constructs had been included in the measure, it might have been possible to conduct a principal components analysis in the more usual way* - on a correlation matrix derived from the raw data - which might have yielded a rather different set of components.

* It will be remembered that the principal components analysis was conducted on a matrix of mean scores because the computer could not handle an analysis involving 204 pieces of data for 392 cases, which was the magnitude of the mechanical problem posed by a more conventional analysis.

The study described in the preceding pages was designed to test the validity and practical utility of a particular model of behavior. It is to be noted that the model in question is not a simple one, but a complex one, and that the study was designed to test the validity and practical utility of a particular model of behavior. It is to be noted that the model in question is not a simple one, but a complex one, and that the study was designed to test the validity and practical utility of a particular model of behavior.

CHAPTER X

INTERPRETATION AND DISCUSSION OF THE PRINCIPAL FINDINGS

During the course of the study it was found that the results of the study were in general in line with the findings of the present investigation. The results of the study were in general in line with the findings of the present investigation. The results of the study were in general in line with the findings of the present investigation.

1) The symbolic environment

The parallel and hypothesis presented in chapter II postulated that, because different social (class) groups are often subjected to similar types of behavior, a pattern of behavior will be formed in an identical manner by persons of different (class) groups. The results of the study were in general in line with the findings of the present investigation.

The study described in the preceding pages was designed to test the validity and practical utility of a particular model of the role played by the social environment in the genesis of mental disorder. Briefly, that model postulated that a simple "billiard-ball" model of causality is inappropriate for research in this area, and that one must, first, take into account the individual's consciousness of himself, and the extent to which this influences his behaviour; and second, examine behaviour and other events external to the individual in the context of a set of values, meanings and expectations which may act as a "filter" between the individual and these external events, and modify their impact on individuals from different social backgrounds. The model was tested by drawing a set of "middle-range" assumptions from these general postulates, and from these a set of ten hypotheses were in turn derived, which formed the basis of the present investigation.

Bearing in mind the points made in chapter IX concerning the measures used in the study, to what extent is that model supported by the findings of the present investigation? Our discussion will be organised around the two concepts - the self and the symbolic environment - which formed the basis for the whole research. We shall start with a consideration of the latter concept.

1) The symbolic environment

The paradigm and hypotheses presented in chapter II postulated that, because different social (-class) groups may attach different meanings to similar types of behaviour, a pattern of behaviour performed in an identical manner by parents from different (class) groups will tend to have different consequences for the self-concept

and/or level of psychopathology of boys from these groups. The results of the study give a degree of support to the hypotheses derived from this assumption, although the trends involved are often rather slight, and certain detailed predictions relating to the direction of these differences have had to be modified.

As was indicated in chapter II, however, the paradigm itself contains a flaw which was not detected at the outset of the research. Since the family experience of children will on the whole be restricted to events within their own family, their perceptions of, and their expectations concerning, parental behaviour will be limited by their own family experience. It therefore seems unlikely that children will acquire expectations which are significantly different from their parents' behaviour. In other words, while the behaviour of parents in different social-class groups may conform to certain normative patterns which relate to their position in the social-class hierarchy, the norms themselves will not be apparent to children whose experience will largely be confined to the behaviour of their own parents. Thus, father's failure to behave in accordance with a class-determined/related norm of leniency, for example, in handling his son, will not necessarily be perceived by the son as a departure from a norm, since the son's standards and expectations concerning paternal behaviour will to a large extent be based on the way father behaves within his own family.

While these observations in no way invalidate the notion of the "symbolic environment" and its importance for determining the way in which the individual reacts to other aspects of his environment, it would seem that the existing paradigm needs to be modified in some way, to account for the findings of the present investigation.

It is now suggested that these findings may be accounted for in terms of those types of family structure or experience which are functional for groups or individuals whose lives are conditioned by particular types of (symbolic) environment. Such a paradigm was in fact (unconsciously) implied in the preamble to hypotheses 5a and 5b in chapter II.

The application of the concept of "function" to the present analysis introduces the possibility of two different types of explanation. First, is the possibility that particular patterns of marital/parental behaviour develop in different social-class groups, in order to permit the family to operate as an effective unit in the face of demands which are typically made on the family or its members by other parts of the social system. It is a notion akin to this which McKinley (1964), for example, appears to have in mind when he postulates that, in order to relieve the feelings of frustration they experience in the (occupationally-determined) reward-system of society, working-class individuals embrace a pattern of "role-compensation", in which certain ascribed roles relating to sex, the peer-group, etc., and the characteristics - such as masculinity and femininity - attached to them assume an "exaggerated" importance. Over time, these psychological responses become traditional and expected modes of adjustment, with the aggression produced by their frustration becoming channelled into the norms of being "tough", etc. In the present case, one would argue that when, for some reason, either of the parents does not conform to these "functional" patterns of behaviour, the structure of the family is disrupted, with deleterious consequences for the socialisation/security of the children.

A second type of explanation would relate the concept of

"function" to the behaviour and adjustment of the boys, rather than of the parents. This concentrates on those types of family-experience which are most likely to produce those characteristics in the boy, which will enable him to adapt to the demands of the kind of social environment in which (as a member of a particular social-class group) he will normally tend to find himself.

Let us now examine the findings in more detail, in the light of this revised framework of explanation. We shall start by considering the findings on the relationship between birth-order, self-conception and psychopathology.

a) Birth-order findings

It will be remembered that class differences in the relationship between birth-order and the personality variables emerged particularly between middle-class and lower working-class boys. Thus, only sons from lower working-class homes are more anxious and more introverted than their late-born counterparts; whereas in middle-class boys this pattern is reversed, with only and first-born boys being less anxious and somewhat more extraverted than late-borns. Only sons of middle-class families are also significantly less anxious than only working-class boys, while lower working-class late-borns are significantly more extraverted and less neurotic than middle-class late-borns. With regard to self-conception, only sons from lower working-class families are significantly more self-derogatory than their late-born peers. There are no corresponding trends in the middle and skilled working-class samples on this variable, however.

In attempting to explain these findings, it may be useful to concentrate first on the only children in the sample, since their

common situation - the fact that their opportunities for interaction within the family are restricted to contacts with parents - possibly contains fewer complicating features than is the case with the other birth-order groups. Following the discussion above, two kinds of explanation may be offered for the class-differences in the trends within this group. The first would focus on the consequences for only children, of social-class differences in parental role-behaviour. Thus, the way in which the (Edinburgh) lower working-class family is organised may encourage such behaviour on the part of parents towards their children that a boy with no interpersonal "cushions" will become anxious, introverted, and low in self-esteem. There may, on the other hand, be something inherent in a family situation where a boy interacts exclusively with adults, which produces or enhances certain personality-characteristics (either cognitive or emotional), and which thereby fits boys for certain kinds of experience, rather than others. If the general life-experience of a middle-class boy demands that he possess certain qualities which are more easily acquired through constant close interaction with adults, then his lower level of anxiety may reflect the greater ease with which the only son is able to adapt to these demands.

It is in fact possible to test the relative effectiveness of at any rate the former explanation, by examining the mean perceptions which only, first and late-born boys in the different social-class groups hold of their parents. If the first type of explanation is correct, then significant differences in perceived parental behaviour should appear as between the different birth-order groups in the different social classes; and these should be consistent with the trends in psychopathology and self-evaluation scores described in

chapter VII. If no such trends are elicited, then this would tend to support the second explanation.

The relevant figures are presented in Tables X.1 to 3. All t tests in Tables 1 and 2 were calculated using the formula for small samples.

Table X.1 details the relationship in the three social classes, between birth order and the perception of father. Four significant differences appear in this Table, which is two or three in excess of the number one would expect to occur by chance. A further two differences are significant at the 10 per cent level. Thus, in the skilled working class, first-born boys evaluate their father significantly more highly than do late-born boys. In the same social class, only sons see their father as significantly less authoritarian than first-borns, and a 10 per cent significant difference appears on the same dimension between only and late-born boys. In the lower working class, only boys report their father as being significantly more authoritarian than either first or late-born boys.

With regard to perception of mother, two significant differences appear, both of them in the skilled working class. In Table X.2, late-born skilled working-class boys evaluate their mother lower than first-borns. This mirrors the pattern found for fathers in Table 1. There is also a difference between the two groups in the extent to which mother is seen as self-sufficient, with late-borns seeing mother as significantly higher on this quality. Again, this is similar to the trend in Table 1, where a difference between these two birth-order groups is significant at the 10 per cent level. No significant differences emerge in Table 3.

TABLE X.1

Social-class differences in the relationship
between birth order and the perception of father

First Component

Birth Order	Middle Class		Skilled Working Class		Lower Working Class	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Only	-.1670	.7660	.0281	.8123	-.0442	1.1655
First	.0930	.8603	-.3095	.8064	-.3008	.6187
Late	.1033	.7766	.3623	1.0419	-.1483	.7831
t for: lv2	-	-	-	-	-	-
lv3	-	-	-	-	-	-
2v3	-	-	2.687	-	-	-

Second Component

Only	.2068	.9230	.6917	.5282	-.7679	1.0225
First	-.1391	.8490	-.0980	.6552	.0953	.9047
Late	-.0230	.7221	-.0210	1.1005	.2292	.9834
t for: lv2	-	-	2.917	-	2.172	-
lv3	-	-	*	-	2.522	-
2v3	-	-	-	-	-	-

Third Component

Only	.1707	1.3231	-.4492	1.3520	.3811	1.7382
First	-.1825	1.1893	.3417	1.2042	.2940	1.0492
Late	-.3407	1.1880	-.3207	1.5729	.1475	1.2814
t for: lv2	-	-	-	-	-	-
lv3	-	-	-	-	-	-
2v3	-	-	*	-	-	-

Taken as a whole, these findings indicate that there is a relationship between birth order (and in particular, first-born status) and the perception of parents in social class 3. There is also a relationship between being an only child and a perception of father as authoritarian in classes 4 and 5. No relationship between these two variables appears to exist in the middle class.

It is rather difficult to interpret these trends. While it is feasible, in common-sense terms - that their perception of father as authoritarian should be related to the higher anxiety-level of only lower working-class boys, it has already been established (Table VIII.1) that anxiety does not correlate with perceived authoritarianism in either parent in any social class. Late-born skilled working-class boys see both mother and father as both lower in valued qualities and more self-sufficient than their first-born counterparts, but this corresponds in neither empirical nor common-sense terms, to their lower anxiety and higher extraversion scores. Common sense might again suggest that there is a relationship between the lower perceived level of authoritarianism in the fathers of only skilled working-class boys and the greater extraversion of these boys. However, neither common sense nor empirical findings suggest this is related to the higher average anxiety score of these same boys.

One therefore concludes that there is a relationship between birth order and parental behaviour (or at any rate, the perception of that behaviour) in skilled working-class, and to a lesser extent in lower working-class boys. These perceptions do not, however, seem to relate to psychopathology levels in the relevant birth-order groups.

TABLE X.2

Social-class differences in the relationship
between birth order and the perception of mother

First Component

Birth Order	Middle Class		Skilled Working Class		Lower Working Class	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Only	-.0601	.7433	-.0364	.7177	-.0965	1.1298
First	-.1250	.6439	-.1469	.5312	-.1666	.7448
Late	.1219	.8397	.2964	.9345	-.0724	.7703
t for: 1v2	-	-	-	-	-	-
1v3	-	-	-	-	-	-
2v3	-	-	2.077	-	-	-

Second Component

Only	.1968	.7822	.3236	.6262	-.2677	1.4621
First	-.0371	.7677	.1272	.8122	.0705	.9411
Late	-.0616	.7807	.2104	.8933	.1827	.8815
t for: 1v2	-	-	-	-	-	-
1v3	-	-	-	-	-	-
2v3	-	-	-	-	-	-

Third Component

Only	-.2437	1.4168	-.5880	1.6653	.3530	1.8561
First	.1718	1.0696	.2665	1.1557	.0196	1.2657
Late	-.2227	1.3020	-.4235	1.3410	-.0170	1.3808
t for: 1v2	-	-	-	-	-	-
1v3	-	-	-	-	-	-
2v3	-	-	2.094	-	-	-

TABLE X.3

Social-class differences in the relationship between birth order and the perception of mother relative to father

First Component

Birth Order	Middle Class		Skilled Working Class		Lower Working Class	
	Mean d	s.e.m.	Mean d	s.e.m.	Mean d	s.e.m.
Only	.1472	.2459	-.0648	.2017	-.0523	.5705
First	-.2182	.1334	.1625	.1646	.1342	.1100
Late	.0041	.0806	-.0657	.1385	.0759	.0866
t for: lv2	-	-	-	-	-	-
lv3	-	-	-	-	-	-
2v3	-	-	-	-	-	-

Second Component

Only	.0509	.4213	-.3681	.1200	.5002	.7847
First	.1020	.1972	.2253	.1926	-.0206	.1714
Late	-.0386	.1104	.2315	.2097	-.0464	.1144
t for: lv2	-	-	-	-	-	-
lv3	-	-	-	-	-	-
2v3	-	-	-	-	-	-

Third Component

Only	-.4953	.4692	-.1387	.3944	-.0282	.8481
First	.2817	.2594	.1147	.2893	-.2341	.2297
Late	.1179	.1691	-.1029	.2711	-.1680	.1431
t for: lv2	-	-	-	-	-	-
lv3	-	-	-	-	-	-
2v3	-	-	-	-	-	-

The former type of explanation is therefore to some extent undermined by these findings. This perhaps gives more support to an explanation of the second type. The following is accordingly presented as a tentative explanation, based on the second model, of the trends in the birth-order data.

Several writers have drawn attention to the importance of peer-relations in the life of the lower working-class child (see, for example, Trasler, 1963; McKinley, op. cit.; Klein, op. cit.) - indeed, a whole body of literature on delinquency and the sociology of education uses this as an explanatory variable. It has also been noted that within working-class groups of age peers, a generally hedonistic style of existence prevails. Members are, for example, encouraged to pursue short-term goals and the immediate gratification of wants (Jackson and Marsden, 1962; Klein, op. cit.); and to express feelings openly and directly (for which Bernstein's work on social-class differences in vocabulary and language-structure has obvious relevance). Conversely, peer-group experiences assume relatively little importance in the life of the middle-class child. In the more home and parent-centred middle-class environment, greater stress is laid on the autonomy and emergent personality of the child (Bernstein and Young, 1967), and the socialisation-process tends to foster the development of self-control through the internalisation of moral standards (Kohn, 1959a, 1959b). Moreover, and bearing in mind the great importance attached to educational attainment by middle-class parents, the only child or the child from a small family would seem to be at something of an advantage in a middle-class environment since he has more ready access to adults, and is consequently more likely to develop the more sophisticated vocabulary

and modes of speech which Bernstein, among others, has shown to be of great importance for educational success.

If these speculations are correct, it would follow that the only child from a lower working-class home is more self-derogatory, anxious, introverted and shy than the late-born boy, because his family experience has given him little opportunity to develop the social or interpersonal "skills" necessary for successful integration into his peer group. It may also be that in certain cases, the fact that working-class parents have had only one child is an indication of aspirations for higher status, so that boys also have this kind of pressure against forming ties with others from their own area. At the opposite end of the birth-order scale, the late-born child, accustomed from early years to cooperation and competition with other children, finds less difficulty in spontaneously interacting with peers. In the middle class, only sons are possibly less anxious than late-borns because their socialisation experience has equipped them more effectively at the verbal and cognitive levels for the more constrained interactions with others which may form an important element of the middle-class ethos, so that their styles of thought and action are less at variance with the expectations held by influential individuals in the environment within which they find themselves.

b) Findings relating to parental behaviour

With regard to psychopathology, the results indicate that only in the skilled working class is parental behaviour per se related to psychopathology in the boy. This trend is particularly marked in the case of the perceived behaviour of father, with significant

correlations and significant social-class differences in the magnitude of these correlations, appearing on both construct and principal-component scores. This trend only holds good for anxiety, however, with neuroticism showing a uniformly low correlation with parental behaviour in all three classes.

Among lower working-class boys, there are modest correlations between anxiety and a perception of father as more independent, relaxed and strong than mother. Perceptions of mother relative to father on the third principal component show a trend consistent with these personal-construct data, but significant only at the 10 per cent level. These same perceptions show a similar - significant - relationship with the level of self-evaluation of boys in this group. There is no such trend on the neuroticism scores, however.

In the middle class, there is no significant relationship between anxiety and any of the data on parental perceptions, with the exception of a perception of father as more excitable than mother, on which the correlation with anxiety is rather small, but significantly different from that for the lower working class. There is, however, a (non-significant) trend with anxiety on the perception of mother in relation to father on the third component, which is the opposite of that for the lower working class, and on which the difference between the two groups with low anxiety levels is significant. A number of moderate correlations appear between the construct data and the neuroticism factor, a high score on this trait correlating with a perception of mother as more strict, cold, sure of self, strong and independent than father.

In the skilled working class, adolescent anxiety would therefore seem to be straightforwardly related to the perception the boy has of

his father, but whether this perception relates to the personality and behaviour of the father, or to the quality of his relationship with his son, is a question which can obviously only be answered by further investigation. The same pattern applies - though to a rather smaller extent - in the case of the boy's relationship with his mother. In the case of the perceived behaviour of father, the correlation with anxiety holds good even when the self-concept is held constant.

The skilled working-class family would therefore seem to be structured in such a way that if (and for whatever reason) a boy perceives his parents, and in particular his father, as lacking in succorance (Table VIII.4) and other highly-valued qualities (Tables VIII.1 and 4), then he is psychiatrically "at risk". On intuitive grounds this pattern is perhaps what one would have expected to occur in any group of boys, irrespective of social class. The problem is obviously to explain why it should be restricted to the skilled working class.

In the first instance, it seems likely that - by contrast with their fellows in the labouring, driving, etc. occupations which comprise social classes 4 and 5 in the Registrar General's classification - men in those occupations which constitute social class 3 will enjoy rather higher wages and more stable working hours, with less shift-work, less need to work overtime, etc. They may thus be in a position to spend more time at home and have more regular contact with their children, and consequently play a more direct part in their socialisation than lower working-class fathers. But while this may bring skilled working-class fathers nearer to the position within the family of their middle-class counterparts,

Kohn's work also suggests that the values they will emphasise, and perhaps also the styles of behaviour they themselves will typically adopt in socialising their children will make the quality of their relationship with their son different from that prevailing in the middle-class family.

It is accordingly suggested that skilled working-class marital and parental roles and responsibilities have become organised around the (putative) fact that the father now has more time to spend with his family. As a result, he is expected to play a major role in the socialisation of his (male) children and, as they grow older, will be expected to share his leisure time and pursuits with them. His behaviour towards his children is governed by working-class assumptions, however, and this means that his emphasis is on overt behaviour, rather than on motives and feelings. Data which will be discussed later in this chapter suggest that this makes for a more relaxed and possibly more open relationship between father and son in the skilled working class, whereas in the middle class, the awareness of fairly strong parental expectations creates something akin to the "personality absorption" which Green (1946) sees as an inherent element in the middle-class socialisation process.

In conclusion, it is suggested that if a skilled working-class father is unable - for whatever reason - to play the role expected of him in the family in terms either of the amount of time he devoted to his children, or of the nature/quality of his behaviour towards them, the family's structure is disrupted and the child's mental health placed in jeopardy. This is obviously an explanation of the first type outlined earlier in this chapter, in which it is assumed that certain types of family structure are "functional" for groups whose lives are shaped by wider (and perhaps mainly economic) forces in

society. If one or other spouse does not conform to the demands placed on him/her, and which allow the roles of others in the family to be articulated with each other, the family is placed under some strain and suffers a disadvantage in fulfilling its basic social functions.

It need hardly be said that this explanation is no more than tentative, based as it is on certain trends and suggestions that emerge from the data. A more thorough test of it, and identification of the more detailed processes involved, obviously demands a further study.

On the whole, the correlation and partial correlation analyses presented in chapter VIII suggest that there is a rather tenuous relationship between parental behaviour and psychopathology in the other two groups. The differences between these groups in the relationship between anxiety/neuroticism and the (perceived) behaviour of mother in relation to father do however contain interesting similarities to the findings of Kohn and Clausen (1956) and Heilbrun (1961), although the sampling-procedures of the latter should make one cautious in extrapolating from his findings.* It may be remembered that Kohn and Clausen found that high-status schizophrenics, by contrast with their controls, reported that mother had been the dominant authority figure in the family during their early adolescence, while the pattern for low-status controls was nearer that of high-status schizophrenics than high-status normals.

* Apart from the fact that he was dealing only with females, Heilbrun a) used the educational level of the mother as his index of social class, and b) his questionnaires were distributed by post, eliciting only a 40 per cent response rate from the mothers of both schizophrenics and normals.

While the findings of the present study are parallel, rather than identical, to these, they are sufficiently similar to suggest that psychopathology in these social-class groups is in some way related to the structure of authority that prevails within the family. In the middle class, a perception of father as more endowed than mother, in the lower working class, a perception of mother as more endowed than father with instrumental qualities, seems to give boys a degree of immunity from psychopathology. When these respective structures are disrupted, then boys are placed "at risk".

As to whether these trends may be explained in terms of the kinds of relationships and experience to which boys will be exposed in middle or lower working-class families with these structures, or of the extent to which such family-structures produce in boys the personal qualities which will enable them to adapt to the demands of their respective social environments outside the family, it is beyond the powers of our data to demonstrate. On the face of it, however, the former seems the more plausible explanation - at any rate for the lower working-class group - if only because it is difficult to accept that the demands their social environment will typically place on skilled and lower working-class boys are so different that they require such different family experiences to develop the skills to meet them.

This raises the possibility that, given the pressures exerted on the family by the wider social structure, the authority structures outlined above are "functional" for (Edinburgh) middle-class and lower working-class families in enabling them to carry out such primary tasks as socialisation. The mother has often been described as the linch-pin of the traditional working-class family, and Spinley (reported in Klein, op. cit.) has attributed this to the possibility

that the male head of family is mostly absent from the home at work and, out of working hours, with male peer groups. In the present case if the mother is, by dint of her personality, incapable of sustaining her ascribed role, and/or if the father - for whatever reason - takes on a more active role within the family, the structure of the family may be disrupted so that it is unable to function effectively, and this may have pathogenic consequences for the children.

It should however be noted that there is a discrepancy between Tables V.18 and VIII.8 which it is difficult to reconcile totally with this account. Table VIII.8 established a (modest) relationship between lower-class anxiety and a perception of mother as less independent, less strong, and more excitable than father. However, Table V.18 indicates that, by contrast at any rate with middle-class mothers, the lower working-class mother is significantly more excitable and weak, although also more independent than father. The two former constructs may relate to the general (ascribed) sex role, rather than to the marital/parental role of the lower working-class mother, but it still seems difficult to unite these two apparently divergent trends within the suggested explanation.

This explanation accounts for these working-class trends relating to family structure, in terms of the demands of the occupational system. It seems rather more difficult to account for the middle-class data in quite the same way. One may plausibly argue that the middle-class family is organised around a relatively dominant male head of household, but it is hard to discern why this pattern should be functional in the same sense as that of the lower working-class family, and why its disruption should be pathogenic. This may,

following the kind of explanation offered by McKinley (op. cit.) be related to the relatively high prestige enjoyed by the middle-class father in the hierarchy of occupational status and reward. Alternatively, it may relate to a need of boys in middle-class circles to be able to identify with a father who emphasises certain (functionally necessary) male characteristics, by dint of the contrast he presents to a female. Again, however, the data allow one to do no more than raise this as a possibility.

A rather different explanation has been presented by Rose Lamb^U Coser (1964), in her interesting paper on "Authority and structural ambivalence in the middle-class family". Coser suggests that, as middle-class marital roles have become more egalitarian, so has the father's position within the family been weakened to some extent. Coser argues that, as the mother has taken on more of the responsibility for dealing with relationships between the family and the external social system (a function which Coser claims to have originally been the major province of the father), she has not delegated to her husband any of the powers she enjoys in maintaining the "internal system" of the family. As a result, mother is a) a potentially domineering figure within the family, and b) tends to use two simultaneous frames of reference (the "internal" and the "external" systems of the family) to evaluate the child's behaviour. This creates difficulties of adjustment for the child, since he never knows by what set of criteria his behaviour may be judged. If the two sets of expectations are separated from each other, father communicating one and mother the other, the child can live up to each in turn. In addition, he will differentiate between these spheres of activity and learn about their meaning for him in his

relationships with other role-partners. When the two are fused in one person, the child is cast into a chronic state of ambivalence concerning his roles and behaviour. It is an explanation very akin to this which Bateson has presented in his "double-bind" theory of schizophrenia (Bateson, Jackson et al., 1956).

In relation to all of the above discussion of middle and lower working-class family patterns and psychopathology, however, it is essential that four factors be borne in mind. First, what emerges from the data in this section of the analysis is a series of trends, rather than any hard-and-fast indicators. This applies to the findings presented by Kohn and Clausen, as much as to those of the present study. These authors, for example, found no significant difference between the reported parental behaviours of lower-class schizophrenics and controls. In the present investigation, the trends discovered were relatively small, they were not reflected in both principal-component and personal-construct data, and did not even emerge on the same psychopathology variables in the two classes. Second, the instrument used to measure parental behaviour does not permit one to discern whether these behaviours reflect the way in which roles are performed within the family, or more generalised personality-characteristics which may be more tangentially related to role-performance. Third, and as already indicated, there are discrepancies between Tables V.18 and VIII.8, which are not entirely consistent with the explanation proffered for the lower working-class trends. Finally, and as will be expanded on below, Tables VIII.12 to 15 suggest that, in these two groups, the self-concept acts as an important intervening variable between parental behaviour and psychopathology.

2) The self

a) Parental behaviour, parental expectations and the self

With relatively minor exceptions, the relationship between self-conception and parental behaviour seems relatively consistent across social class. This finding is confirmed in Tables X.4 and 5 where, when the self-ideal is held constant, the correlation between parental behaviour and the self remains significant in all social classes. When self-perception is held constant, the relationship between parental behaviour and the self-ideal also remains significant. One may therefore conclude that parental behaviour is a significant factor in the formation and/or maintenance of both a self-concept and a self-ideal in adolescent boys, irrespective of social class.

That the relationship between parental behaviour and the self is susceptible to the influence of social class is suggested by the trends in Table VIII.14, where it was discovered that low self-esteem in low working-class boys is related to a perception of father as more self-sufficient than mother. In general, however, the relationship between these two variables seems stable across social class, indicating that the same general processes underlie the development of the self concept (at any rate, as it relates to parental behaviour) in different social (-class) groups.

The findings in chapter V also indicate that working-class boys' reports of what their parents would like them to be like are correlated with the boys' own self-ideals, rather than their perceptions of themselves as they really are. They also suggest that, among working-class boys, the self-concept is correlated with the self-ideal rather than with parental expectations. In the middle class, however, while the relationship between the self ideal and parental expectations is

the same as in the working class, the (already small) relationship between self concept and self ideal disappears when parental ideals are held constant, with the relationship between the self and father's ideal remaining significant (Table V.12). These class differences in the degree of correlation between the self concept and the self ideal are confirmed in Tables X.4 and 5, where the relationship between self and self ideal is non-existent in the middle class when perceptions of mother and father are held constant, while it remains significant in the two working-class samples, and actually increases in magnitude in the skilled working class.

Parental behaviour may therefore be concluded to be fairly universally related to the development of both a self-concept and a self-ideal, with no substantial differences in the relationship between parental behaviour and either of these two variables when the other is held constant. A reasonable interpretation of these results would seem to be that a process of modelling and/or identification takes place, with both parents used by the boy as models, although it has still to be explained why - if such a process takes place - there should be such a small relationship between the self and the self-ideal in middle-class boys. Alternatively, these trends might indicate that, as established by Rosenberg (1963), parents who show little interest in their child are more destructive of the self-esteem of the child than those who are overtly critical of the child. Gecas (1971) has also found that the level of self-evaluation among adolescents is significantly related to the extent to which they perceive their parents as supportive.

The data presented in chapter V also indicate that the relationship between parental ideals, the self ideal and the self is sensitive

TABLE X.4

Partial correlations between self, self ideal
and mother's perceived behaviour

Mother held constant

	Middle Class	Skilled Working Class	Lower Working Class
Partial Coefficient	.0623	.6185	.2825
t	-	10.141	2.989

Self ideal held constant

	Middle Class	Skilled Working Class	Lower Working Class
Partial Coefficient	.4281	.3843	.2049
t	5.058	5.363	2.125

Self held constant

	Middle Class	Skilled Working Class	Lower Working Class
Partial Coefficient	.4152	.3862	.2900
t	4.873	5.394	3.075

TABLE X.5

Partial correlations between self, self ideal and father's perceived behaviour

Father held constant

	Middle Class	Skilled Working Class	Lower Working Class
Partial Coefficient	.0955	.6269	.2650
t	-	10.367	2.764

Self ideal held constant

	Middle Class	Skilled Working Class	Lower Working Class
Partial Coefficient	.4509	.3616	.2744
t	5.394	4.997	2.896

Self held constant

	Middle Class	Skilled Working Class	Lower Working Class
Partial Coefficient	.3043	.3522	.3266
t	3.411	4.848	3.507

to the effects of social class. Whether or not because of the non-significant relationship between the self and the self-ideal in this group, the self-concept of middle-class boys seems more "permeable", in the sense that it is more closely related to what the boys think their father would like them to be like than to any notion of what the boys themselves would like to be like. In other words, the self-concept of middle-class boys seems more influenced by processes of interpersonal perception than is the case among working-class boys.

b) Psychopathology and the self

When psychopathology was correlated with self-conception across the total study-population, a strong and significant relationship was found to exist between low self-evaluation and anxiety, neuroticism and introversion. This result corresponds to the findings of such writers as Rosenberg (1965), Coopersmith (op. cit.) and Kaplan (op. cit.), although it may be worth noting that the correlation between anxiety and the perception of self on the two remaining components was zero, while for neuroticism and introversion, these correlations were significant. When these correlations were controlled for social-class effects, however, significant differences were found to exist in the strength of these relationships. In general, it seems that the self concept (as measured on all three components) is more pervasively related to psychopathology among middle-class than among working-class boys - its relationship to neuroticism in particular being significantly stronger in the former group. The personal-construct data are not entirely congruent with these findings, however. While anxious middle-class boys perceive themselves as significantly more lacking in the qualities of independence and strength of personality than their working-class counterparts, there

seem to be no important class differences in the nature of the qualities associated with neuroticism. Table VI.⁵13 also indicates that, consistent with the findings of Manis (1959), psychopathology is directly related to the extent to which a person sees himself as dissimilar from his parents.

A major problem in interpreting these findings is of course that of determining the direction of the causal connection between the self and psychopathology, since it could equally well be argued from these data that a particular view of the self gives rise to psychopathological processes in the individual, or that psychopathology causes individuals to take a particular view of themselves. The findings in Tables VIII.12 and 13 indicate that self-evaluation acts as a mediator between parental behaviour and anxiety, the relationship between the latter two variables being reduced virtually to zero in the middle and lower working class when parental behaviour is held constant, but remaining significant in the skilled working class. But while this finding does help to clarify the relationship between these three variables (at any rate, in the middle-class and lower working-class samples), it obviously says nothing about the causal flow between them. It is still possible that high anxiety gives rise to low self-esteem, which in turn creates a tendency for boys to perceive their parents in certain ways (or in turn, that families tend to structure themselves in certain ways around boys who show signs of low self-esteem), just as it is also possible that parental behaviour gives rise to low self-esteem, which in turn creates anxiety.

An analysis of the relationship between anxiety and the perceived distance between the self and what the boy feels his parents would like him to be like, shows that only in the middle class does a

statistically-significant association exist between these two variables. There is a very large discrepancy between these two sets of perceptions among middle-class boys with high anxiety scores. These findings are supported by the trends on the "d" scores in Tables VI.5 and 6, in which it was established that the relationship between both anxiety and neuroticism and the "d" scores for self/mother's ideal and self/father's ideal were very significantly greater in the middle than in the working class.

Among middle-class boys therefore, the self-concept appears to be a) more pervasively related to psychopathology and b) more "permeable" - in the sense of being more easily disrupted by processes of interpersonal perception - than is the case among working-class boys. This suggests that the cognitive and symbolic processes implicated in the development and maintenance of the self-concept are more important determinants of the behaviour and level of personal adjustment of middle-class than of working-class boys.

One could at least partially explain these trends in terms of the greater importance of ("formal") language (Bernstein, 1961) and the use of "elaborated" linguistic codes in the middle-class socialisation-process. With a more powerful and sophisticated set of linguistic tools at his disposal, the middle-class child may have a greater capacity for self-consciously analysing and evaluating his own behaviour. To this extent, one may therefore expect that he will attempt to make his behaviour consistent with his conception of himself (or, of course, vice-versa).

The greater permeability of the middle-class self-concept again suggests that a significant part of the middle-class socialisation process is conducted at a symbolic, rather than an overt behavioural

level. It was established in Tables V.1 and 2 that middle-class parents have significantly higher expectations of their sons on the valued qualities which comprise component 1. Table V.6 also indicated that there was a very much larger difference between perceptions of self and of parental expectations for self in the middle class than in the working classes, the class differences between these being highly significant. The picture suggested is therefore one of rather high standards set by middle-class parents, with the sons seeing themselves as falling short of these. This is consonant with Kohn's findings that the middle-class socialisation process is aimed at instilling in the child a set of standards which make him capable of regulating his own behaviour, and may also indicate that - in line with the findings of Rosen (1964b) - middle-class children are disciplined by reason and appeals to guilt. As has been demonstrated in the partial-correlation analyses, these parental expectations become incorporated into the self-ideal (rather than the actual self) but the self-ideal is not - among middle by contrast with working-class boys - incorporated into the self (reflected in the non-significant correlation between these two elements). This may indicate that parental expectations are set so high in the middle class that the son begins to devalue himself because he feels he cannot attain the goals set by his parents - goals which he accepts for himself (as indicated by the correspondence between self-ideals and parental ideals). The fact that there are much larger correlations in the middle class between anxiety and neuroticism and the "d" score for self v ideal self would support this interpretation.

In the skilled working class, by contrast, there is a very substantial correlation between the self and the self ideal, and

the "d" score between these two elements is only slightly related to anxiety and neuroticism. There is also a significant correspondence between how boys see themselves, and what they think their parents would like them to be like. The socialisation process for this group would therefore seem to be less demanding than is the case for the middle class, in the sense that parents set lower (and possibly more realistic) standards which, as Tables IV.8 and V.6 show, correspond closely to and are even less demanding than, the boys' conceptions of themselves.

The self-concept of these boys is therefore less pervasively related to psychopathology (Table VI.2), and seems to be more integrated, in the sense that self and self-ideal are in closer correspondence to each other, than among middle-class boys. It is also less susceptible to the influence of interpersonal perception, which may in part explain the correspondence between self and self-ideal. The indications are, however, that it is more sensitive to the direct influence of father's (perceived) behaviour. As was shown in Table VIII.12, the skilled working class was the only group in which the relationship between the self and perception of father remained significant when anxiety was held constant. Whether this indicates that the pressures towards identification with father are stronger in this group, or whether it indicates the influence of a succorant, highly-valued father-figure within the family-structure of the skilled working class is a question which can only be resolved by further research.

Within the lower working class, while similar trends are evident, to those for skilled working-class boys, certain important differences also exist. Thus, while there is no significant relationship among

these boys, between neuroticism and the "d" for self - self-ideal, a significant association does appear between this perceptual variable and anxiety. The correlation between the self and the self-ideal on the first principal component is also much smaller (though significant) in this group than in the skilled working class, and this reflects itself in substantially smaller partial correlations between these two variables when perceptions of father and mother are held constant (Tables V.11 and 12). The close correspondence between the self and the self-ideal would therefore seem to be peculiar to the skilled working class.

The self per se is again less extensively related to psychopathology in this group than in the middle class, in that it correlates significantly with introversion and anxiety, but not neuroticism. It also seems to be relatively impervious to the influence of interpersonal perception, in the sense that anxiety is not related to a discrepancy between how a boy views himself and what he thinks his parents would like him to be like. With regard to this last point, an interesting finding is contained in Table X.6, which details the relationship in each social-class group, between anxiety and the self-ideal per se. As can be seen, the only group in which a significant relationship exists between these two variables is the lower working class, this correlation being significantly greater than that for either of the other two groups. Significant correlations have of course already been established in all social-class groups between anxiety and both the self-concept and the distance (as measured by Osgood's "d") between the self and the self-ideal. What Table X.6 indicates is that in the lower working class, the self-ideal,

TABLE X.6

Relationship between self-ideal and anxiety

Social class	Anxiety x self-ideal
Middle	.0186
Skilled Working	.0440
Lower Working	<u>-.2935</u>
t for: 1v2	-
1v3	2.360
2v3	2.548

irrespective of its relationship to the self-concept, is significantly associated with anxiety. Thus, the higher the standards a lower working-class boy sets for himself, the more anxious he is. This could indicate that lower working-class boys who set (relatively) high standars^d for their own behaviour have greater difficulty in becoming integrated into their peer-culture, and that this is a factor in the genesis of anxiety in this group. As with so many of our other findings, however, this is a possibility which requires to be investigated further, and at a more direct level.

STUDY LIST
BIBLIOGRAPHY

School	Department	Address
Lincoln Park	Elementary	Chicago, Ill.
Madison	Elementary	Chicago, Ill.
Washington	Elementary	Chicago, Ill.
Woodlawn	Elementary	Chicago, Ill.
Wright	Elementary	Chicago, Ill.

APPENDICES

Appendix A	Chicago Public Schools	Chicago, Ill.
Appendix B	Chicago Public Schools	Chicago, Ill.
Appendix C	Chicago Public Schools	Chicago, Ill.
Appendix D	Chicago Public Schools	Chicago, Ill.
Appendix E	Chicago Public Schools	Chicago, Ill.
Appendix F	Chicago Public Schools	Chicago, Ill.
Appendix G	Chicago Public Schools	Chicago, Ill.
Appendix H	Chicago Public Schools	Chicago, Ill.
Appendix I	Chicago Public Schools	Chicago, Ill.

APPENDIX I

Schools used in the study

<u>School</u>	<u>Electoral Ward</u>	<u>Sample</u>
Ainslie Park	Pilton	Working class
BelleVue	St. Bernard's, Calton, Central Leith.	Working class
Broughton	Calton, St. Andrew's, St. Bernard's.	Working class
David Kilpatrick	Central Leith	Working class
Firrhill	Oxgangs (Colinton)	Working class and Middle class
George Heriot's	Colinton, Craiglockhart, Morningside.	Middle class
George Watson's	Colinton, Craiglockhart, Morningside.	Middle class
James Clark	Calton, Holyrood, St. Bernard's.	Working class
John Watson's	Colinton, Craiglockhart, Morningside.	Middle class
Norton Park	Central Leith, Calton.	Working class
St. Anthony's	Calton, Central Leith.	Working class
Scotus Academy	Colinton, Craiglockhart, Morningside.	Middle class

APPENDIX II

The H.S.P.Q.

1) Description of first-order factors

	<u>Low Score Description</u>	<u>High Score Description</u>
A	Reserved	Outgoing
B	Less intelligent	More intelligent
C	Affected by feelings	Emotionally stable
D	Phlegmatic	Excitable
E	Obedient	Assertive
F	Sober	Happy-go-lucky
G	Disregards rules	Conscientious
H	Shy	Venturesome
I	Tough-minded	Tender-minded
J	Vigorous	Doubting
O	Self-assured	Apprehensive
Q2	Group-dependent	Self-sufficient
Q3	Casual	Controlled
Q4	Relaxed	Tense

2) Derivation of second-order factors

a) Extraversion - is the sum of:

	"sten"	score	for	A	x	2
	"	"	"	H	x	2
	"	"	"	F	x	2
11-	"	"	"	Q2		

b) Anxiety - is the sum of:

	"sten"	score	for	D	x	2
	"	"	"	Q4	x	2
	"	"	"	O	x	2
11-	"	"	"	Q3	x	2
11-	"	"	"	C		
11-	"	"	"	H		

c) Neuroticism - is the sum of:

Anxiety score \div 10

	"sten"	score	for	I
11-	"	"	"	E
11-	"	"	"	F

APPENDIX III

PERSONAL CONSTRUCT MEASURE

MEYER, A.F. and KASSEL, S.B. (1953). Interclass differences in organizational role and attitudes toward children. American Journal of Orthopsychiatry, 23, pp. 376-377.

MERZBACH, E. (1944). Intergroup Psychology. New York: The Behavioral.

MERTON, R. and BAIR, J.M. (1953). The Evaluation of Personal Satisfaction. London: Academic Press.

MERZ, H., Jr. (1947). Birth order, environment, schizophrenia and culture. International Journal of Psychiatry, 3, pp. 439-448.

MERTON, R. (1936). The Structure of Social Structure (translated by J. Merton). London: Routledge.

MERTON, R.B. (1936). Structure and Function in Social Psychology (Chicago Research Center Study no. 7). Cambridge, Mass.: Harvard University Press.

MERTON, R. (1936). Stratification. In H. Staudy (ed.) Stratification in Social Research. London: Routledge.

MERTON, R.B. (1936). Stratification. New York: Free Press.

REFERENCES

MERTON, R.B. and MERTON, J.M. (1937). The consequences of labelling. American Journal of Orthopsychiatry, 7, pp. 25-31.

MERTON, R.B. and MERTON, J.M. (1937). The Social Structure of Society: A Study in the Sociology of Knowledge. London: Allen Lane.

MERTON, R. (1936). Social class and linguistic development: a theory of social learning. In Halsey, M.L., Flint, J. and Erikson, J.A. (eds). Intelligence, Environment and Society. New York: Free Press.

MERTON, R. and MERTON, J.M. (1937). Social class differences in the relevance of language to socialization. American Journal of Orthopsychiatry, 7, pp. 1-10.

MERTON, R.B. (1934). Schizophrenia and deviant stages of development. Journal of Abnormal Psychology, 18, pp. 135-157.

MERTON, R.C. (1939). "Social structure and the development of the social structure of a small city", by R.C. Merton and H.L. Kohn. In H.L. Kohn (ed.) Anthropology of Social Structure. Washington, D.C.: American Association for the Advancement of Science.

MERTON, J.M. (1961). Self concepts of children and their intelligence, achievement, interests and attitudes. J. Abnormal Psychology, 62, pp. 24-34.

- ABERLE, D.F. and NAEGELE, K.D. (1952). Middle-class fathers' occupational role and attitudes toward children. American Journal of Orthopsychiatry, 22, pp. 366-378.
- ABRAHAMSON, M. (1966). Interpersonal Accommodation. New York: Van Nostrand.
- BANNISTER, D. and MAIR, J.M. (1968). The Evaluation of Personal Constructs. London: Academic Press.
- BARRY, H., jr. (1967). Birth order, achievement, schizophrenia and culture. International Journal of Psychiatry, 3, pp. 439-444.
- BASTIDE, R. (1972). The Sociology of Mental Disorder (translated by J. McNeil). London: Routledge.
- BAUER, R.G. (1952). The New Man in Soviet Psychology (Russian Research Center Study no. 7). Cambridge, Mass.: Harvard University Press.
- BECHHOFFER, F. (1969). Occupations. in M. Stacey (ed.) Comparability in Social Research. London: Heinemann.
- BECKER, H.S. (1963). Outsiders. New York: Free Press.
- BECKER, H.S. (ed.) (1964). The Other Side: Perspectives on Deviance. New York: Free Press.
- BENTZ, W.K. and EDGERTON, J.W. (1971). The consequences of labelling a person as mentally ill. Social Psychiatry, 6, pp. 29-33.
- BERGER, P.L. and LUCKMANN, T. (1967). The Social Construction of Reality: a Treatise on the Sociology of Knowledge. London: Allen Lane.
- BERNSTEIN, B. (1961). Social class and linguistic development: a theory of social learning. in Halsey, A.H., Floud, J. and Anderson, C.A. (eds). Education, Economy and Society. New York: Free Press.
- BERNSTEIN, B. and HENDERSON, D. (1969). Social class differences in the relevance of language to socialisation. Sociology, 3, pp. 1-20.
- BILLS, R.E. (1954). Self-concepts and Rorschach signs of depression. Journal of Consulting Psychology, 18, pp. 135-137.
- BIRCH, H.G. (1959). Comment on "Relation of schizophrenia to the social structure of a small city", by J.A. Clausen and M.L. Kohn. in B. Pasamanick (ed.) Epidemiology of Mental Disorder. Washington, D.C.: American Association for the Advancement of Science.
- BLEDSOE, J.C. (1964). Self concepts of children and their intelligence, achievement, interests and anxiety. J. Individual Psychology, 20, pp. 55-58.

- BRIM, O.G., jr. (1958). Family structure and sex role learning by children: a further analysis of Helen Koch's data. Sociometry, XXI, pp. 1-16.
- BRIM, O.G., jr. (1960). Personality development as role-learning. in Iscoe, J. and Stevenson, H. (eds) Personality Development in Children. Austin: Univ. of Texas Press.
- BRIM, O.G., jr. (1966). Socialisation through the life cycle. in Brim, O.G. and Wheeler, S. (eds) Socialisation after Childhood: Two Essays. New York: Wiley.
- BRONFENBRENNER, U. (1958). Socialisation and social class through time and space. in Maccoby, E.E., Newcomb, T.M. and Hartley, E.L. (eds) Readings in Social Psychology. New York: Henry Holt.
- BRONFENBRENNER, U. (1961). The changing American child - a speculative analysis. Journal of Social Issues, 17, pp. 6-18.
- BROWN, R.W. (1958). Is a boulder sweet or sour? Contemporary Psychology, 3, pp. 113-115.
- BUROS, O.K. (ed.) (1966). The Mental Measurements Yearbook. Highland Park, New Jersey: Rutgers Univ. Press.
- CALDWELL, B.M. (1964). The effects of infant care. in Hoffman, M.L. and Hoffman, L.W. (eds) Review of Child Development Research, vol. 1. New York: Russell Sage Foundation.
- CARSTAIRS, G.M. (1959). The social limits of eccentricity: an English study. in M.K. Opler (ed.) Culture and Mental Health (ch. 16). New York: Macmillan.
- CATTELL, R.B. and BELOFF, H. (1962). Handbook for the Junior-Senior High School Personality Questionnaire. Champaign, Illinois: Institute for Personality and Ability Testing.
- CLAUSEN, J.A. and KOHN, M.L. (1954). The ecological approach in social psychiatry. American Journal of Sociology, 40, pp. 140-49.
- CLAUSEN, J.A. and KOHN, M.L. (1959). Relation of schizophrenia to the social structure of a small city. in B. Pasamanick (ed.) Epidemiology of Mental Disorder. Washington, D.C.: American Association for the Advancement of Science.
- CLAUSEN, J.A. (1966a). Research on socialisation and personality development in the United States and France: remarks on the paper by Professor Chombart de Lauwe. American Sociological Review, 31, pp. 248-257.
- CLAUSEN, J.A. (1966b). Family structure, socialisation and personality. in Hoffman, L.W. and Hoffman, M.L. (eds) op. cit., vol. 2.

- CLAUSEN, J.A. (ed.) (1968). Socialisation and Society.
Boston: the Social Science Research Council of America.
- COLBY, A. (1955). Energy and Structure in Psychoanalysis.
New York: Ronald Press.
- COOLEY, C.H. (1902). Human Nature and the Social Order.
New York: Scribners.
- COOPERSMITH, S. (1967). The Antecedents of Self-Esteem.
San Francisco: W.H. Freeman.
- COSER, R.L. (1964). Authority and structural ambivalence in the middle-class family. in R.L. Coser (ed.) The Family: its Structure and Functions. New York: St. Martin's Press.
- COUCH, C.J. (1962). Family role specialisation and self-attitudes in children. Sociological Quarterly, 3, pp. 115-121.
- DAVIS, A. and HAVIGHURST, R.J. (1946). Social class and color differences in child rearing. American Sociological Review, 11, pp. 698-710.
- DIGGORY, J. (1966). Self-Evaluation: Concepts and Studies.
New York: Wiley.
- DOHRENWEND, B.P. (1966). Social status and psychological disorder: an issue of substance and an issue of method. American Sociological Review, 31, pp. 14-34.
- DOMRENWEND, B.P. and DOHRENWEND, B.S. (1969). Social Status and Psychological Disorder: a Causal Inquiry. New York: Wiley Interscience.
- DOUGLAS, J. (1967). The Social Meanings of Suicide. Princeton, New Jersey.
- DUNHAM, H.W. (1961). Social structures and mental disorders: competing hypotheses of explanation. in Causes of Mental Disorders: A Review of Epidemiological Knowledge, 1959. New York: Millbank Memorial Fund.
- DUNHAM, H.W. (1965). Community and Schizophrenia. Detroit: Wayne State University Press.
- DURKHEIM, E. (1952). Suicide (translated by J.A. Spaulding and G. Simpson, ed. G. Simpson). London: Routledge.
- DURKHEIM, E. (1964). The Rules of Sociological Method (translated by S.A. Solovay and J.H. Mueller; ed. G.E.G. Catlin). New York: Free Press.
- ELDER, G.H. (1962). Structural variations in the child rearing relationship. Sociometry, 25, pp. 241-262.

- ELDER, G.H. (1963). Parental power legitimation and its effects on the adolescent. Sociometry, 26, pp. 50-65.
- ELIAS, N. (1969). Sociology and psychiatry. in S.H. Foulkes and G.S. Prince (eds) Psychiatry in a Changing Society. London: Tavistock.
- EMMERICH, W. and SMOLLER, F. (1964). The role patterning of parental norms. Sociometry, 27, pp. 382-390.
- ERICSON, M.C. (1946). Child rearing and social status. American Journal of Sociology, 52, pp. 190-192.
- ERLENMEYER-KIMLING, L., van den BOSCH, E. and DENHAM, B. (1969). The problem of birth order and schizophrenia: a negative conclusion. British Journal of Psychiatry, 115, pp. 659-78.
- FARIS, R. and DUNHAM, H.W. (1939). Mental Disorders in Urban Areas. Chicago: Chicago University Press.
- FREUD, S. (1945). Civilisation and its Discontents. London: Hogarth.
- GECAS, V. (1971). Parental behaviour and dimensions of adolescent self-evaluation. Sociometry, 34, pp. 466-482.
- GERARD, D.L. and HOUSTON, L.G. (1953). Family setting and the social ecology of schizophrenia. Psychiatric Quarterly, 27, pp. 90-101.
- GIBBS, J.P. (1966). Conceptions of deviant behaviour: the old and the new. Pacific Sociological Review, 9, pp. 9-14.
- GOFFMAN, E. (1961). Asylums. New York: Doubleday Anchor.
- GOFFMAN, E. (1969). The insanity of place. Psychiatry, 32, pp. 357-88.
- GOLDBERG, E.M. and MORRISON, S.L. (1963). Schizophrenia and social class. Brit. J. Psychiatry, 109, pp. 785-802.
- GOVE, W.R. (1970). Societal reactions as a factor in mental illness: an evaluation. American Sociological Review, 35, pp. 873-84.
- GRANVILLE-GROSSMAN, K.L. (1966). Birth order and schizophrenia. British Journal of Psychiatry, 112, pp. 1119-1126.
- GREEN, A.W. (1946). The middle-class male child and neurosis. American Sociological Review, 11, pp. 31-41.
- HARE, E.H. (1956a). Mental illness and social conditions in Bristol. Journal of Mental Science, 102, pp. 349-57.
- HARE, E.H. (1956b). Family setting and the urban distribution of schizophrenia. Journal of Mental Science, 102, pp. 753-760.
- HARTLEY, R.E. (1959). Sex-role among elementary school-age girls. Marriage and Family Living, 21, pp. 457-468.

- HEILBRUN, A.B., jr. (1961). Maternal authoritarianism, social class and filial schizophrenia. Journal of General Psychology, 65, pp. 235-41.
- HOFFMAN, L.W. and HOFFMAN, M.L. (eds) (1964). Review of Child Development Research, vol. 1. New York: Russell Sage Foundation.
- HOFFMAN, L.W. and HOFFMAN, M.L. (eds) (1966). Review of Child Development Research, vol. 2. New York: Russell Sage Foundation.
- HOLLINGSHEAD, A.B. and REDLICH, F.C. (1958). Social Class and Mental Illness. New York: Wiley.
- HOPE, K. (1969). A guide to social investment. Applied Social Studies, 1, pp. 21-28.
- HOROWITZ, F.D. (1962). The relationship of anxiety, self-concept and sociometric status among fourth, fifth and sixth grade children. J. Abnormal and Social Psychology, 65, pp. 212-214.
- INKELES, A. (1959). Personality and Social Structure. in R.K. Merton, L. Broom and L.S. Cottrell, jr. Sociology Today: Problems and Prospects. New York: Basic Books.
- INKELES, A. (1968). Society, Social Structure and Child Socialisation. in J.A. Clausen (ed.) (1968) op. cit.
- JACKSON, B. and MARSDEN, D. (1962). Education and the Working Class. London: Routledge.
- KAPLAN, B., REED, R. and RICHARDSON, W. (1956). A comparison of the incidence of hospitalised and non-hospitalised cases of psychosis in two communities. American Sociological Review, 21, pp. 472-79.
- KAPLAN, H.B. (1969). Mental illness as a social problem. in E.O. Smigel (ed.) Handbook of Social Problems. Chicago: Rand-McNally.
- KAPLAN, H.B. (1970a). Self-derogation and childhood family structure. J. of Nervous and Mental Disease, 151, pp. 13-23.
- KAPLAN, H.B. (1970b). Self-derogation and adjustment to recent life experiences. Archives of General Psychiatry, 22, pp. 324-331.
- KAPLAN, H.B. (1971). Social class and self-derogation: a conditional relationship. Sociometry, 34, pp. 41-64.
- KAPLAN, H.B. and POKORNY, A.D. (1969). Self-derogation and psychosocial adjustment. Journal of Nervous and Mental Disease, 149, pp. 421-434.
- KAPLAN, H.B. and MEYEROWITZ, J.H. (1970). Social and psychological correlates of drug abuse. Social Science and Medicine, 4, pp. 203-225.

- KAPLAN, H.B. and POKORNY, A.D. (1970). Age-related correlates of self-derogation: report of childhood experiences. Brit. J. Psychiatry, 117, pp. 533-534.
- KAPLAN, H.B. and POKORNY, A.D. (1971). Self-derogation and childhood broken home. J. of Marriage and the Family, 33, pp. 328-337.
- KENNEDY, M.C. (1964). Is there an ecology of mental illness? International Journal of Social Psychiatry, 10, no. 2, pp. 119-33.
- KITSUSE, J.J. (1962). Societal reactions to deviant behaviour: problems of theory and method. Social Problems, 9, pp. 247-256. Reprinted in H.S. Becker (ed.) (1964) op. cit., pp. 9-21.
- KLATSKIN, E.H. (1952). Shifts in child care practices in three social classes under an infant care programme of flexible methodology. Amer. J. of Orthopsychiatry, pp. 52-61.
- KLEIN, J. (1965). Samples from English Cultures (2 vols). London: Routledge.
- KLEINER, R.J. and PARKER, S. (1963). Goal-striving, social status and mental disorder: a research review. American Sociological Review, 28, pp. 189-203.
- KOHN, M.L. (1959a). Social class and parental values. American Journal of Sociology, LXIV, pp. 337-351.
- KOHN, M.L. (1959b). Social class and the exercise of parental authority. American Sociological Review, 24, pp. 352-366.
- KOHN, M.L. (1963). Social class and parent-child relationships: an interpretation. American Journal of Sociology, LXVIII, pp. 471-480.
- KOHN, M.L. (1968). Social class and schizophrenia: a critical review. J. Psychiatric Research, 6, pp. 157-73.
- KOHN, M.L. (1969). Class and Conformity: a Study in Values. Homewood, Ill.: Dorsey.
- KOHN, M.L. (1972). Class, family and schizophrenia: a reformulation. Social Forces, 50, pp. 295-313.
- KOHN, M.L. and CARROLL, E.E. (1960). Social class and the allocation of parental responsibilities. Sociometry, 23, pp. 372-392.
- KOHN, M.L. and CLAUSEN, J.L. (1956). Parental authority behaviour and schizophrenia. American Journal of Orthopsychiatry, 26, pp. 297-313.

- KOHN, M.L. and SCHOOLER, C. (1969). Class, occupation and orientation. American Sociological Review, 34, pp. 659-678.
- KUHN, M. (1960). Self-attitudes by age, sex and professional training. Sociological Quarterly, 1, pp. 39-55.
- KUNITZ, S.J. (1970). Equilibrium theory in social psychiatry: the work of the Leightons. Psychiatry, 33, pp. 312-28.
- LAING, R.D. (1965). The Divided Self. London: Pelican.
- LAING, R.D., PHILLIPSON, H. and LEE, A.R. (1966). Interpersonal Perception: a Theory and a Method of Research. London: Tavistock.
- LANGNER, T.S. and MICHAEL, S.T. (1963). Life Stress and Mental Health. New York: Free Press.
- LAWLEY, D. and MAXWELL, A. (1963). Factor Analysis as a Statistical Method. London: Butterworth.
- LAWTON, D. (1968). Social Class, Language and Education. London: Routledge.
- LEIGHTON, A.H. (1959). My Name is Legion (vol. 1 of the Stirling County Study of Psychiatric Disorder and Sociocultural Environment). New York: Basic Books.
- LEIGHTON, D.C., HARDING, J.S., et al. (1963). The Character of Danger: Psychiatric Symptoms in Selected Communities (vol. 3 of the Stirling County Study). New York: Basic Books.
- LEMERT, E. (1962). Paranoia and the dynamics of exclusion. Sociometry, 25, pp. 2-20.
- LINDESMITH, A.R. and STRAUSS, A.L. (1968). Social Psychology (8th edition). New York: Holt, Rinehart and Winston.
- MACINTYRE, A. (1958). The Unconscious: a Conceptual Analysis. London: Routledge.
- McKINLEY, D.G. (1964). Social Class and Family Life. New York: Free Press.
- MACMURRAY, J. (1961). Persons in Relation. London: Faber.
- McPARTLAND, T.S. and CUMMING, J.H. (1958). Self-conception, social class and mental health. Human Organisation, 17, no. 3, pp. 24-29.
- MANIS, M. (1958). Personal adjustment, assumed similarity to parents, and inferred parental-evaluations of the self. Journal of Consulting Psychology, 22, pp. 481-485.
- MARTINDALE, R. (1961). The Nature and Types of Sociological Theory. London: Routledge.

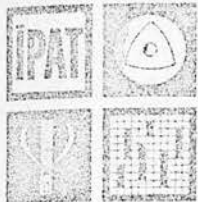
- MATZA, D. (1964). Delinquency and Drift. New York: John Wiley and Sons.
- MEAD, G.H. (1934). Mind, Self and Society. Chicago: Chicago University Press.
- MECHANIC, D. and VOLKART, E.H. (1961). Stress, illness behaviour and the sick role. American Sociological Review, 26, pp. 51-58.
- MILLS, C.W. (1943). The professional ideology of social pathologists. American Journal of Sociology, 49, pp. 165-80.
- MISHLER, E.G. and SCOTCH, N.A. (1963). Sociocultural factors in the epidemiology of schizophrenia: a review. Psychiatry, 26, pp. 315-51.
- MUNROE, R.L. (1957). Schools of Psychoanalytic Thought. London: Hutchinson.
- MYERSON, A. (1941). Review of "Mental Disorders in Urban Areas", by R. Faris and H.W. Dunham. American Journal of Psychiatry, 96, pp. 995-97.
- NEWSON, J. and NEWSON, E. (1963). Infant Care in an Urban Community. London: Allen and Unwin.
- OSGOOD, C.E. and LURIA, Z. (1954). A blind analysis of a case of multiple personality using the semantic differential. Journal of Abnormal and Social Psychology, 49, p. 579.
- OSGOOD, C.E., SUCI, G.J. and TANNENBAUM, P.H. (1957). The Measurement of Meaning. Urbana, Ill.: University of Illinois Press.
- PEARLIN, L.I. and KOHN, M.L. (1966). Social class, occupation and parental values: a cross-national study. American Sociological Review, 31, pp. 466-479.
- PETRAS, J.W. and CURTIS, J.E. (1968). The current literature on social class and mental disease in America: critique and bibliography. Behavioral Science, 13, pp. 382-98.
- PHILLIPS, D.L. (1968). Social class and psychological disturbance: the influence of positive and negative experiences. Social Psychiatry, 3, pp. 41-46.
- POPPER, K.R. (1961). The Poverty of Historicism. London: Routledge.
- PRESLY, A.S. (1969). Concept-scale interaction in the semantic differential and its implications for factor scores. British Journal of Psychology, 60, pp. 109-113.
- PRIMROSE, E.J.R. (1962). Psychological Illness: a Community Study. London: Tavistock.

- RAMZY, I. (1965). From Aristotle to Freud: a few notes on the roots of psychoanalysis. in I.G. Sarason (ed.) op. cit.
- RECKLESS, W.C., DINITZ, S. and MURRAY, E. (1956). Self-concept as an insulator against delinquency. American Sociological Review, 21, pp. 774-76.
- REGISTRAR GENERAL (GENERAL REGISTER OFFICE) (1966). Classification of Occupations. London: H.M.S.O.
- RENNIE, T.A.C., SROLE, L., et al. (1957). Urban Life and Mental Health. American Journal of Psychiatry, 113, 831-36.
- REX, J. (1961). Key Problems in Sociological Theory. London: Routledge.
- ROBERTSON, A. and KAPUR, R.L. (1972). Social change, emotional distress, and the world view of students: an empirical study of the existentialist ethic and the spirit of suffering. British Journal of Sociology, XXIII, pp. 462-77.
- ROBINSON, W.S. (1950). Ecological correlations and the behaviour of individuals. American Sociological Review, 15, pp. 351-57.
- ROGERS, C.R. (1951). Client-Centered Therapy: its Current Practice, Implications, and Theory. New York: Houghton Mifflin.
- ROGERS, C.R. (1952). Client-centered psychotherapy. Scientific American, 187, no. 5, pp. 66-74 (Scientific American reprint no. 448).
- ROSE, A.M. (1962). A systematic summary of symbolic interaction theory. in A.M. Rose (ed.) Human Behavior and Social Processes: an Interactionist Approach. London: Routledge.
- ROSEN, B.C. (1964a). Social class and the child's perception of the parent. Child Development, 35, pp. 1147-1153.
- ROSEN, B.C. (1964b). Family structure and value transmission. Merrill-Palmer Quarterly, 10, pp. 59-76.
- ROSENBERG, M. (1963). Parental interest and children's self-conceptions. Sociometry, XXVI, pp. 35-49.
- ROSENBERG, M. (1965). Society and the Adolescent Self-Image. New Jersey: Princeton University Press.
- ROSENGREN, W.R. (1961). The self in the emotionally disturbed. American Journal of Sociology, 66, pp. 454-62.
- ROWITZ, R. and LEVY, L. (1968). Ecological analysis of treated mental disorders in Chicago. Archives of General Psychiatry, 19, pp. 571-579.
- RUNCIMAN, W.G. (1963). Social Science and Political Theory, chs. 1 and 6. Cambridge: Cambridge University Press.

- RUSHING, W.A. (1969). Deviance, interpersonal relations and suicide. Human Relations, 22, pp. 61-76.
- SARASON, J.G. (ed.) (1965). Science and Theory in Psychoanalysis. New York: Van Nostrand.
- SCARPITTI, F.R. et al. (1960). The 'good' boys in a high delinquency area: four years later. American Sociological Review, 25, pp. 555-59.
- SCHACHTER, S. and SINGER, J.E. (1962). Cognitive, social and physiological determinants of emotional state. Psychological Review, 69, pp. 379-399.
- SCHATZMAN, L. and STRAUSS, A. (1966). A sociology of psychiatry: a perspective and some organising foci. Social Problems, 14, no. 1, pp. 3-22.
- SCHEFF, T.J. (1966). Being Mentally Ill: a Sociological Theory. London: Weidenfeld and Nicholson.
- SCHNORE, L.F. (1958). Social morphology and human ecology. American Sociological Review, 63, pp. 620-34.
- SCOTT, W.A. (1958). Research definitions of mental health and mental illness. Psychological Bulletin, 55, pp. 29-45.
- SEARS, R.R., MACCOBY, E.E. and LEVIN, H. (1957). Patterns of Child Rearing. Evanston, Ill.: Row, Peterson.
- SEWELL, W.H. (1952). Infant training and the personality of the child. American Journal of Sociology, 58, pp. 150-159.
- SEWELL, W.H. (1961). Social class and childhood personality. Sociometry, 24, pp. 340-356.
- SEWELL, W.H. (1963). Some recent developments in socialisation theory and research. Annals of the American Academy of Political and Social Science, vol. 349, pp. 163-181. Philadelphia: Amer. Acad. Pol. Soc. Sci.
- SEWELL, W.H. (1968). MENTAL HEALTH: Social Class and Personal Adjustment. International Encyclopedia of the Social Sciences. New York: Crowell Collier and Macmillan, Inc.
- SEWELL, W.H., MUSSEN, P.H. and HARRIS, C.W. (1955). Relationships among child-training practices. American Sociological Review, 20, pp. 137-148.
- SHEPHERD, M., OPPENHEIM, B. and MITCHELL, S. (1971). Childhood Behaviour and Mental Health. London: University of London Press.
- SHIBUTANI, T. (1955). Reference groups as perspectives. American Journal of Sociology, 60, pp. 562-69.

- SILVERS, R.J. (1966). Rejoinder to Weinstock. British Journal of Sociology, XVII, pp. 64-9.
- SOLOMON, L. and NUTTALL, R. (1967). Sibling order, premorbid adjustment and remission in schizophrenia. Journal of Nervous and Mental Disease, 144, pp. 37-46.
- SROLE, L., LANGNER, T.S., MICHAEL, S.T., et al. (1962). Mental Health in the Metropolis (vol. 1 of the Midtown Manhattan Study). New York: McGraw-Hill.
- STARK, W. (1962). The Fundamental Forms of Social Thought. London: Routledge.
- STEIN, L. (1957). 'Social-class' gradient in schizophrenia. British Journal of Preventive and Social Medicine, 11, pp. 181-95.
- STRAUSS, A. (ed.) (1965). George Herbert Mead on Social Psychology. Chicago: Phoenix.
- STRAUS, M.A. (1957). Anal and oral frustration in relation to Sinhalese personality. Sociometry, 20, pp. 21-31.
- STRAUS, M.A. (1967). The influence of sex of child and social class on instrumental and expressive family roles in a laboratory setting. Sociology and Social Research, 52, pp. 7-21.
- STRAUS, M.A. (1968). Communication, creativity and problem-solving ability of middle and working-class families in three societies. American Journal of Sociology, 73, pp. 417-430.
- STRYKER, S. (1968). Identity salience and role performance: the relevance of symbolic interaction theory for family research. Journal of Marriage and the Family, 30, pp. 558-564.
- SULLIVAN, H.S. (1953). The Interpersonal Theory of Psychiatry (ed. H.S. Perry and M.L. Gawel). New York: Norton.
- TRASLER, G. (1963). The Explanation of Criminality. London: Routledge.
- TURNER, R.J. and WAGENFELD, M.O. (1967). Occupational mobility and schizophrenia: an assessment of the social causation and social selection hypotheses. American Sociological Review, 32, pp. 104-113.
- WALTERS, J. and STINNETT, N. (1971). Parent-child relationships: a decade review of research. Journal of Marriage and the Family, 33, pp. 70-111.
- WARDLE, C.J. (1962). Social factors in the major functional psychoses. in A.T. Welford et al. (eds) Society: Problems and Methods of Study. London: Routledge.

- WEINSTOCK, S.A. (1966). A note on the value of structural explanations in the study of acculturation. British Journal of Sociology, XVII, pp. 60-63.
- WHITE, M.S. (1957). Social Class, Child Rearing Practices and Child Behaviour. American Sociological Review, 22, pp. 704-12.
- WRONG, D. (1961). The over-socialised conception of man. American Sociological Review, 26, pp. 185-93.
- WYLIE, R. (1961). The Self Concept. Lincoln, Nebraska: University of Nebraska Press.
- YINGER, J.M. (1963). Research implications of a field view of personality. American Journal of Sociology, 68, pp. 580-92.
- ZAZZO, B. (1958). Etude différentielle de l'image de soi chez l'adolescent. Enfance, 415, pp. 353-80.
- ZBOROWSKI, M. (1952). Cultural components in responses to pain. Journal of Social Issues, 8, pp. 16-30.



Jr.-Sr.

H. S. P. Q.

FORM A

Second Edition (1963)

WHAT TO DO: You have a Booklet and an Answer Sheet. Write your name, age, etc., on the Answer Sheet where it tells you to.

We want to know what sort of a person you are. The paper before you has questions about your interests and your likes and dislikes. First, we shall give you two examples so that you will know exactly what to do. After each question there are three answers. Although you are to read the questions in *this* Booklet, *you must put your answers on the Answer Sheet*, alongside the same number as in the Booklet. Read the following examples and mark an x for your answers on the Answer Sheet where indicated:

EXAMPLES:

1. Which would you rather do:
 - a. visit a zoo,
 - b. uncertain,
 - c. go up in an airplane?
2. If you have a quarrel, do you make friends again quickly?
 - a. yes, b. in between, c. no.
(or uncertain)

As you see from these examples, there are usually no right and wrong answers. Each person is different and has only to say what is true for *him*. You can always find one answer that suits you a *little* better than the others, so never leave a question without marking one of the answers.

Inside you will find more questions like the ones above. When you are told to turn the page, begin with number 1 and go on until you finish all the questions. In answering them, please keep these four points in mind:

1. Answer the questions frankly and truthfully. There is no advantage in giving the wrong impression. Never give an untrue answer about yourself because you think it is the "right thing to say." There are ways of detecting such unfair answers.
2. Please answer the questions as quickly as you can. Do not spend time puzzling over them. Give the first, natural answer as it comes to you. Some questions are a bit similar to others but no two are exactly alike and your answers will often differ in these cases.
3. Use the middle answer *only* when it is *absolutely impossible* to lean toward one or the other of the answer choices. In other words, the "yes" (or "a") or the "no" (or "c") answer should be used for *most* cases.
4. Do not skip any questions. Occasionally a statement may not seem to apply to you or your interests, but answer every question, somehow.

If there is anything you want to ask about what you have to do, ask now. If there is nothing now, but you meet a word later on you do not understand, stop and ask then.

DO NOT TURN PAGE UNTIL TOLD TO DO SO

1. Have you understood the instructions?
a. yes, b. uncertain, c. no.
2. At a picnic would you rather spend some time:
a. exploring the woods alone,
b. uncertain,
c. playing around the campfire with the crowd?
3. When you write an essay about your personal thoughts and feelings, do you:
a. enjoy telling about yourself,
b. uncertain,
c. prefer to keep some ideas to yourself?
4. When you do a foolish thing, do you feel so badly that you wish the earth would just swallow you up?
a. yes, b. perhaps, c. no.
5. Do you find it easy to keep an exciting secret?
a. yes, b. sometimes, c. no.
6. Compared to other people, do you make up your mind:
a. with hesitation,
b. in between,
c. with certainty?
7. When things go wrong and upset you, do you believe in:
a. just smiling,
b. in between,
c. making a fuss?
8. If friends' ideas differ from yours, do you keep from saying yours are better, so as not to hurt their feelings?
a. yes, b. sometimes, c. no.
9. Do you laugh with your friends more in class than other people do?
a. yes, b. perhaps, c. no.
10. Do most people seem to enjoy your company?
a. yes, a lot, b. just average, c. no.
11. Which of these says better what you are like?
a. a dependable leader,
b. in between,
c. charming, good looking.
12. Do you sometimes feel, before a big party or outing, that you are not so interested in going?
a. yes, b. perhaps, c. no.
13. When you rightly feel angry with people, do you think it's all right for you to shout at them?
a. yes, b. perhaps, c. no.
14. When classmates play a joke on you, do you usually enjoy it as much as others without feeling at all upset?
a. yes, b. perhaps, c. no.
15. Are there times when you think, "People are so unreasonable, they can't even be trusted to look after their own good"?
a. true, b. perhaps, c. false.
16. Can you always tell what your real feelings are, for example, whether you are tired or just bored?
a. yes, b. perhaps, c. no.
17. Do you think there is a fair chance that you will be a well-known, popular figure when you grow up?
a. yes, b. perhaps, c. no.
18. When you are given higher grades than you usually make, do you feel that the teacher might have made a mistake?
a. yes, b. perhaps, c. no.
19. Would you rather be:
a. a traveling TV actor,
b. uncertain,
c. a medical doctor?
20. Do you think that life has been a bit happier and more satisfying for you than for many other people?
a. yes, b. perhaps, c. no.
21. Do you have trouble remembering someone's joke well enough to tell it yourself?
a. yes, b. sometimes, c. no.

(End, column 1 on answer sheet.)

22. Have you enjoyed being in drama, such as school plays?
a. yes, b. uncertain, c. no.
23. "Mend" means the same as:
a. repair, b. help, c. patch.
24. "Truth" is the opposite of:
a. fancy, b. falsehood, c. denial.
25. Do you completely understand what you read in school?
a. yes, b. usually, c. no.
26. When chalk screeches on the blackboard does it make you feel queer?
a. yes, b. perhaps, c. no.
27. When something goes badly wrong, do you get very angry with people before you start to think what can be done about it?
a. often, b. sometimes, c. seldom.
28. When you finish school, would you like to:
a. do something that will make people like you, though you are poor,
b. uncertain,
c. make a lot of money?
29. Do you dislike going into narrow caves or climbing to high places?
a. yes, b. sometimes, c. no.
30. Are you always ready to show, in front of everyone, how well you can do things compared with others?
a. yes, b. perhaps, c. no.
31. Do you like to tell people to follow proper rules and regulations?
a. yes, b. sometimes, c. no.
32. Can you talk to a group of strangers without stammering a little or without finding it hard to say what you want to?
a. yes, b. perhaps, c. no.
33. Do some types of movies upset you?
a. yes, b. perhaps, c. no.
34. Would you enjoy more watching a boxing match than a beautiful dance?
a. yes, b. perhaps, c. no.
35. If someone has been unkind to you, do you soon trust him again and give him another chance?
a. yes, b. perhaps, c. no.
36. Do you sometimes feel you are not much good, and that you never do anything worthwhile?
a. yes, b. perhaps, c. no.
37. In the first grade, did you always go to school without your mother's having to make you?
a. yes, b. perhaps, c. no.
38. Do you tend to be quiet when out with a group of friends?
a. yes, b. sometimes, c. no.
39. Do people say that you are a person who can always be counted on to do things exactly and methodically (carefully)?
a. yes, b. perhaps, c. no.
40. If someone puts on noisy music while you are trying to work, can you still go on working?
a. yes, b. perhaps, c. no.
41. Would you rather spend some spare pocket money on:
a. a popular dance record,
b. uncertain,
c. a book to show how you can earn more pocket money?

(End, column 2 on answer sheet.)

42. Do you feel hurt if people borrow your things without asking you?
a. yes, b. perhaps, c. no.
43. "Firm" is the opposite of:
a. hard, b. kind, c. loose.
44. "Rich" is to "money" as "sad" is to:
a. trouble, b. friends, c. land.
45. Have you always got along really well with your parents, brothers, and sisters?
a. yes, b. perhaps, c. no.
46. If your friends leave you out of something they are doing, do you:
a. think they made a mistake,
b. in between,
c. feel hurt and angry?
47. Do people say you are sometimes careless and untidy, though they think you are a fine person?
a. yes, b. perhaps, c. no.
48. Have you ever told your parents that some teachers are too old-fashioned to understand modern young people like you and your friends?
a. yes, b. perhaps, c. no.
49. Which would you rather be:
a. the most popular person in school,
b. uncertain,
c. the person with the best grades?
50. In a group of people, are you generally one of those who tells jokes and funny stories?
a. yes, b. perhaps, c. no.
51. Are you usually patient with people who speak very fast or very slowly?
a. yes, b. sometimes, c. no.
52. Are your feelings easily hurt?
a. yes, b. perhaps, c. no.
53. In a play, would you rather act the part of a famous teacher of art than a tough pirate?
a. yes, b. perhaps, c. no.
54. Which course would you rather take:
a. practical mathematics,
b. uncertain,
c. foreign language or drama?
55. Would you rather spend free time:
a. by yourself, on a book or stamp collection,
b. uncertain,
c. working under others in a group project?
56. Do you feel that you are getting along well, and that you do everything that could be expected of you?
a. yes, b. perhaps, c. no.
57. Do you find yourself humming tunes someone else started?
a. yes, b. perhaps, c. no.
58. When a new fad starts, for example, in dress or way of speaking, do you:
a. start early and go along with it,
b. uncertain,
c. wait and watch before deciding if you will follow it?
59. Would you like to be extremely good-looking, so that people would notice you wherever you go?
a. yes, b. perhaps, c. no.
60. Do you feel that most of your wants are reasonably well satisfied?
a. yes, b. perhaps, c. no.
61. When you read an adventure story, do you:
a. get bothered whether it is going to end happily,
b. uncertain,
c. just enjoy the story as it goes along?

(End, column 3 on answer sheet.)

62. In dancing or music, do you pick up a new rhythm easily?
a. yes, b. sometimes, c. no.
63. "Picture" is to "scenery" as "novel" is to:
a. locality, b. history, c. book.
64. If Joan's mother is my father's sister, what relation is Joan's father to me?
a. father, b. brother, c. uncle.
65. Do you often make big plans and get excited about them, only to find that they just won't work out?
a. yes, b. occasionally, c. no.
66. Can you work hard on something, without being bothered if there's a lot of noise around you?
a. yes, b. perhaps, c. no.
67. Do you often remember things differently from other people, so that you have to disagree about what really happened?
a. yes, b. perhaps, c. no.
68. Do you prefer having teachers tell you how things should be done?
a. yes, b. perhaps, c. no.
69. When you are ready for a job, would you like one that:
a. is steady and safe, even if it needs hard work,
b. uncertain,
c. has lots of change and meetings with lively people?
70. In group activities, which do you prefer?
a. to be a good leader,
b. in between,
c. to be a good follower.
71. If you found another pupil doing a job you had been told to do, would you:
a. ask him to let you do it,
b. uncertain,
c. let him keep on until the teacher could come to decide?
72. Can you work just as well, without making more mistakes, when people are watching you?
a. yes, b. perhaps, c. no.
73. When you see something very sad in a play, do you:
a. find it hard to keep the tears away,
b. in between,
c. say, "Oh, this is just a lot of make-believe"?
74. Would you rather spend an afternoon by a lake:
a. watching dangerous speed boat racing,
b. uncertain,
c. walking by the lovely shore with a friend?
75. When you are in a group, do you spend more time:
a. enjoying the friendship,
b. uncertain,
c. watching what happens?
76. Which of these changes in school would you rather vote for:
a. putting slow people in classes of their own,
b. uncertain,
c. doing away with unnecessary punishment?
77. When things are going wonderfully, do you:
a. actually almost "jump for joy,"
b. uncertain,
c. feel good inside, while appearing calm?
78. Would you rather be:
a. a builder of bridges,
b. uncertain,
c. a member of a traveling circus?
79. When something is bothering you, do you think it's better to:
a. try to hold it until you're in a calmer state,
b. uncertain,
c. blow off steam?
80. Do you sometimes say silly things, just to see what people will say?
a. yes, b. perhaps, c. no.
81. When you do badly in an important game, do you:
a. say, "This is just a game,"
b. uncertain,
c. get angry and "kick yourself"?

(End, column 4 on answer sheet.)

82. Do you go out of your way to avoid crowded buses and streets?
a. yes, b. perhaps, c. no.
83. "Usually" means the same as:
a. sometimes, b. always, c. generally.
84. If all firs are coniferous trees, and all coniferous trees are evergreens, which of the following is true?
a. all firs are evergreens,
b. all evergreens are firs,
c. all coniferous trees are firs.
85. Are you satisfied that you come up to what people expect from someone of your age?
a. yes, b. perhaps, c. no.
86. If you keep breaking and accidentally wasting things when you are making something, do you keep calm just the same?
a. yes, b. perhaps, c. no, I get furious.
87. Do you tell schoolmates who are getting too noisy to keep quiet?
a. often, b. sometimes, c. seldom.
88. In a trip with naturalists, would you find it more fun to:
a. catch birds and preserve them in a collection,
b. uncertain,
c. make artistic photos and paintings of birds on the wing?
89. Would you rather:
a. read a story of wild adventure,
b. uncertain,
c. actually have wild adventures happen to you?
90. Are you "steady and sure" in what you do?
a. seldom, b. sometimes, c. always.
91. With people who take a long time to answer a question, do you:
a. let them take their own time, however long,
b. in between,
c. try to hasten their answer, and get cross if they take a long time?
92. Do you sometimes feel unwilling to try something, though you know it is not really dangerous?
a. yes, b. perhaps, c. no.
93. Do you stand up before class without looking nervous and ill-at-ease?
a. yes, b. perhaps, c. no.
94. Which would you rather watch on a fine evening:
a. car racing,
b. uncertain,
c. an open-air musical play?
95. Have you ever thought what you would do if you were the only person left in the world?
a. yes, b. not sure, c. no.
96. When you have to wait in line, do you often:
a. wait patiently,
b. uncertain,
c. fidget and think of going away instead of waiting?
97. Do you wish you could learn to be more carefree and light-hearted about your school work?
a. yes, b. perhaps, c. no.
98. Are you, like a lot of people, slightly afraid of lightning?
a. yes, b. perhaps, c. no.
99. Do you ever suggest to the teacher a new subject for the class to discuss?
a. yes, b. perhaps, c. no.
100. Would you rather spend a break between morning and afternoon classes in:
a. a card game,
b. uncertain,
c. catching up on homework?
101. When you are walking in a quiet street in the dark, do you often get the idea you are being followed?
a. yes, b. perhaps, c. no.

(End, column 5 on answer sheet.)

102. In talking with your classmates, do you dislike telling your most private feelings?
a. yes, b. sometimes, c. no.
103. When you go into a new group, do you:
a. quickly feel you know everyone,
b. in between,
c. take a long time to get to know people?
104. Look at these five words: mostly, gladly, chiefly, mainly, highly. The word that does not belong with the others is:
a. mostly, b. gladly, c. highly.
105. Do you sometimes feel happy and sometimes feel depressed without real reason?
a. yes, b. uncertain, c. no.
106. When people around you laugh and talk while you are listening to radio or TV:
a. can you listen without being bothered,
b. in between,
c. does it spoil things and annoy you?
107. If you accidentally say something odd in company, do you stay uncomfortable a long time, and find it hard to forget?
a. yes, b. perhaps, c. no.
108. Are you known among your friends for going "all out" for things that take your fancy?
a. yes, b. perhaps, c. no.
109. Are you best regarded as a person who:
a. thinks, b. in between, c. acts?
110. Do you spend most of your allowance each week for fun (instead of saving much of it for future needs)?
a. yes, b. perhaps, c. no.
111. Do other people often get in your way?
a. yes, b. perhaps, c. no.
112. How would you rate yourself?
a. inclined to be moody,
b. in between,
c. not at all moody.
113. In school, do you feel your teachers:
a. approve of you,
b. uncertain,
c. hardly know you are there?
114. Do your interests:
a. roam widely over many things,
b. in between,
c. settle strongly on one or two important things?
115. Do you get in trouble more often through saying to a group wanting to do something:
a. "Let's go!"
b. uncertain,
c. "I'd rather not join in"?
116. When you were growing up, did you expect the world to be:
a. more kind and considerate than it is,
b. uncertain,
c. more tough and hard than it is?
117. Do you find it easy to go up and introduce yourself to an important person?
a. yes, b. perhaps, c. no.
118. Do you think that the average committee of your classmates often makes poorer decisions than one person would do and also takes too much time?
a. yes, b. perhaps, c. no.
119. Do you usually:
a. follow your own ideas of what is right,
b. uncertain,
c. do the same as other people?
120. Do you sometimes go on and do something you very much want to do, even though you feel a bit ashamed of yourself?
a. yes, b. perhaps, c. no.
121. When someone is disagreeing with you, do you:
a. let him say all he has to say,
b. uncertain,
c. tend to interrupt before he finishes?

(End, column 6 on answer sheet.)

122. Would you rather live:
 a. in a deep forest, with only the song of birds,
 b. uncertain,
 c. on a busy street corner, where a lot happens?
123. When a new teacher comes to your class, does he or she soon notice who you are and remember you?
 a. yes, b. perhaps, c. no.
124. Look at these five words: below, beside, above, behind, between. The word that does not belong with the others is:
 a. below, b. between, c. beside.
125. If someone asks you to do a new and difficult job, do you:
 a. feel glad and show what you can do,
 b. in between,
 c. feel you will make a mess of it?
126. When you raise your hand to answer a question in class, and many others raise their hands too, do you get excited?
 a. sometimes, b. not often, c. never.
127. In school would you rather be:
 a. a librarian, looking after the reading books,
 b. uncertain,
 c. an athletic coach?
128. On your birthday, do you prefer:
 a. to be asked beforehand, so that you can choose the present you want,
 b. uncertain,
 c. to have the fun of getting a present as a complete surprise?
129. Are you very careful not to hurt anyone's feelings or startle anyone, even in fun?
 a. yes, b. perhaps, c. no.
130. If you were working with groups in class, would you rather:
 a. walk around to carry things from one person to another,
 b. uncertain,
 c. specialize in showing people how to do one difficult part?
131. Do you take trouble to be sure you are right before you say anything in class?
 a. always, b. generally, c. not usually.
132. Are you so afraid of consequences that you avoid making decisions one way or the other?
 a. often, b. sometimes, c. never.
133. Do you have periods of feeling just "run down"?
 a. seldom, b. sometimes, c. often.
134. When a close friend prefers someone else's company to yours on a special day, do you:
 a. complain to him for neglecting you,
 b. in between,
 c. take it in a "matter of fact" way?
135. Would you like better, when in the country:
 a. running a class picnic,
 b. uncertain,
 c. learning to know all the different trees in the woods?
136. In group discussions, do you often find yourself:
 a. taking a lone stand,
 b. uncertain,
 c. agreeing with the group?
137. Do your feelings get so bottled up that you feel you could burst?
 a. often, b. sometimes, c. seldom.
138. Which kind of friends do you like? Those who like to:
 a. "kid around,"
 b. uncertain,
 c. be more serious?
139. If you were not a human being, would you rather be:
 a. an eagle on a far mountain,
 b. uncertain,
 c. a seal, in a seal colony by the seashore?
140. Do you think that to be polite you must learn to control your feelings?
 a. yes, b. perhaps, c. no.
141. Do small troubles sometimes "get on your nerves" even though you know that they are not very important?
 a. yes, b. perhaps, c. no.
142. Are you sure you have answered *every* question?
 a. yes, b. perhaps, c. no.

PRIVATE AND CONFIDENTIAL

A TEST OF WORD MEANINGS

Name _____

School _____

In this test we are interested in the ways boys of your age form their ideas about people.

If you look at the page opposite you will see the adjective STRICT in capital letters at the top and a list of persons down the side. On every other page of this book you will find an adjective or phrase and a list of persons. The adjective at the top is different on each page but the list of persons is always the same.

On the opposite page you will also see that the word "strict" and the adjective which is opposite to it in meaning, "lenient" are written in small letters underneath the word at the very top. Underneath these is a set of lines, with a line facing each of the persons on the list down the side. One end of the set of lines is under the word "strict". The other end is under the word "lenient". The same thing is done with the different adjectives on the other pages of this book.

We now want you to use the adjective at the top of each page to describe the persons on the list.

FOR EXAMPLE: If you feel that "strict" is a very good description of the person you are rating, you should put a cross in the space at the end of the line nearest "strict", like this :

Strict X | | | | | | Lenient

If you feel "lenient" is a very good description of the person you should put a cross at the end of the line nearest "lenient" like this :

Strict | | | | | | X Lenient

If you feel "strict" is quite a good (but not very good) description you should place your cross as follows :

Strict | X | | | | | Lenient

If "lenient" is quite a good description you should place your cross like this :

Strict | | | | | X | Lenient

If you feel that the person falls somewhere in the middle you should put your cross in one of the two middle spaces, according to which description you feel fits the person better - like this (if he is more strict than lenient) :

Strict | | X | | | | Lenient

OR this (if he is more lenient than strict) :

Strict | | | | X | | Lenient

IMPORTANT: 1) Place your crosses in the spaces not on the lines between them.

THIS | X | | | | X | NOT THIS

- 2) Be sure you have a cross on every line on each page.
- 3) Never put more than one cross on a line.
- 4) Be sure you are putting your cross under the correct adjective.

STRICT

Strict

Lenient

My best friend



My mother



My father



The kind of person
I really am



The kind of person I
would like to be



A person I would go to
if I were in trouble



The person I dislike most



The person I admire most



HAS A WARM NATURE

Warm

Cold

My best friend



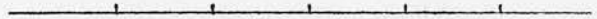
My mother



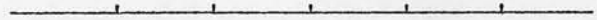
My father



The kind of person
I really am



The kind of person I
would like to be



A person I would go to
if I were in trouble



The person I dislike most



The person I admire most

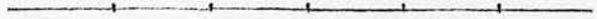


UNDERSTANDS OTHER PEOPLE

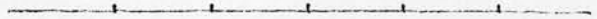
Understands
people

Doesn't under-
stand people

My best friend



My mother



My father



The kind of person
I really am



The kind of person I
would like to be



A person I would go to
if I were in trouble



The person I dislike most



The person I admire most



UNSURE OF HIMSELF (OR HERSELF)

Unsure of self

Sure of self

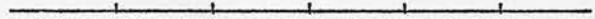
My best friend



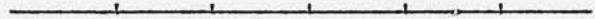
My mother



My father



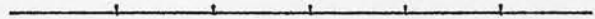
The kind of person
I really am



The kind of person I
would like to be



A person I would go to
if I were in trouble



The person I dislike most



The person I admire most



FAIR PERSON

Fair

Unfair

My best friend



My mother



My father



The kind of person
I really am



The kind of person I
would like to be



A person I would go to
if I were in trouble



The person I dislike most



The person I admire most



KIND PERSON

Kind

Unkind

My best friend



My mother



My father



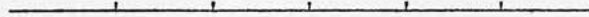
The kind of person
I really am



The kind of person I
would like to be



A person I would go to
if I were in trouble



The person I dislike most



The person I admire most



APPROACHABLE

Approachable

Not approachable

My best friend



My mother



My father



The kind of person
I really am



The kind of person
I would like to be



A person I would go to
if I were in trouble



The person I dislike most



The person I admire most

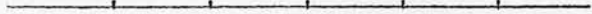


SILENT PERSON

Silent

Talkative

My best friend



My mother



My father



The kind of person
I really am



The kind of person I
would like to be



A person I would go to
if I were in trouble



The person I dislike most



The person I admire most

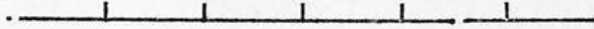


EXCITABLE

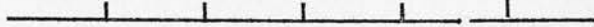
Excitable

Relaxed

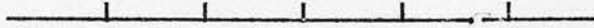
My best friend



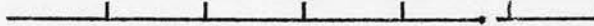
My mother



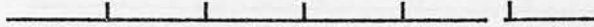
My father



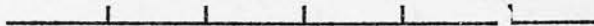
The kind of person
I really am



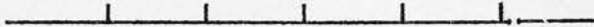
The kind of person I
would like to be



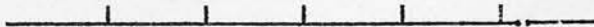
A person I would go to
if I were in trouble



The person I dislike most



The person I admire most



DOMINEERING

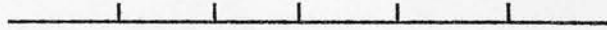
Domineering

Meek

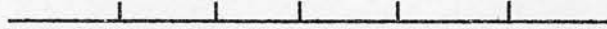
My best friend



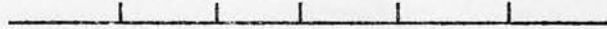
My mother



My father



The kind of person
I really am



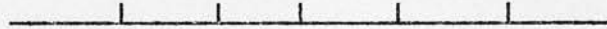
The kind of person I
would like to be



A person I would go to
if I were in trouble



The person I dislike most



The person I admire most

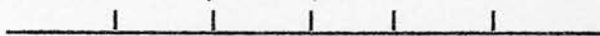


DEPENDABLE ("CAN BE DEPENDED ON")

Dependable

Undependable

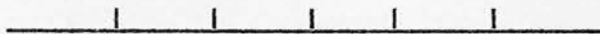
My best friend



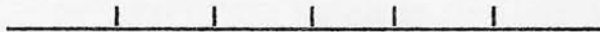
My mother



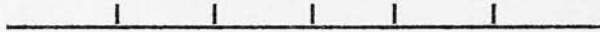
My father



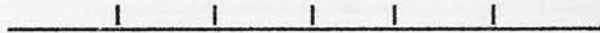
The kind of person
I really am



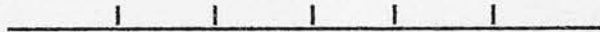
The kind of person I
would like to be



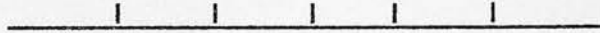
A person I would go to
if I were in trouble



The person I dislike most



The person I admire most



HARD TO UNDERSTAND

Hard to
understand

Easy to
understand

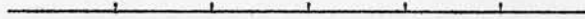
My best friend



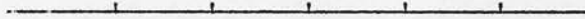
My mother



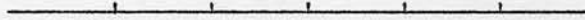
My father



The kind of person
I really am



The kind of person I
would like to be



A person I would go to
if I were in trouble



The person I dislike most



The person I admire most



STRONG PERSONALITY

Strong

Weak

My best friend



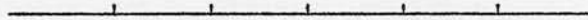
My mother



My father



The kind of person
I really am



The kind of person I
would like to be



A person I would go to
if I were in trouble



The person I dislike most



The person I admire most



QUICK-THINKING

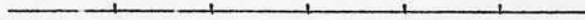
Quick

Slow

My best friend



My mother



My father



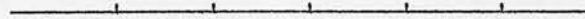
The kind of person
I really am



The kind of person I
would like to be



A person I would go to
if I were in trouble



The ~~person~~ I dislike most



The person I admire most

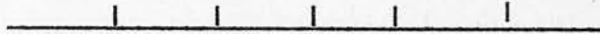


MAKES PEOPLE FEEL AT EASE

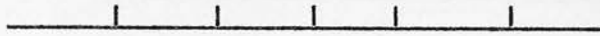
Makes people
feel at ease

Makes people feel
ill at ease

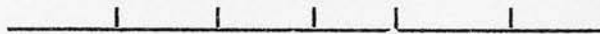
My best friend



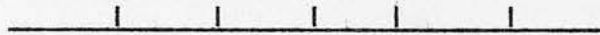
My mother



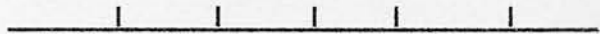
My father



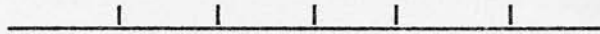
The kind of person
I really am



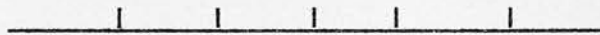
The kind of person I
would like to be



A person I would go to
if I were in trouble



The person I dislike most



The person I admire most



"HAS DRIVE" ("GETS THINGS DONE")

Has drive

Has no drive

My best friend



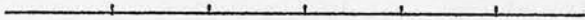
My mother



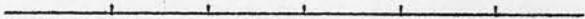
My father



The kind of person
I really am



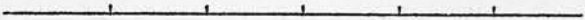
The kind of person I
would like to be



A person I would go to
if I were in trouble



The person I dislike most



The person I admire most

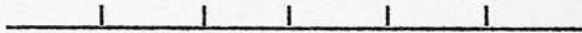


DEPENDS ON OTHER PEOPLE

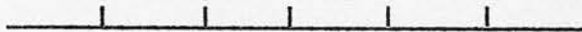
Dependent
on people

Independent

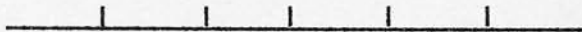
My best friend



My mother



My father



The kind of person
I really am



The kind of person I
would like to be



A person I would go to
if I were in trouble



The person I dislike most



The person I admire most



PRIVATE AND CONFIDENTIAL

A TEST OF WORD MEANINGS

Name _____

School _____

I now want you to imagine that your parents have been given a test like the one you have just finished and that they have been asked to describe your behaviour.

The two pages underneath have the phrase "HOW I THINK MY MOTHER (OR FATHER) SEES ME" at the top of the page. Down each page there is also the set of adjectives which you used for your descriptions in the book you have just completed. Work in the same way on these pages as you did in the other book.

FOR EXAMPLE: You would put a cross in the space right next to the word or phrase - like this:-

Strict X Lenient

OR this:

Strict X Lenient

if you thought your father (or mother) would say that an adjective was a very good description of you.

The cross would go in the next space along - like this:

Strict . X Lenient

OR this:

Strict X . . Lenient

if you felt that your mother (or father) would rate the adjective as quite a good description of you.

If you think your father or mother would rate you scmewhere in the middle, the cross would go like this:

Strict . . X Lenient

OR this:

Strict . . . X . . . Lenient

according to where you think your parent would put you.

IMPORTANT:

- 1) Bear in mind the points you had to remember when you were filling in the other book.
- 2) Try to imagine yourself in your father's (or mother's) shoes, when you are doing this test. It may help to ask yourself (for example) "How strict does my mother (father) think I am?" before you make a cross on the line.

HOW I THINK MY MOTHER SEES ME

Strict	_____	Tenant
Warm-natured	_____	Cold-natured
Understands other people	_____	Doesn't understand other people
Unsure of self	_____	Sure of Self
Fair	_____	Unfair
Kind	_____	Unkind
Unapproachable	_____	Approachable
Silent	_____	Talkative
Excitable	_____	Relaxed
Domineering	_____	Meek
Dependable	_____	Undependable
Hard to understand	_____	Easy to understand
Strong (in personality)	_____	Weak
Quick-thinking	_____	Slow-thinking
Makes people feel ill-at-ease	_____	Makes people feel at ease
Has "drive"	_____	Has no "drive"
Depends on other people	_____	Independent

HOW I THINK MY FATHER SEES ME

Strict	_____	Lenient
Warm-natured	_____	Cold-natured
Understands other people	_____	Doesn't understand other people
Unsure of self	_____	Sure of Self
Fair	_____	Unfair
Kind	_____	Unkind
Unapproachable	_____	Approachable
Silent	_____	Talkative
Excitable	_____	Relaxed
Domineering	_____	Meek
Dependable	_____	Undependable
Hard to understand	_____	Easy to understand
Strong (in personality)	_____	Weak
Quick-thinking	_____	Slow-thinking
Makes people feel ill-at-ease	_____	Makes people feel at ease
Has "drive"	_____	Has no "drive"
Depends on other people	_____	Independent

"WHAT MY PARENTS WOULD LIKE ME TO BE LIKE"

On these two pages I want you to decide what kind of person you think your father (or mother) would like you to be. Work in the same way as you did on the two pages you have just completed, putting a cross in the space on the line that you think is the best description.

It may help to ask yourself (for example), "How strict would my father (or mother) like me to be?" before you make a cross on the line.

WHAT MY MOTHER WOULD LIKE ME TO BE LIKE

Strict	_____	Llenient
Warm-natured	_____	Cold-natured
Understands other people	_____	Doesn't understand other people
Unsure of self	_____	Sure of Self
Fair	_____	Unfair
Kind	_____	Unkind
Unapproachable	_____	Approachable
Silent	_____	Talkative
Excitable	_____	Relaxed
Domineering	_____	Meek
Dependable	_____	Undependable
Hard to understand	_____	Easy to understand
Strong (in personality)	_____	Weak
Quick-thinking	_____	Slow-thinking
Makes people feel ill-at-ease	_____	Makes people feel at ease
Has "drive"	_____	Has no "drive"
Depends on other people	_____	Independent

WHAT MY FATHER WOULD LIKE ME TO BE LIKE

Strict	_____	Llenient
Warm-natured	_____	Cold-natured
Understands other people	_____	Doesn't understand other people
Unsure of self	_____	Sure of self
Fair	_____	Unfair
Kind	_____	Unkind
Unapproachable	_____	Approachable
Silent	_____	Talkative
Excitable	_____	Relaxed
Domineering	_____	Meek
Dependable	_____	Undependable
Hard to understand	_____	Easy to understand
Streng (in personality)	_____	Weak
Quick-thinking	_____	Slow-thinking
Makes people feel ill-at-ease	_____	Makes people feel at ease
Has "drive"	_____	Has no "drive"
Depends on other people	_____	Independent

SOCIOLOGY AND THE STUDY OF PSYCHIATRIC DISORDER

Alex Robertson

Anyone who seeks to present the case for a sociological approach to the study of psychiatric disorder may be excused for confessing to a certain amount of diffidence on entering on his task. Because psychiatry emerged and developed as a substantive branch of conventional medicine, work in this area has been dominated by models of personality and mental functioning which closely reflect the concepts and practice of physical medicine.¹ Within this frame of reference the basic causes of any psychiatric abnormality are assumed to lie inside the individual organism and the reasons for any emotional or behavioural disturbance are sought in some imbalance of biochemical functioning or a unique pattern of interpersonal relationships. Although there has in recent years been a resurgence of interest in 'social' and 'community' psychiatry,² psychiatry as a field of study is still, *par excellence*, the province of the physician and the clinical psychologist. Sociological variables are assumed to have, at the most, secondary significance in the onset of psychiatric breakdown. Environmental pressure, for example, is presumed to act as the 'trigger' which sets off a chain of pathological responses in a predisposed personality.³ Cultural provisions and expectations, it is also generally accepted, may set their stamp on the content, but not the form, of mental illnesses; to take a somewhat crude example, the symptoms of schizophrenia will vary between cultures according to the particular objects—palm trees, television sets, etc.—to which delusions can be attached; but the actual disease entity—schizophrenia—is held to be universally the same.⁴

Given this climate of opinion, it is perhaps not surprising that sociologists have shown some reluctance to become involved in the study of psychiatric disorder. The serious conceptual and methodological problems which dog aetiological research in psychiatry may also serve to dissuade the potential researcher from entering this arena. These difficulties are well reflected in such meagre and inconclusive findings as have emerged from the bulk of the studies undertaken to date in this field. Mishler and Scotch, at the end of their excellent review of sociological research into the causes of schizophrenia,⁵ liken

their task in trying to draw some conclusions to that of:

'talking with the relatives of the deceased after returning from a funeral. Other than some platitudes there is little that can be suggested that would remedy, alleviate or eliminate the trouble.'

Other, more admonitory, statements are not hard to find. As Mishler and Scotch point out, criticism and review in this field preponderate over actual research. Wardle, for instance, has expressed the opinion that in the absence of unequivocal proof of a relationship between sociological variables and psychosis, the contribution of sociology to psychiatry is likely to be greatest in attempts to understand and change public attitudes towards the mentally-ill, rather than in endeavours to identify presumed aetiological links.⁶ Dohrenwend also insists, *inter alia*, that before sociologists can conduct effective research into the epidemiology of psychiatric illness they must come to some agreement on the crucial problem of defining a psychiatric 'case'.⁷

More recently, Schatzman and Strauss have claimed that 'it would be much more fruitful for sociology if more research were done *about* psychiatry than in it or for it'.⁸ This last is a particularly significant point with which the author finds himself in substantial agreement. Apart from the issues of professional growth, identity and conflict, with which Schatzman and Strauss principally concern themselves, it also implies consideration of the factors affecting the formulation of a psychiatric diagnosis, a fact which would obviously have a major bearing on Dohrenwend's⁹ observation.

While acknowledging the validity of many of these criticisms, it is the burden of this paper that, despite the difficulties involved, sociology can make a distinctive contribution to an understanding of the causes of mental disorder. It is felt, moreover, that its application to this field could also throw light on certain basic issues in sociology.

Any attempt to apply sociology to the study of psychiatric illness properly demands prior consideration of two related sets of problems. First is the basic and somewhat neglected problem of what conception sociologists hold of human nature and the framework one should adopt for viewing the relationship between the individual and society. The second is an issue stemming from methodological considerations: the development of sociological theory shows a recurring preoccupation with the subject of verification, which demonstrates the difficulty of developing a theory which is both sociologically relevant and at the same time amenable to empirical testing—a fact discernible in the long-standing ambivalence of the relationship between sociology and

positivism.¹⁰

Examination of these topics may give some indication of what a sociological theory of mental disorder could look like: it should at least produce a rationale for sociological investigations in this area.

Psychiatry and the conceptual frameworks of sociology

Many of the ambiguities contained in the results of existing sociological research into the causes of mental disorder arise, in the opinion of the present author, from the eclectic approach of researchers who start with a particular model of social structure and attempt to fit into this a model of personality which is guided by the basic assumptions of traditional psychiatry. This psychiatric model and the presumed relationship between the two conceptual systems is sometimes made explicit but more normally is implied in the assumptions which guide research. The reverse criticism could be applied to much of the research in which psychiatrists have tried to make use of socio-cultural variables and hypotheses.¹¹

While the tendency to regard the person and his social environment as separate entities, with psychology involving the study of the individual and sociology the study of the group or society, has undoubtedly made for advances in knowledge, it seems increasingly acknowledged that this has also presented obstacles to the understanding of human behaviour¹²—not least to the development of an effective social science. The pervasiveness of this dualism is evidenced in the fact that the rather hoary debate between realism and nominalism—between ‘organic’ and ‘mechanical’ models of social functioning¹³—is still something of an issue in sociology.¹⁴ With regard to the interaction of person and society, the dichotomy between realism and nominalism in their pure forms resolves itself, of course, into a question of whether one holds individual behaviour to be determined by the pressures from a social environment which has an existence of its own, over and against that of its individual members; or the patterns and regularities of social interaction to arise from the autonomous actions of individuals pursuing similar goals. It need hardly be said that in practice the dispute is largely one of emphasis, with sociologists adopting their individual positions at points between these two extremes.

It is probably no accident that many of those studies undertaken into the relationship between culture and psychiatric or parapsychiatric phenomena have inclined towards the organic end of the continuum. Regarding the individual as subject to external pressures over which he

has no control is an attractive conception for one who is studying apparently irrational behaviour. The explanations of psychiatric disorder which it is logically possible to reconcile with this theoretical position are, either that it results from a tension between innate psychic needs and the demands for conformity placed upon the individual by his culture;¹⁵ or that it is a function of a disturbance or impairment in the quality of the individual's participation in a group or moral order causing frustration of certain postulated biosocial impulses, either inherent or derived. The multi-disciplinary study of patterns of mental illness in 'Stirling County', for example, adduces evidence to support the thesis that social disintegration has a direct bearing on the prevalence of psychiatric disorder.¹⁶ Alexander Leighton, sketching in the conceptual background to this study, makes his organicism quite explicit:

'As organisms such as human beings are self-integrating units composed of cells which are also self-generating, so also to some degree the community is an organism composed of human beings. The fact that the individuals in a county are physically detached does not negate this, but rather reflects the type of integration . . . The organismic characteristics of communities . . . may be summed up by referring to them as quasi-organisms.'

His subsequent statement that:

'The emphasis . . . is on "organism" rather than "quasi"' sets the seal on this position.¹⁷

The major weaknesses in this study seem, in the view of the present author, to stem from this theoretical foundation, necessitating as it does the introduction of a set of tautologous assumptions concerning social functioning, the basic needs of the individual and the interplay between these two.¹⁸

For the sociologist, Durkheim's study of the relationship between social cohesion and the incidence of suicide¹⁹ provides an obvious and still influential case in point. The most salient feature of Durkheim's conceptual position (that the individual experiences social life in terms of 'things' which impinge upon and shape his behaviour²⁰) may have been dictated by his methodological position (that the methods of the natural sciences are applicable to the study of social phenomena). As is now widely accepted, the weakness of Durkheim's analysis lies in the fact that 'social facts', as (in terms consistent with his theoretical stance) he defines them,²¹ are not capable of demonstration, and their operation can consequently only be *inferred* from his data. Moreover,

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despite his avowed intention to eschew psychological explanations of suicide, Durkheim's classification of the suicidal act can be seen to rest ultimately on psychological assumptions,²² which again are inferred from and strongly supported—but not necessarily proven—by his data. This is not to deny the brilliance of method and design of *Le Suicide*; but what we have here is a prime instance of the methodological dilemma, as noted above, with which sociology is confronted.

Ecological studies of psychiatric illness

Moving from the positivistic organicism of Durkheim to the work of the ecological school, we see in operation a very similar model of the relationship between man and society,²³ with corresponding difficulties of verification. A number of studies have discovered an inverse relationship between social class and the incidence of schizophrenia,²⁴ and some that this type of disorder tends particularly to be concentrated in the poorer parts of the city. There is, however, also some evidence to contradict these findings.²⁵ Perhaps the commonest criticism of the interpretation Faris and Dunham chose to place upon the trends revealed in their pioneering Chicago study²⁶ was that the concentration of schizophrenia in the more deprived neighbourhoods is due not, as Faris and Dunham claim, to causal factors in the social environment of these areas—with particular reference to the disintegrative effects for the personality of lack of opportunity for effective social intercourse—but rather to the 'drift' into such zones of individuals with a prior disposition to psychotic breakdown.

Ecological research has, of course, inspired a considerable critical literature. In a now ageing paper which draws attention to the difficulty of validating interpretations from ecological material,²⁷ Clausen and Kohn do not go so far in their criticisms as W. S. Robinson, who rejects the method out of hand,²⁸ but they agree that as a technique it is too coarse-grained to give dependable results. They argue that ecological work contains two major sets of assumptions. A first set is statistical in nature, implying that it is possible to isolate from the group of variables which typify a neighbourhood the particular cluster of variables which explain that area's higher or lower incidence of mental illness. Secondly, a number of assumptions are invoked in the interpretation of the sociological significance of these statistical findings. The area is presumed to have an 'effect' on its inhabitants through, for example, acting upon genetic predispositions in the individual; through the impoverished quality of social interaction within

it (as in the 'social isolation' hypothesis of Faris and Dunham); or through the existence of divergent value-systems (as reflected, for instance, in socialisation patterns) in particular areas.²⁹ Dunham himself is sensitive to this kind of criticism, as is evidenced in a somewhat ambiguous remark contained in a paper of 1959:

'If he operates as an ecologist (the researcher) will emphasise the processes within the environment and attempt to show the social variable or complex of variables that is associated with the rate differential. If he tries to get at the social factors that are causative or predisposing for persons in that environment, he will be thrown on another level of analysis where his ecological findings will prove only indicative of some factors that he might study as having an aetiological significance.'³⁰

It is thus apparent that when the ecologist is faced with the problem of explaining areal differences in rates of mental illness, he must, like Durkheim, leave his purely sociological model behind and introduce into his argument a set of psychological assumptions, which again render his findings explicable in terms of a theoretical structure but which lack any ring of finality. His findings are always open to several alternative explanations because they fail to demonstrate conclusively how individuals are affected by the trends postulated from the data to be in operation.³¹

It may be salutary to add that, on the basis of his most recent study (published in 1965),³² Dunham, with characteristic courage, has rejected the hypothesis that social isolation is the effective cause of schizophrenia in the interstitial areas of a large city. He now favours the notion that the concentration of hospitalised schizophrenics in certain neighbourhoods and social classes is due to selective processes operating within the social system which induce individuals with predisposed personalities to gravitate into these less privileged groups and areas. In short, he now denies that the conditions of life in such communities are directly implicated in a causal manner in the development of schizophrenia. This study, however, contains certain methodological shortcomings which lead the present author to conclude that the case against the causal rôle of socio-cultural factors in mental disorder remains not proven.

Sociology and psychiatry

Ecological research in the field of psychiatric disturbance therefore contains both conceptual and methodological deficiencies. Conceptually,

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it is unable to locate the *specific* processes involved in the onset of a disorder. Methodologically, it depends on the questionable use of statistics to measure the presumed interconnections between variables. Valid sociological generalisations about psychiatric aetiology require a model of society which links the individual more directly to his cultural environment and which thereby permits more direct testing of the processes presumed to be influential in the causation of mental breakdown.

Ecological studies in this area can be viewed as resting at the level of statistical descriptions of the psychiatric characteristics of populations in certain urban areas. They are studies of the *epidemiology* but not the *aetiology* of psychological disorder. Although it has been suggested at various times³³ that ecological research could be strengthened through the logical use and manipulation of different sets of statistics, it seems unlikely that ecological findings will ever provide conclusive proof of any hypothesis in the sociological analysis of the causes of mental breakdown. Purely ecological explanations might, however, operate from a stronger base if a series of comparative analyses were carried out between towns in an attempt to demonstrate under what circumstances areal rates of psychiatric illness may differ. It seems likely, for example, that the size of the city may have an important effect on the incidence of mental disorder in different areas. Clausen and Kohn, for instance, in their study of the distribution of disorders in a small city,³⁴ found no relationship between schizophrenia and social status as measured either by occupation or by ecological area. This stands, of course, in direct contrast to the findings of most ecological research. It is interesting, however, that Clausen and Kohn did uncover the same positive correlation as was found by Faris and Dunham, between social status and manic-depressive psychosis. It is probably significant that nearly all the ecological research into psychiatric disorder has been undertaken in large cities. In other fields—for example in religious behaviour³⁵ and in the diffusion of new techniques among physicians³⁶—size of town or city seems to be an influential variable. It could thus obviously be useful if a set of comparative analyses were conducted between towns of varying size to check under what circumstances particular patterns of relationship between ecological status and rates of psychiatric breakdown do and do not hold.³⁷ Variables worthy of consideration in such a programme of comparative study might include rates of migration to, from and within the town, the basic types of industry and employment opportunities

within the town, demographic structure, religious affiliations, the level of development of social and other preventive services and the like.

Even here, however, such *ad hoc* theories or generalisations as might be elicited to explain the variations in psychiatric morbidity would still require to be tested by examination of the actual relationship in individual cases.³⁸ Such studies, as the reader may have observed, would also require to develop satisfactory criteria for the identification of psychological illness, one of the most important—and intractable—problems facing the sociologist studying this field. It was over ten years ago that Dr. H. G. Birch, in his discussion of Clausen and Kohn's paper on the 'Relation of Schizophrenia to the Social Structure of a Small City',³⁹ complained that research reports on the ecological distribution of psychiatric disorder had too often been prefaced by the plea that they should be regarded as 'tentative' or 'exploratory' statements. The continuing appearance of such studies in the literature almost persuades one to agree with Birch's⁴⁰ subsequent judgement that:

'It almost seems as though the method of exploration has become the method of choice in the investigation of some of these problems, that the preliminary method, because of the ease with which it may be utilised, has become the desirable method for investigation.'

These studies have depended on assessments of the *incidence* of mental disorder (that is, of the number of individuals becoming ill, normally taken to be the number of cases referred within a given time for formal treatment) and on the diagnoses made by the doctors handling the particular cases. Both of these are variables which will obviously bear the stamp of a variety of elusive influences which are only partly related to the psychiatric state of the patient. Do, for example, ecological variations in the proportions of hospitalised schizophrenics reflect true areal differences in the percentage of individuals suffering from schizophrenia; or is the family in certain areas more capable of shielding the potential schizophrenic so that he never comes to the notice of the mental health services? Are psychiatrists more ready (as suggested by the findings of Hollinghead and Redlich) to diagnose as schizophrenic, persons who are less articulate in talking about their mental state, who come from areas with a 'bad' reputation or who behave in a certain way in interview because they possess a different, less confident or less appropriate set of assumptions as to what is expected of them in the professional relationship? This underlines the need, mentioned above, for research on the diagnostic process—into

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the relationship between the 'symptoms' the patient displays, the professional training of the psychiatrist and its subsequent modification or reinforcement and the effects of interpersonal stimuli, perception and expectation in the judgements made by the psychiatrist.

Attempts have been made to counter this difficulty by adopting a measure of the *prevalence* of mental illness (that is, of the number of people who can actually be judged to be ill at a particular time). In one of the best known studies of this type, Srole and his colleagues rated twenty-four per cent of the population of mid-town Manhattan as disturbed to a 'marked', 'serious' or 'extreme' degree.⁴¹ Apart from the obvious, but nonetheless interesting problems of what criteria one adopts for such a judgement, and whether one can justifiably rate a person as mentally 'ill' if he does not consider himself to be so, one is also left with the aetiologically relevant question of why it is that certain individuals seek psychiatric treatment while others with (if the Manhattan results are to be believed) equally strong reasons do not.⁴²

Ideally, it would seem that the most effective approach to understanding the sociological causes of mental disorder lies in prospective studies of the incidence of disorder in different areas. This would entail, in the first phase, estimates (through the use of personality tests or of instruments such as those developed for the mid-town Manhattan study) of the *prevalence* in selected areas of *potentially* disturbed persons, with a follow-up study over time to see how many 'high risk' individuals sought psychiatric treatment; whether these were different from those 'high risk' individuals who did not become ill and how these groups compared with any 'medium' or 'low risk' individuals who also referred for psychiatric attention. Time, expense, and the large sample which would be required in order to obtain a large enough number of persons ultimately requiring treatment, to say nothing of the problems involved in trying to maintain contact with individuals who move from their original area, would seem, however, to militate against this as a feasible approach. A more realistic alternative (assuming that one is studying the specific processes which affect ecological differences in the distribution of psychiatric disorder) might be to match 'high' and 'low risk' individuals from the same, or at least similar, ecological areas with individuals (also from the same areas) who have received treatment for a psychiatric breakdown and to identify the important differences between these groups. Since this begins to anticipate topics which will be examined more fully below, this discussion will be postponed until later.

It may be useful at this stage to specify what appear to be emerging as the criteria which a sociological theory of mental disorder should satisfy. These are threefold. Psychiatrically, it should explain why 'sick' individuals behave as they do; ideally, perhaps, it should also possess the power to discriminate between individuals who do and those who do not ultimately present themselves for psychiatric treatment. Sociologically, it should clearly offer an explanation of pathological behaviour in terms of the social environment of the individual: this implies prior acceptance of the axiom that the individual develops in a social context and that one is therefore likely to gain more by first studying the cultural environment and then moving to the study of the individual, rather than vice-versa. Thirdly, it should meet the scientific requirement of testability. That is, it should consist of a series of *complementary* statements which are amenable to empirical testing because allowing sets of propositions to be deduced from them. All this points to the need for an approach based on micro-sociological concepts although this by no means necessarily entails the invocation of a naïvely mechanical paradigm of social functioning. The most useful frame of reference for this purpose would seem to be one based broadly on the assumptions of symbolic interactionism.

Psychiatric aetiology and the interactionist frame of reference
Basic assumptions

The basic task of the sociologist studying the causes of mental disorder will be to show how the social experience of the disturbed individual has impinged upon and modified his actions. It is accepted that the self is a product of social experience and that it is through the study of attitudes towards the self that sociology is likely to make its most significant contribution to the understanding of mental disorder. But this view is presented not simply as an attempt to extend the sphere of influence of sociology. It seems a useful—even necessary—counterweight to the medical model, with its rather mechanistic view of human nature.

Within the interactionist frame of reference, this implies analysis of the 'definition of the situation' held by individuals operating in particular social contexts and of the effect on the individual's behaviour of the structure of the interpersonal situations in which he is involved. On a common-sense level, it would appear feasible to divide this into two related areas of research. On the one hand are 'situational' studies—that is, studies of the situations in which individuals are immediately

pensate for deficiencies caused by the disease. Basic symptoms are held by Kline to be immutable, but action and rationalisation (the two major compensatory processes) are subject to modification by prior experience and immediate circumstances:

'The acceptability of specific rationalisations and actions may vary greatly from one culture—or even from one subculture—to another.'⁵²

While (chiefly because he does not elaborate his position in sufficient detail) there are certain ambiguities in Kline's position—in particular, his discussion of the exact relationship between the two types of symptom seems rather vague—and whilst the author would not agree with Kline's apparent implication that all mental disorder is caused by a disturbance of 'basic' processes, this argument has obvious merit for the sociologist in that it shows the 'sick' individual, as well as his 'healthy' partners in interaction, to be sensitive to cultural prescriptions and expectations concerning behaviour, and to be attempting to render his behaviour consonant with his perceptions of these. This is not to deny that there are certain individuals who show bizarre symptoms, which can probably best be explained by reference to organic failure or impairment (Kline's 'basic' symptoms); but the author would extend and somewhat modify Kline's analysis to argue that a large number of types of psychiatric impairment can in fact be regarded as modes of adaptation (akin to Kline's 'compensatory' symptoms), developed by the individual as the result of immediate pressures, or of prior social learning experiences,⁵³ and which involve his operating with a definition of the situation which is not concordant with that held by other actors sharing the same cultural context. In other words, these processes are considered to be primary, rather than secondary, in the genesis of many cases of psychiatric breakdown. Explanations of mental disorder conformable with this line of reasoning have, for example, been presented by R. D. Laing,⁵⁴ who has suggested that schizophrenic symptoms may be interpreted as a mode of defence, in which the ego learns to shield itself from perceived threats from the environment by manifesting bizarre patterns of behaviour, designed to repel approaches by other individuals, which 'non-adaptive' behaviour then becomes a standard means of coping with stress. The finding that the mothers of schizophrenics frequently appear to be domineering persons, unwilling to allow their children privacy, even to the extent of reading diaries and 'listening in' when they talk in their sleep, would be consistent with this interpretation. Thomas

Szasz⁵⁵ argues from an approach based on games theory that psychiatric conditions can be interpreted as reward-seeking behaviour. This assumption also underlies some of the work inspired by the concept of the 'sick rôle'.

It seems therefore that an approach based on this framework can fulfil the criterion of psychiatric adequacy. The problem now becomes that of relating 'pathological' behaviour to the social experience of the individual in a way which is amenable to empirical test, through the formulation of a set of key propositions, from which a series of testable hypotheses may be logically derived. The following set of 'middle range' assumptions is suggested as a step towards this.

It is first assumed that social interaction is structured, and that its structure tends to vary between different social groups. This structure will of course be comprised of the rôles individuals play in relation to one another, these being sustained by the differing value and attitudinal systems of the particular groups in question. Second, it is assumed that human beings develop awareness and a conception of themselves through their experience in social intercourse. This involves at least three subsidiary assumptions: (a) that human 'consciousness' or self-awareness (that is, the ability to become an object of one's own thinking) emerges only through the individual being able to place himself in the position of other people, adopting their perspective when considering himself and his own behaviour; (b) that this becomes built into a conception of the self in which the responses of others towards ego play an important part, and (c) that the individual is responding to the actions of others as these are defined and perceived within the context of the value-system of the social group to which he belongs. This is, of course, no new idea, although it has enjoyed greater currency in America than in this country. From the work of William James (with his division between the 'I' and the 'me' of the 'social self'), through Cooley's reflexive or 'looking-glass' self, to the work of G. H. Mead,⁵⁶ whose influence is obvious in the above presentation, American writers working within the tradition of philosophical pragmatism have started from the fact that all social behaviour involves a process of mutual adjustment on the part of interacting organisms, and that this has an important bearing on the development of human personality. More recently, R. D. Laing, working in this country,⁵⁷ has elaborated an interesting theory and typology of marital behaviour using the concepts of 'self'-identity and 'meta'-identity, but he uses these psychologically to view interacting individuals rather than

interacting *social* individuals from this perspective. Finally, it may be assumed that the conception of the self, and the assumptions concerning the motives and probable behaviour of other persons, built up by the individual as a result of the processes outlined above, are significant determinants of the individual's behaviour and modes of social adjustment (given that he remains capable of learning and re-adaptation through subsequent social experience).

Given these assumptions, certain related consequences may reasonably be expected to follow. In the first place, the differing social experiences acquired by individuals coming from varying backgrounds will tend to give rise to different 'modal' self-concepts and sets of perceptions of 'key' rôles, in ways which will reflect the divergences in rôle-structure of various groups. Second, it may be anticipated that a 'key' rôle (such as father or mother) performed in an identical manner in different sub-cultures will, because of the different expectations attached to behaviour, tend to have very different effects on the individuals involved in close and constant relationships with persons performing that rôle. In the field of mental health research there is some evidence to substantiate this deduction. Kohn and Clausen, in their study of 'Parental Authority Behaviour and Schizophrenia',⁵⁸ matched a group of individuals who had been treated for schizophrenia with a group of 'normal' controls. As compared with the controls, schizophrenics from high status families consistently more often reported that their mother had been the dominant authority figure during their early adolescence. No significant relationship was found between parental authority behaviour and the existence of schizophrenia among lower status individuals; but the lower status controls reported an authority structure in the family which was more similar to that of the high status schizophrenics than that of the high status controls. From this it might be predicted that neuroticism, schizophrenia, and other types of psychiatric disorder will be related to different kinds of perception of 'key' figures by individuals in different sub-cultures.

Finally, it seems reasonable to expect that particular kinds of self-concept will be related to psychiatric disorder, although how this relationship operates in practice cannot at present be predicted. R. E. Jones has published relevant work in this field⁵⁹ as have McPartland and Cumming,⁶⁰ who found that 'concrete' and 'extravagant' modes of self-definition were related to psychiatric illness. McPartland and Cumming did not examine the significance of social class differences

in self-concept, but an analysis of the figures presented in their paper shows that, consistent with the assumptions outlined above, a particular type of self-concept which was more common among middle class psychiatric patients than among middle class 'normals' showed a reverse pattern among working class individuals.⁶¹ Their sampling procedure does not, however, seem entirely satisfactory, and so this finding awaits further test.

It will be apparent that this only touches on some of the possibilities arising from these basic assumptions. To summarise at a more general level, the approach suggested would demand detailed analysis of four broad areas. First, it would require study of the process of social or 'vicarious' learning by which individuals establish their 'definitions of the situation'. This seems to fall into three related fields of study: first, research on the development of the self-concept; second, study of the way in which the individual perceives other people; and third, the bearing which the process of interpersonal perception (of 'my view of your view of me' and 'my view of what you would like me to be like' etc.) has on the development of the individual.⁶² Secondly, basic descriptive work is necessary on the nature and significance of the contribution made to the development of the self-concept by different types of social learning experiences. How do social class, religion, sex, family type, age, birth order, residence within a particular ecological area, and other such key sociological variables, and the relationship between them, affect the individual's concept of himself? Erich Fromm,⁶³ for example, has argued that a person living in an integrated social unit would develop an 'identity' in which he would be unable to think of himself in isolation from the group of which he is a member, in contrast to the kind of identity which individuals have to develop in a modern industrial society, where they perceive of themselves as *individuals*, separate from all other individuals. Although Fromm applies this idea to the effects of living in a feudal society, it would seem interesting and relevant to test this out among individuals living in a well-integrated extended family, or a 'close-knit' social network. With reference to psychiatric disorder, does the move from an integrated social unit to a more amorphous and individualistic environment generate stresses, or a crisis of identity, for the individual? Thirdly, it is also necessary to examine the relationship between the conception of self, and different types of psychiatric impairment. Some evidence does⁶⁴ exist on this, although it can by no means be considered conclusive. From this emerges the final point. What is the

relationship between key sociological variables, the self-concept and different types of psychiatric impairment? Are, for example, particular types of self-concept invariably related to specific kinds of mental disorder, or is the connection rendered more complex and indirect by the intervention of sub-cultural and other variables?

As may have become apparent in the above discussion, one is interested in the study of social behaviour at a phenomenological level, studying the significance which individuals subjectively attach to their own and other people's behaviour.⁶⁵ Implicit in all of the above is also the assumption that the most useful path to understanding the rôle of the social environment in psychiatric aetiology lies in the development of a classificatory system, in which the way in which different types of value-system and related variables are correlated with psychiatric symptomatology would be examined and established. A caveat must be entered here, however. To elicit relationships would not be to establish whether or in what way these variables are causally connected. It is possible, for example, that families would organise themselves in particular ways around individuals who started to show particular types of psychiatric symptom; or alternatively that psychiatrically-ill individuals would tend to perceive the behaviour of individuals within the family in a particular way. These are only two of the alternative possibilities, and the determination of causal connections would require an analysis of the way in which the relationship between these different variables developed over time.

¹ The relevance for psychiatry of such a medical model—of which the very terms 'disease' and 'treatment' are obvious indicators—is the subject of some current debate. See, for example, T. S. Szasz: *The Myth of Mental Illness*, Secker and Warburg, London, 1962; T. J. Scheff (ed.): *Mental Illness and Social Processes*, New York, Harper and Row, 1967; R. D. Laing: 'Is schizophrenia a disease?', *International Journal of Social Psychiatry*, Vol. 10, No. 3, Summer 1964, pp. 184-193. Somewhat earlier consideration of this matter is contained in the work of Harry Stack Sullivan, especially: *The Interpersonal Theory of Psychiatry*, (ed. H. S. Perry and M. L. Gawel), Norton, New York, 1953.

² See, for example, M. Opler: *Culture, Psychiatry and Human Values*, Thomas, Springfield, Ill., 1956 (re-issued in 1967 as *Culture and Social Psychiatry*, Atherton Press, New York); A. V. S. de Reuck and R. Porter (eds.): *Transcultural Psychiatry*, (Ciba Foundation Symposium), J. and A. Churchill, London, 1965; E. E. Krapf: 'The concept of social psychiatry', *International Journal of Social Psychiatry*, Vol. 6, No. 1, Winter 1960, pp. 6-8.

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³ De Reuck and Porter: *op. cit.*

⁴ See, for example, De Reuck and Porter: *op. cit.*; K. E. Schmidt: 'Some concepts of mental illness of the Murut of Sarawak', *International Journal of Social Psychiatry*, Vol. 14, No. 1, Winter 1968, pp. 24-31; S. Rav: 'Culture and mental disorder: a study in an Indian mental hospital', *International Journal of Social Psychiatry*, Vol. 12, No. 3, 1966, pp. 139-48; P. K. Benedict and I. Jacks: 'Mental illness in primitive societies', in M. Opler: *op. cit.*

⁵ E. G. Mishler and N. A. Scotch: 'Sociocultural factors in the epidemiology of schizophrenia: a review', *Psychiatry*, Vol. 26, 1963, p. 340.

⁶ C. J. Wardle: 'Social factors in the major functional psychoses', in A. T. Welford *et al.* (eds.): *Society: Problems and Methods of Study*, Routledge, London, 1962, pp. 351-377.

⁷ B. P. Dohrenwend: 'Social status and psychological disorder: an issue of substance and an issue of method', *American Sociological Review*, Vol. 31, No. 1, Feb. 1966, pp. 14-34.

⁸ L. Schatzman and A. Strauss: 'A sociology of psychiatry: a perspective and some organising foci', *Social Problems*, Vol. 14, No. 1, Summer 1966, p. 4 (my italics).

⁹ B. P. Dohrenwend: *loc. cit.*

¹⁰ See, for example, R. Martindale: *The Nature and Types of Sociological Theory*, Routledge, London, 1961, *passim*.

¹¹ For a recent example see E. Angrist, B. Pasamanick *et al.*: *Women after Treatment*, New York, 1968.

¹² See, for example, W. A. Rushing: 'Deviance, interpersonal relations and suicide', *Human Relations*, Vol. 22, No. 1, 1969, pp. 61-76.

¹³ See, for example, W. Stark: *The Fundamental Forms of Social Thought*, Routledge, London, 1962. As Stark rightly infers, the persistence of this debate is probably due less to the (commonly invoked) 'immature' stage of development of social science than to the subject matter with which sociologists have to deal.

¹⁴ See, for example, S. A. Weinstock: 'A note on the value of structural explanations in the study of acculturation', *British Journal of Sociology*, Vol. XVII, No. 1, March 1966, pp. 60-63; and R. J. Silvers: 'Rejoinder', *British Journal of Sociology*, Vol. XVII, March 1966, pp. 64-69; W. Stark: *op. cit.*

¹⁵ This is, for example, the basic Freudian position. See S. Freud: *Civilisation and its Discontents*, Hogarth, London, 1945; also D. Wrong: 'The oversocialised conception of man', *American Sociological Review*, Vol. 26, 1961, pp. 185-93.

¹⁶ A. H. Leighton *et al.*: *The Stirling County Study of Psychiatric Disorder and Sociocultural Environment*, Basic Books, New York, 1959 (3 vols.), but esp. Vol. 3 by D. C. Leighton, J. S. Harding *et al.*: *The Character of Danger: Psychiatric Symptoms in Selected Communities*.

¹⁷ A. H. Leighton: *My Name is Legion* (Vol. 1 of the Stirling County Study), pp. 199-200.

¹⁸ A. H. Leighton: *op. cit.*, Vol. 1, esp. appendix B, pp. 421-425.

¹⁹ E. Durkheim: *Suicide*, (transl. J. A. Spaulding and G. Simpson; ed. G. Simpson), Routledge, London, 1952.

²⁰ E. Durkheim: *The Rules of Sociological Method* (transl. S. A. Solovay and J. H. Mueller; ed. G. E. G. Catlin), Free Press, New York, 1964, *passim*.

²¹ *Ibid.*, p. 13.

²² A. Inkeles: 'Personality and Social Structure', in R. K. Merton *et al.* (eds): *Sociology Today: Problems and Prospects*, Basic Books, New York, 1959, pp. 249-50.

²³ See, for example, L. F. Schnore: 'Social morphology and human ecology', *American Sociological Review*, Vol. 63, 1958, pp. 620-634.

²⁴ See, for example, R. Faris and H. W. Dunham: *Mental Disorders in Urban Areas*, University of Chicago Press, Chicago, 1939 (re-issued in 1960, Hafner, New York); A. B. Hollingshead and F. C. Redlich: *Social Class and Mental Illness*, John Wiley and Sons, New York, 1958; E. H. Hare: 'Mental illness and social conditions in Bristol', *Journal of Mental Science*, Vol. 102, 1956, pp. 349-357; T. A. C. Rennie, L. Srole *et al.*: 'Urban life and mental health', *American Journal of Psychiatry*, Vol. 113, 1957, pp. 831-36. B. Kaplan *et al.*: 'A comparison of the incidence of hospitalised and non-hospitalised cases of psychosis in two communities', *American Sociological Review*, Vol. 21, 1956, pp. 472-9 report an inverse relationship between social class and incidence of hospitalised psychosis in Boston, but found higher rates of non-hospitalised psychosis in their 'upper class' community.

²⁵ J. A. Clausen and M. L. Kohn: 'Relation of schizophrenia to the social structure of a small city', in B. Pasamanick (ed.): *Epidemiology of Mental Disorder*, Amer. Asscn. for the Advancement of Science, Washington, D.C., 1959; L. Stein: '"Social class" gradient in schizophrenia', *British Journal of Preventive and Social Medicine*, 11, 1957, pp. 181-95; E. G. Jaco: *The Social Epidemiology of Mental Disorders*, Russell Sage Foundation, New York, 1960.

²⁶ Faris and Dunham; *op. cit.*

²⁷ J. A. Clausen and M. L. Kohn: 'The ecological approach in social psychiatry', *American Journal of Sociology*, Vol. 40, 1954, pp. 140-49; see also M. C. Kennedy: 'Is there an ecology of mental illness?', *International Journal of Social Psychiatry*, Vol. 10, No. 2, Spring 1964, pp. 119-33.

²⁸ W. S. Robinson: 'Ecological correlations and the behaviour of individuals', *American Sociological Review*, Vol. 15, 1950, pp. 351-7.

²⁹ See also H. W. Dunham: 'Current status of ecological research in mental disorder', in *Sociological Theory and Mental Disorder*, Wayne State University Press, Detroit, 1959, Ch. 9.

³⁰ H. W. Dunham: 'Social structures and mental disorders: competing hypotheses of explanation', in *Causes of Mental Disorders: a Review of Epidemiological Knowledge*, Millbank Memorial Fund, New York, 1961, p. 230.

³¹ Although Hollingshead and Redlich (*op. cit.*), for example, draw attention to the possible influence of (presumed) class differences in socialisation procedures and attitudes towards social mobility, they say in effect no more than that there is a relationship between social class and mental disorder, while the problem of explanation remains.

³² H. W. Dunham: *Community and Schizophrenia*, Wayne State University Press, Detroit, 1965.

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³³ See, for example, Dohrenwend: *loc. cit.*; also N. L. Mintz and D. T. Schwartz: 'Urban ecology and psychosis: community factors in the incidence of schizophrenia and manic-depression among Italians in greater Boston', *International Journal of Social Psychiatry*, Vol. 10, 1964, pp. 101-118.

³⁴ J. A. Clausen and M. L. Kohn in B. Pasamanick (ed.): *op. cit.*

³⁵ See, for example, H. P. Douglass and E. de S. Brunner: *The Protestant Church as a Social Institution*, New York, 1935.

³⁶ C. Winick: 'The diffusion of an innovation among physicians in a large city', *Sociometry*, Vol. 24, No. 4, 1961, pp. 384-92; H. Menzel and E. Katz: 'Comment on Charles Winick', *Sociometry*, Vol. 26, No. 1, 1963, pp. 125-27.

³⁷ Clausen and Kohn make a similar suggestion in their paper in B. Pasamanick (ed.): *op. cit.*

³⁸ W. S. Robinson: *loc. cit.*; H. Selvin, 'Durkheim's "Suicide" and problems of empirical research', *American Journal of Sociology*, Vol. 63, 1958, pp. 607-619.

³⁹ H. G. Birch in B. Pasamanick (ed.): *op. cit.*, pp. 86-90.

⁴⁰ *Ibid.*, p. 90.

⁴¹ L. Srole, T. S. Langner *et al.*: *Mental Health in the Metropolis*, McGraw Hill, New York, 1962.

⁴² *Ibid.* For a good account of the issues involved in the use of prevalence and incidence measures, see appendix C (pp. 380-2) of this work.

⁴³ M. Kuhn: 'Self-attitudes by age, sex, and professional training', *Sociological Quarterly*, Vol. 1, January 1960, pp. 39-55.

⁴⁴ W. C. Reckless, S. Dinitz and E. Murray: 'Self-concept as an insulator against delinquency', *American Sociological Review*, Vol. 21, 1956, pp. 744-6; F. R. Scarpitti *et al.*: 'The "good" boys in a high delinquency area: four years later', *American Sociological Review*, Vol. 25, 1960, pp. 555-9; S. Dinitz, W. Reckless and B. Kay: 'A self-gradient among potential delinquents', *Journal of Criminal Law, Criminology and Police Science*, Vol. 49, 1958.

⁴⁵ C. J. Couch: 'Family rôle specialisation and self-attitudes in children', *Sociological Quarterly*, Vol. 3, 1962, pp. 115-121.

⁴⁶ T. S. McPartland and J. H. Cumming: 'Self-conception, social class and mental health', *Human Organisation*, Vol. 17, No. 3, 1958, pp. 24-29.

⁴⁷ J. Bieri and R. Lobeck: 'Self-concept differences in relation to identification, religion and social class', *Journal of Abnormal and Social Psychology*, Vol. 62, 1961, pp. 94-8.

⁴⁸ S. Coopersmith: *The Antecedents of Self-Esteem*, W. H. Freeman and Co., San Francisco, 1967.

⁴⁹ E. Goffman: *The Presentation of Self in Everyday Life*, Doubleday Anchor, New York, 1959; also *Asylums*, Doubleday Anchor, New York, 1961.

⁵⁰ E. Lemert: 'Paranoia and the dynamics of exclusion', *Sociometry*, Vol. 25, 1962, p. 6.

⁵¹ N. S. Kline: 'A theoretic framework for transcultural psychiatry', *American Journal of Psychiatry*, Vol. 123, 1966, pp. 85-87.

⁵² *Ibid.*, p. 86. I am grateful to Prof. G. M. Carstairs for drawing my attention to the fact that a similar distinction—between 'primary' and 'secondary' symptoms—was made by Bleuler in 1911. These classifications also have some affinity with Lemert's distinction between 'primary' and 'secondary' deviance. See E. Lemert: *Social Pathology*, McGraw Hill, New York, 1951, pp. 75ff.

⁵³ A. Bandura and R. H. Walters: *Social Learning and Personality Development*, Holt, Rinehart and Winston, New York, 1965.

⁵⁴ R. D. Laing: *The Divided Self*, Pelican, Harmondsworth, Middlesex, 1964. See also G. Bateson *et al.*: 'Toward a theory of schizophrenia', *Behavioural Science*, Vol. 1, 1956, pp. 251-64.

⁵⁵ T. S. Szasz: *op. cit.*

⁵⁶ G. H. Mead: *Mind, Self and Society*, Univ. of Chicago Press, Chicago, 1934. See also A. Strauss: *George Herbert Mead on Social Psychology*, Phoenix, Chicago, 1965.

⁵⁷ R. D. Laing, H. Phillipson and A. R. Lee: *Interpersonal Perception: a Theory and a Method of Research*, Tavistock, London, 1966, part I.

⁵⁸ M. L. Kohn and J. L. Clausen: 'Parental authority behaviour and schizophrenia', *American Journal of Orthopsychiatry*, Vol. 26, 1956, pp. 297-313.

⁵⁹ R. E. Jones: 'Identification in terms of personal constructs', *Journal of Consultative Psychology*, Vol. 25, 1961, p. 276.

⁶⁰ T. S. McPartland and J. H. Cumming: *loc. cit.*

⁶¹ *Ibid.* 26.8 per cent middle class 'normals' described themselves in terms of self-concept type 'C', as opposed to 35 per cent of middle class psychiatric cases. Among working class subjects, the percentages were 52.8 and 31 respectively ($\chi^2 = 5.534$, $p < .025$).

⁶² See, for example, U. Bronfenbrenner: 'The study of identification through interpersonal perception', in R. Tagiuri and L. Petrullo (eds): *Personal Perception and Interpersonal Behaviour*, Stanford Univ. Press, Stanford, 1958, Ch. 9.

⁶³ E. Fromm: *The Fear of Freedom*, Routledge, London, 1942.

⁶⁴ See, for example, R. E. Jones: *loc. cit.*; McPartland and Cumming; *loc. cit.*

⁶⁵ The particular contribution which the sociologist can make in this area would seem to be in the study of differences in values and attitudes and their effects on the perceptual and motivational systems of the individual. Following the argument of Winch (*The Idea of a Social Science*, Routledge, London, 1965) one is looking for meaning through studying the rules governing behaviour which is socially established. The major question (where one departs from Winch's conclusion that 'meaning' can only be grasped intuitively) then becomes that of identifying and measuring meaning-systems. A promising approach to this problem might be through use of that ubiquitous instrument, the semantic differential (see C. E. Osgood *et al.*: *The Measurement of Meaning*, Univ. of Illinois Press, Urbana, 1957). This does, however, possess the drawback that the individual has to work with concepts and adjectives provided by the researcher, which need not be those with the greatest significance for the subject. (See, for example, R. W. Brown: 'Is a boulder sweet or sour?', *Contemporary Psychology*, Vol. 3, 1958, p. 113; also A. S. Presly:

'Concept-scale interaction in the semantic differential and its implications for factor scores', *British Journal of Psychology*, Vol. 60, 1969, pp. 109-113.) This difficulty might be overcome by the more internally consistent 'repertory-grid' method of Kelly. In this, the subject himself supplies 'constructs' (adjectives) to judge 'elements' (concepts) normally specified by the researcher. (G. A. Kelly: *The Psychology of Personal Constructs*, Norton, New York, 1955 (2 vols.); see also D. Bannister and J. M. Mair: *The Evaluation of Personal Constructs*, Academic Press, London, 1968.) These grids can then be analysed by one of a number of available procedures based on analysis of variance, to elicit the principal dimensions of the meaning-system of the individual. The aim in this would be to elicit such construct-systems from sufficiently large and representative groups of people with similar backgrounds, to enable one to categorise these major dimensions of meaning on specified 'key' concepts, and use these as a base from which to undertake inter-group comparisons.

Social Class Differences in the Relationship Between Birth Order and Personality Development

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Summary. While most writers on the subject are probably aware of the need to study interactions between birth order and other factors in the environment of the individual, research on the relationship between birth order and personality development or psychopathology has tended to ignore the possibility that the experience of individuals in particular birth positions may vary in groups with different life-styles. A survey was undertaken among boys aged 14—15, and coming from different social class backgrounds, to test the hypothesis that the relationship between birth order and personality development varies by social class. The results lend support to this hypothesis, with differences emerging particularly between middle-class and lower working-class boys. Thus, only sons from lower working-class homes are more anxious and more introverted than their late-born counterparts, whereas in middle-class boys this pattern is reversed, with only and first-born boys being less anxious and somewhat more extraverted than late-borns. Moreover, only sons of middle-class families are significantly less anxious than only lower working-class boys, while lower working-class late-borns are significantly more extraverted and less neurotic than middle-class late-borns. Possible interpretations of these results are examined and a tentative explanation presented, centering on the possibilities for interaction between parents and children in various birth-order groups, and the kinds of career for which such experiences may fit the individual.

Résumé. Bien que la plupart des auteurs, dans ce domaine, soient probablement conscients de la nécessité d'étudier les interactions qui existent entre la position dans la fratrie et les autres facteurs de l'environnement de l'individu, les recherches concernant la relation entre la position dans la fratrie et le développement de la personnalité, ou la psychopathologie, ont tendance à négliger la possibilité que l'expérience des individus occupant une certaine position dans la fratrie peut varier selon le mode de vie du groupe auxquels ils appartiennent. On a entrepris une étude parmi des garçons âgés de 14 à 15 ans, et provenant de milieux sociaux différents, afin de vérifier l'hypothèse selon laquelle la relation entre la position dans la fratrie et le développement de la personnalité varie selon la classe sociale. Les résultats confirment cette hypothèse, des différences apparaissant particulièrement entre les garçons de la classe moyenne et ceux de la classe ouvrière inférieure. Ainsi, les fils uniques de familles de la classe inférieure sont plus anxieux et plus introvertis que leurs camarades puînés; chez les garçons de

la classe moyenne, par contre, ce schéma est inversé, les enfants uniques et les aînés étant moins anxieux et plus extravertis que les puînés. De plus, les fils uniques des familles de la classe moyenne sont, de façon significative, moins anxieux que ceux de la classe inférieure, tandis que les puînés de la classe inférieure sont, de façon significative, plus extravertis et moins névrosés que ceux de la classe moyenne. On a examiné les interprétations possible de ces résultats et tenté d'en présenter une explication, en mettant l'accent sur les possibilités d'interaction entre parents et enfants dans les différents groupes; on examine également le genre de carrières qui pourraient convenir aux individus ayant vécu de telles expériences.

Zusammenfassung. Während die meisten Autoren auf diesem Gebiet sich wahrscheinlich der Notwendigkeit einer Untersuchung der Wechselbeziehungen zwischen der Stellung in der Geschwisterreihe und anderen Faktoren in der Umwelt eines Menschen bewusst sind, hat die Forschung über die Beziehung zwischen Geschwisterposition und Persönlichkeitsentwicklung oder Psychopathologie bisher die Möglichkeit ziemlich ignoriert, daß die Erfahrung von Menschen in verschiedenen Geschwisterpositionen in Gruppen mit verschiedenen Lebensstilen variieren kann. An Knaben im Alter zwischen 14 bis 15 Jahren, die aus verschiedenen Sozialschichten kamen, wurde eine Übersichtsstudie unternommen, um die Hypothese zu untersuchen, daß die Beziehung zwischen Geschwisterposition und Persönlichkeitsentwicklung mit der Sozialschicht variiert. Die Ergebnisse stützen diese Hypothese, die Unterschiede treten besonders zwischen Knaben der Mittelschicht und der unteren Arbeiterschicht hervor. So sind Einzelsöhne aus Elternhäusern der unteren Arbeiterschicht ängstlicher und introvertierter als ihre nachgeborenen Vergleichspartner, während bei Knaben der Mittelschicht diese Beziehung umgekehrt besteht, wo Einzelkinder und erstgeborene Knaben weniger ängstlich und etwas extravertierter als Nachgeborene sind. Außerdem sind Einzelsöhne aus Familien der Mittelschicht signifikant weniger ängstlich als männliche Einzelkinder der unteren Arbeiterschicht, während Nachgeborene der unteren Arbeiterschicht signifikant extravertierter und weniger neurotisch als Nachgeborene der Mittelschicht sind. Mögliche Interpretationen dieser Ergebnisse werden geprüft, und eine vorsichtige Erklärung wird gegeben, die sich auf die Interaktionsmöglichkeiten zwischen Eltern und Kindern in verschiedenartigen Geschwisterpositionen konzentriert und auf die jeweilige Lebensform, zu der solche Erfahrungen den einzelnen ausrüsten können.

One is tempted, in the preamble to a paper on birth order, to follow that convention which draws attention to the volume and longevity of work within a field, then bemoans its lack of progress to date. As is no doubt well known to the reader, studies of the relationship between birth order and personality development or psychiatric state have produced an array of inconclusive, and at times frankly contradictory findings which it seems hardly necessary to recount, in view of the several competent reviews which already exist (Clausen; Erlenmeyer-Kimling *et al.*; Granville-Grossman; Grosz; and Ming-Tso Tsuang). It was these inconsistencies, and a belief in the importance of the role of birth order in personality development, which provided the stimulus for the present study.

Birth order and psychiatric aetiology. Among the most important—and intractable—of the problems involved in attempting to trace the influence of social factors in the development of personality is that of distinguishing between those elements which may *a priori* be expected to produce the same general effects across all individuals and social groups, and such features as may vary in their effects according to differences between social groups. These considerations seem particularly apposite in the case of birth-order research. It is, in the first place, obvious that order of birth *per se*, will to some extent impose a pattern on the learning-situation of the child. Thus, the family relationships of an only child will by definition be restricted to contacts with his parents. By the same token a substantial part of the

late-born child's social experience is likely to derive from close and constant interaction with other children (Clausen; Kammeyer). But whether or not children in particular birth-order positions develop characteristic traits, or modes of thinking and behaviour, may depend on how these experiences are in turn shaped by factors which may vary between different social groups. Thus, if the normal relationship of parent to child in a particular social class is close, helpful and egalitarian, his experience within the family may benefit the only child; whereas if the expected pattern is for parents to be more aloof and authoritarian, the only child may be at a relative disadvantage. Alternatively, it could be argued that, as a group, only children will for example tend to develop "adult-oriented" styles of thought, speech and behaviour; while late-borns are more "child-oriented" in these areas. Differences may however still develop between different social-class groups, according to the extent to which their life outside the family demands the exercise of "adult"- or "child-oriented" qualities. Since this anticipates a later discussion, fuller consideration of this point will be undertaken below.

The possibility of the differential significance of birth order has not, of course, been overlooked by contributors to the psychiatric literature on the subject. Barry for example, argues (1967 b) that: "(some) discrepancies may be related to such variables as family size, sex, socio-economic levels and, especially, type of culture." In support of his thesis, Barry contrasts findings from studies in India, Malaya and the U.S.A.; and draws attention to the discovery by Solomon and Nuttall that in Massachusetts, upper-class male schizophrenics showed a preponderance of first over last-born sibs of 3.5:1. This ratio he claims to be opposite in direction to that found in most reported samples of (presumably working-class) American schizophrenics. The bulk of the psychiatric research on this subject does however seem to start from the assumption that birth order is a homogeneous variable—that the effects of occupying a particular position within the family are the same across different groups in any population. It is perhaps significant that such advances as have been made in the study of this problem have been methodological, rather than conceptual. A range of more or less sophisticated statistical techniques is now available to the individual who wishes to undertake research on the effects of birth order (Davis; Greenwood and Yule; Gregory; and Slater).

The present study was accordingly designed to test the idea that order of birth possesses a different significance for individuals from different social groups. More specifically (and although social class is of course not the only criterion on which a population can be subdivided), it was hypothesised that adolescent boys from particular positions in working-class families will encounter a different range and type of experience from that of adolescent boys of

equivalent birth rank in middle-class families. Thus, boys who share the same birth order will possess different personality characteristics in these different social classes. If this prediction holds true, then it would seem possible that at least some of the discrepancies in existing findings on birth order and psychiatric conditions may be due to there being different proportions of working-class to middle-class patients in the various study-populations.

Method

Data on family size, birth order and parental occupation were obtained for 297 boys all aged between 14 and 15 years, attending schools in Edinburgh. The subjects in the middle-class sample (those from social classes 1 and II of the Registrar General's classification) were drawn from schools serving a mainly residential area on the periphery of the city. Boys were included in the study only if their home address was in the electoral ward covering this area, and their father was in social class 1 or II. All cases fulfilling these criteria were contained in the sample. Working-class subjects were drawn from three basically working-class areas of Edinburgh—two purpose-built estates near the city boundary, and a central "tenement" area. Again boys were included in the study only if their home address was in an appropriate ward, and their father was in social class III, IV or V. As before, all boys who satisfied these requirements were incorporated into the sample. It should also be noted that subjects were included in the research only when both parents were alive and living together (information on this being obtained from school record cards, and checked with the headmaster).

To ensure that the working-class sample was as homogeneous as possible, and following the recommendation of Bechhofer, those boys whose fathers were in "clerical and shop workers" occupations (i. e. socio-economic groups 5, 6 and 7 in the 1960 classification) were excluded from the social-class III sample. For purposes of analysis, social classes 1 and II (114 boys) were combined to form a "middle-class" group; and social classes IV and V (88 boys) amalgamated to form a "lower working-class" group. The 95 boys from social class III constituted the "skilled working-class" group. At the request of the Burgh's Direction of Education, the permission of parents had been sought before the boys were included in the study. There were no refusals among the middle-class group; nine parents (8.65%) in the skilled working-class group refused permission, and 7 (7.37%) of the parents of lower working-class subjects declined. This low rate of refusal leads the author to believe the sample is representative for each group. A detailed breakdown of these three populations, by birth order and family size, is presented in Table 1.

Table 1. No. of Boys in Each Birth-Order/Family-Size Group in:

	N
<i>Middle class</i>	
Only sons	12
1st-born in a small family	27
1st-born in a large family	6
Late-born in a small family	51
Late-born in a large family	18
<i>Skilled working</i>	
Only sons	7
1st-born in a small family	28
1st-born in a large family	6
Late-born in a small family	20
Late-born in a large family	34
<i>Lower working</i>	
Only sons	7
1st-born in a small family	20
1st-born in a large family	4
Late-born in a small family	22
Late-born in a large family	35

Cattell's High School Personality Questionnaire (the "HSPQ") was administered by the author to boys in their classroom groups. This widely-used and well-standardised test gives scores for fourteen basic dimensions of personality, from which a number of subsidiary ("second-order") factors can also be derived. Scores were calculated for three of these second-order factors—extraversion, anxiety, and neuroticism—following the procedures recommended by Cattell and Beloff.

Results

For ease of presentation and discussion, findings are detailed for the four marginal groups only, i. e. first-born, late-born, boys from large families (four or more members) and boys from small families (two or three members)—plus only sons.

Mean "second-order" factor scores for the various birth-order/family-size groups in each social class are presented in Table 2 (a). Comparing the three social-class groups, it becomes quickly apparent that the relationship between birth order and the three factor scores operates somewhat differently within each social class. Thus, we find that the 24 first-born boys from lower working-class families are significantly ($p < 0.05$) more introverted than their late-born (i. e. second or subsequent in birth order) peers. Moreover, only boys from this social class are most introverted of all and, despite their small representation ($N=7$) are significantly more introverted than late-born boys. There are no significant differences in the middle-class group in the degree of extraversion of only, first, and late-born boys. It is, however, of note that the trend of the mean scores is exactly the reverse of that of the lower working-class sample, with only boys being least, and late-born most introverted. The trend in the skilled working-class group is similar to that in

Table 2(a). Mean second-order factor scores for:

<i>Middle class</i>				
	N	Extravn.	Anx.	Neur.
Only	12	39.5	52.9	22.4
First-born	33	38.4	54.2	20.9
Late-born	69	35.3	60.4	22.9
Large family	24	35.5	58.4	22.3
Small family	78	36.5	58.4	22.2
t for 1st v late	—	—	2.2	*
t for 1st v only	—	—	—	—
t for only v late	—	—	*	—
t for large v small	—	—	—	—
<i>Skilled working</i>				
	N	Extravn.	Anx.	Neur.
Only	7	40.4	68.0	21.1
First-born	34	38.2	54.9	21.2
Late-born	54	37.6	58.0	20.8
Large family	40	37.7	56.6	20.4
Small family	48	37.9	57.3	22.1
t for 1st v late	—	—	—	—
t for 1st v only	—	—	2.5	—
t for only v late	—	—	*	—
t for large v small	—	—	—	—
<i>Lower working</i>				
	N	Extravn.	Anx.	Neur.
Only	7	33.3	68.4	22.0
First-born	24	36.0	58.3	21.5
Late-born	57	40.8	55.9	20.9
Large family	39	40.3	56.1	21.4
Small family	42	38.5	58.1	20.7
t for 1st v late	—	2.4	—	—
t for 1st v only	—	—	—	—
t for only v late	—	2.2	2.4	—
t for large v small	—	—	—	—

* = $p < .1$. Where the value of t is specified, the difference is significant at or beyond the 0.05 level.

All t tests in this and following tables are for small samples.

Of the 36 comparisons in this table, chance factors would of course yield two which differ significantly at the 5% level.

the middle-class boys, though again no significant differences emerge.

Turning to the dimension of *anxiety*, we find that late-born middle-class boys are significantly more anxious than are the first-born from the same social class. Only sons again fit the trend, being least anxious of all in this social-class group, although the difference between these and the late-born is not significant at an acceptable level of confidence. While on this factor there is no consistent trend with birth order in social class III, only boys are significantly more anxious than first-born boys although not than late-born boys. In the lower working-class sample, however, only sons are significantly more anxious than the late-born, and the trend is again the reverse of that apparent in the middle-class group, with late-born least anxious through first-born to only sons, who are the most anxious.

On the neuroticism factor, the only social-class group in which the trend runs consistent with birth

Table 2(b). Mean primary factor scores

	A	C	D	E	F	G	H	I	J	O	Q2	Q3	Q4
<i>Middle class</i>													
Only	10.3	11.2	9.4	9.0	10.5	11.3	10.4	8.3	7.5	9.6	10.8	10.9	8.8
First-born	9.5	9.8	10.9	10.2	10.4	11.9	10.8	7.6	9.3	9.7	11.4	11.1	8.7
Late born	9.1	8.8	11.6	9.3	10.3	11.3	8.6	8.4	9.1	10.3	11.3	10.3	10.2
Large family	9.0	10.5	11.9	9.3	10.5	11.7	9.2	8.3	9.4	9.5	11.4	10.4	10.4
Small family	9.4	8.7	11.1	9.7	10.2	11.5	9.4	8.1	9.1	10.3	11.3	10.6	9.5
t for 1st v late	—	—	—	—	—	—	2.8	—	—	—	—	—	2.2
t for 1st v only	—	—	—	—	—	—	—	—	—	—	—	—	—
t for only v late	—	2.0	*	—	—	—	—	—	*	—	—	—	—
t for large v small	—	2.3	—	—	—	—	—	—	—	—	—	—	—
Skilled working													
<i>Skilled working</i>													
Only	10.7	9.0	14.0	10.9	11.7	10.1	9.7	6.6	8.4	11.4	10.6	8.3	11.4
First-born	10.0	9.5	10.1	10.4	10.2	11.0	10.1	7.1	8.6	9.8	11.5	10.5	9.0
Late-born	9.4	9.4	11.0	10.2	11.0	10.4	10.0	7.0	8.4	10.3	11.9	9.8	9.1
Large family	9.3	10.0	11.0	10.2	10.9	10.4	10.5	6.6	8.2	10.5	11.5	9.9	9.2
Small family	9.9	8.8	10.3	10.4	10.6	10.8	9.6	7.5	8.6	10.5	11.9	10.2	9.0
t for 1st v late	—	—	—	—	—	—	—	—	—	—	—	—	—
t for 1st v only	—	—	3.3	—	—	—	—	—	—	—	—	—	*
t for only v late	—	—	2.3	—	—	—	—	—	—	—	—	—	*
t for large v small	—	—	—	—	—	—	—	—	—	—	—	—	—
<i>Lower working</i>													
Only	8.4	7.1	12.9	10.0	11.3	8.3	7.3	7.4	10.1	12.4	12.3	7.4	10.6
First-born	9.6	9.8	11.3	10.0	9.8	10.6	10.2	7.1	8.5	10.3	12.6	8.7	9.7
Late-born	10.7	9.5	10.8	10.4	10.9	10.2	10.4	7.9	8.1	10.7	10.3	10.0	9.8
Large family	10.9	9.9	10.9	10.1	10.3	10.4	10.7	7.6	7.9	10.8	10.6	9.8	9.5
Small family	9.9	9.3	10.9	10.4	10.9	10.2	10.0	7.1	8.5	10.4	11.4	9.4	10.0
t for 1st v late	—	—	—	—	—	—	—	—	—	—	3.7	*	—
t for 1st v only	—	—	—	—	—	—	—	—	—	—	—	—	—
t for only v late	*	*	*	—	—	—	2.4	—	*	—	*	2.3	—
t for large v small	—	—	—	—	—	—	—	—	—	—	—	—	—

* = $p < .1$. In each social-class group, chance factors would give 2—3 differences significant at the 5% level. Where the value of t is specified, the difference is significant at or beyond the 0.05 level.

order is the lower working class, where we see a progression from late-born (least) to only (most neurotic). Differences between these groups fail to even approach significance, however.

To summarise the results so far, there appears to be no marked relationship between birth order and these second-order factors in the social-class III sample, although there is a slight tendency for only and first-born boys to be more extraverted, and a definite tendency for only boys to be more anxious. Trends in the middle-class and the lower working-class groups are on the whole *antithetical* to each other, with only or first-born status perhaps tending to favour the child of middle-class parents, and late order of birth operating to the possible advantage of a low working-class child. In none of the three social-class groups, moreover, does family size appear to have a bearing on these dimensions of personality.

In Table 2 (b) are presented the mean scores for the other personality factors¹ sub-divided again by social class, birth order and family size. In the interests of economy and clarity, only those results significant at the 2.5% level will be discussed in the text.

¹ Factor B has been omitted from the analysis since it is not specifically a personality factor.

Concentrating first on the skilled working-class sample, we find the higher level of anxiety among only sons in this group reflected in significant differences between this group and both first and late-born boys on factor D, which is one of the dimensions contributing to this second-order factor. Their significantly higher score on this factor indicates that only sons of the skilled working class are more likely to be excitable, demanding and overactive than boys with siblings, who are of more phlegmatic temperament.

This pattern is to some extent repeated in the lower working-class, where the higher anxiety and introversion of the only son are manifested in a score on the H factor which is significantly lower than that of late-born boys. Cattell (1962) characterises the child low on factor H as shy, diffident and sensitive to threat. First-born sons in this social class also prove to be more self-sufficient (Q₂) than late-born boys.

Turning to the middle-class sample, the only difference which emerges as significant at the 0.025 level is on factor H, where first-born boys prove more adventurous and less shy than their late-born peers. It is interesting to note the contrast between this finding, and that for the late-borns in the lower working-class. Indeed, perhaps as interesting as these

detailed differences themselves, are the variations in the trends of the mean scores across the various birth-order groups. Looking only at those cases where there is a consistent progression from high to low or from low to high scores, from only, through first, to late-born boys, one discovers three (A, C and D) of the primary factors on which the direction of the trend is reversed in the middle and lower working-class samples. Add to this the two second-order factors (extraversion and anxiety) on which the trends are also antithetical, and there emerge five out of 16 factors which are possibly affected differently by birth order in these two groups.

When comparisons are conducted within each birth-order group across the three social classes, we find the patterns presented in Tables 3 (a) and 3 (b).

Table 3 (a). Comparisons across social class of mean second-order factor scores for each birth-order group

<i>Middle v lower working</i>			
	Extravn.	Anx.	Neur.
Only	—	2.4	—
1st	—	—	—
Late	3.2	*	2.5
<i>Middle v skilled working</i>			
	Extravn.	Anx.	Neur.
Only	—	2.4	—
1st	—	—	—
Late	—	—	2.6
<i>Skilled v lower working</i>			
	Extravn.	Anx.	Neur.
Only	—	—	—
1st	—	—	—
Late	2.1	—	—

* = $p < .1$.

With a total of 27 comparisons, chance alone would yield two differences significant at the 5% level.

Where the value of t is specified, the difference is significant at or beyond the 0.05 level.

This analysis confirms the divergent trends noted above, and would therefore suggest that the relationship between birth order and personality characteristics is affected by social class, with particularly marked variations emerging between the two groups at the extremes of the class spectrum. Thus, only sons in skilled and lower working-class families are significantly more anxious than only boys from middle-class homes. Late-born middle-class boys are, on the other hand, distinctly more neurotic than their (skilled or lower) working-class counterparts. Late-born lower working-class boys are also significantly more extraverted than late-born middle or skilled working-class subjects. Again, these figures seem to suggest that the only child is on the whole at an advantage in the middle-class and a disadvantage in the working-class family. Conversely, late-born status possibly favours the working-class (particularly the lower working-class) child.

In Table 3 (b) nine out of a possible 26 differences between middle and lower working-class late-born and only sons prove to be significant at the 5% level, or better. As before, however, only those results which are significant at the 0.025 level will be considered in this discussion of the primary factors.

The only lower working-class son emerges as more self-doubting (J), and less "integrated" (Q₃) than the middle-class child in a similar family situation. Late-born working-class boys are more outgoing (A) and less shy (H).

The comparison between the middle and skilled working-class subjects again highlights the contrast between only and late-born status in the two groups, but elicits only one difference which is significant at less than the 0.025 level of confidence. Only sons of middle-class parents are more phlegmatic (D) than only sons from the skilled working-class. Moving to the final set of comparisons, again only one difference meets the required level of significance. Lower working-class late-borns are more oriented to group activity (Q₂) than their skilled working-class counterparts.

Table 3 (b). Comparisons across social class of mean primary factor scores for each birth-order group

	A	C	D	E	F	G	H	I	J	O	Q2	Q3	Q4
<i>Middle v lower working</i>													
Only	—	2.5	2.1	—	—	2.3	*	—	2.6	—	—	3.1	—
1st	—	—	—	—	—	*	—	—	—	—	*	2.6	—
Late	2.6	—	—	—	—	2.2	2.9	—	*	—	2.0	—	—
<i>Middle v skilled working</i>													
Only	—	—	3.0	—	—	—	—	—	—	—	—	2.3	*
1st	—	—	—	—	—	—	—	—	—	—	—	—	—
Late	—	—	—	—	—	*	2.2	2.3	—	—	—	—	*
<i>Skilled v lower working</i>													
Only	—	—	—	—	—	—	—	—	—	—	—	—	—
1st	—	—	—	—	—	—	—	—	—	—	*	2.0	—
Late	2.1	—	—	—	—	—	—	—	—	—	3.3	—	—

* = $p < .1$. In each section of this table, chance factors would give two significant differences at the 5% level. Where the value of t is specified, the difference is significant at or beyond the 0.05 level.

Discussion

It therefore seems reasonable to interpret these results as providing support for the original hypothesis. The personality-correlates of particular orders of birth do appear to vary by social class—a finding which clearly has important implications for psychiatric research in this area. Future studies might usefully extend this kind of analysis by investigating the interaction between social class and birth order among girls, and other age-groups; and such additional considerations as whether the sex-composition of the family has any bearing on the trends noted above. What, for instance, is the position of a boy or girl in a two-child family who has a sibling of the opposite sex? For the present, however, an attempt will be made to explain the trends uncovered by this research.

It may prove useful at this stage to concentrate on the only children in the sample, since their common situation—the fact that their opportunities for interaction within the family are restricted to contacts with parents—possibly contains fewer complicating features than is the case with the other birth-order groups. As noted above, two basic kinds of explanation seem possible for the different trends in this group². The first would focus on the consequences for only children, of social class differences in parental role-behaviour. Thus, the way in which Edinburgh lower working-class parents behave towards their children may be of such a nature that a boy with no interpersonal “cushions” will become anxious and introverted. There may, on the other hand, be something inherent in a family situation where a boy interacts exclusively with adults, which produces or enhances certain personality-characteristics (either cognitive or emotional) and which thereby fits boys for certain kinds of experience, rather than others. If the general life-experience of a middle-class boy demands that he possess certain qualities which are more easily acquired through constant close interaction with adults, then his lower level of anxiety may reflect the greater ease with which the only son is able to adapt to these demands.

On the whole, an explanation of this latter type seems more convincing to the present author. Several writers have drawn attention to the importance of peer-relations in the life of the lower working-class child (Cohen; Mays; Spinley; Trasler)—indeed, a whole body of literature on delinquency and the sociology of education uses this as an explanatory variable. It has also been noted that within working-class groups of age peers a generally hedonistic style of existence prevails. Members are, for example, encouraged to pursue short-term goals and the immediate gratification of wants (Jackson and Marsden; Klein); and to express feelings openly and directly

(for which Bernstein's work on social-class differences in vocabulary and language-structure has obvious relevance). Conversely, peer-group experiences assume relatively little importance in the life of the middle-class child. In the more home and parent-centred middle-class environment, greater stress is laid on the autonomy and emergent personality of the child (Bernstein and Young; Bernstein and Henderson), and the socialisation-process tends to foster the development of self control through the internalisation of moral standards (Kohn). Moreover, and bearing in mind the great importance attached to educational attainment by middle-class parents, the only child or the child from a small family would seem to be at something of an advantage in a middle-class environment since he has more ready access to adults, and is consequently more likely to develop the more sophisticated vocabulary and modes of speech which Bernstein, among others, has shown to be of great importance for educational success.

If these speculations are correct, it would follow that the only child from a lower working-class home is more anxious, introverted and shy than the late-born boy, because his family experience has given him little opportunity to develop the “social” or interpersonal skills necessary for successful integration into his peer group. It may also be that in certain cases, the fact that working-class parents have had only one child is an indication of aspirations for higher status, so that some boys also have this kind of pressure against forming ties with others from their own area. At the opposite end of the birth-order scale, the late-born child, accustomed from early years to co-operation and competition with other children finds less difficulty in spontaneously interacting with peers. In the middle-class, only sons are possibly less anxious than late-borns, because their socialisation experience has equipped them more effectively at the verbal and cognitive levels for academic competition and perhaps also for the more constrained interactions with others which may form an important part of the middle-class ethos, so that their styles of thought and action are less at variance with the expectations held by influential individuals in the environment within which they find themselves.

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References

- Barry, H., Jr.: A century of wasted opportunity? *Int. J. Psychiat.* 3, 31—36 (1967).
 — Birth order: achievement, schizophrenia and culture. *Int. J. Psychiat.* 3, 439—444 (1967).
 Bedhofer, F.: Occupations. In *Comparability in Social Research*. Ed.: M. Stacey. London: Heinemann 1969.

² It should be stressed that these are *basic* explanatory types. The possibility of an interaction between these two is not therefore ruled out.

- Bernstein, B.: Social class and linguistic development: a theory of social learning. In: *Education, Economy and Society*. Eds.: A. H. Halsey, J. Floud, and C. A. Anderson. New York: Free Press 1961.
- A socio-linguistic approach to social learning. In: *Survey of the Social Sciences*. Ed.: J. Gould. London: Penguin 1965.
- Young, D.: Social class differences in conceptions of the use of toys. *Sociology* 1, 131—140 (1967).
- Henderson, D.: Social class differences in the relevance of language to socialisation. *Sociology* 3, 1—20 (1969).
- Cattell, R. B., Beloff, H.: *Handbook for the Jr.-sr. High School Personality Questionnaire*. Champaign, Ill.: Institute for Personality and Ability Testing, 1962.
- Clausen, J. A.: Family structure, socialisation and personality. In: *Rev. Child Dev. Res.* Eds.: L. W. Hoffman and M. L. Hoffman. New York: Russell Sage Foundation 1966.
- Cohen, A.: *Delinquent Boys: The Culture of the Gang*. Glencoe, Ill.: The Free Press 1955.
- Davis, D. R.: Comment on E. Slater: Birth order and maternal age of homosexuals. *Lancet* 1, 540—541 (1962).
- Erlenmeyer-Kimling, L., van den Bosch, E., Denham, B.: The problem of birth order and schizophrenia: a negative conclusion. *Brit. J. Psychiat.* 115, 659—678 (1969).
- Granville-Grossman, K. L.: Birth order and schizophrenia. *Brit. J. Psychiat.* 112, 1119—1126 (1966).
- Greenwood, M., Yule, G. U.: On the determination of size of family and the distribution of characters in order of birth. *J. Royal Statist. Soc.* 77, 179—199 (1914).
- Gregory, I.: An analysis of familial data on psychiatric patients: parental age, family size, birth order, and ordinal position. *Brit. J. prev. soc. Med.* 12, 42—59 (1958).
- Grosz, H. J.: Birth order, anxiety and affiliative tendency. *J. Nerv. ment. Dis.* 139, 588 (1964).
- Jackson, B., Marsden, D.: *Education and the Working Class*. London: Routledge and Kegan Paul 1962.
- Kammeyer, K.: Birth order as a research variable. *Social Forces* 46, 71—80 (1967—68).
- Klein, J.: *Samples from English Cultures* (2 vols.). London: Routledge and Kegan Paul 1965.
- Kohn, M. L.: Social class and parental values. *Amer. J. Sociol.* 64, 337—351 (1959).
- Social class and the exercise of parental authority. *Amer. Sociol. Rev.* 24, 352—366 (1959).
- Mays, J. B.: *Growing up in a City*. Liverpool: University of Liverpool Press 1954.
- Ming-Tso Tsuang: Birth order and maternal age of psychiatric in-patients. *Brit. J. psychiat.* 112, 1131—1141 (1966).
- Slater, E.: Birth order and maternal age of homosexuals. *Lancet* 1, 69—71 (1962).
- Solomon, L., Nuttall, R.: Sibling order, premorbid adjustment and remission in schizophrenia. *J. nerv. ment. Dis.* 144, 37—46 (1967).
- Spinley, B. M.: *The Deprived and the Privileged*. London: Routledge and Kegan Paul 1953.
- Trasler, G.: *The Explanation of Criminality*. London: Routledge and Kegan Paul 1963.

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