THE DEVELOPMENT OF

MORAL JUDGEMENTS IN CHILDREN:

A THEORETICAL AND EMPIRICAL INVESTIGATION

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INTRODUCTION

Nowadays it is uncommon to open a new book on child development and find no mention of the work of Jean Piaget. In his fifty years of academic life Piaget has published a phenomenal number of books and articles, has provided the impetus for even more research and has contributed a unique theory of child development to a field already crowded with ideas. An understanding of Piaget's work is essential to anyone interested in the development of the child; this thesis attempts to explain and extend the theory of moral development which has been proposed by this truly remarkable academic.

The major emphasis in this thesis is on moral development. An attempt is made to qualify Piaget's theory of moral development in several ways. The methodological weaknesses and obscurities which typify Piaget's approach will be discussed since these limit the validity of his findings. A review of the replication work deriving from Piaget's study will be made since they further test the validity of his scheme and suggest many modifications to his original statements. Other theories of moral development will be outlined since Piaget emphasizes a single aspect of conscience (the cognitive ability to distinguish right and wrong) and ignores other equally important
features (such as guilt or behaviour).

The stress placed by Piaget on the cognitive aspects of moral development derives from his overriding interest in the development of the child's acquisition and organization of knowledge; Piaget regards morality as one particular area of knowledge which the child must assimilate. He suggests that the process of development is basically the same for moral knowledge and for other areas of cognitive growth. Piaget has elaborated a complex theory of intellectual development which is often closely related to his theory of moral development and he implies that the factors which contribute to the child's organization and understanding of the world necessarily affect his moral knowledge as well. A complete understanding of Piaget's theory of moral development is therefore dependent upon some insight into his more general cognitive theory. An account of this theory will be given here for two reasons: first, a fairly straightforward explanation of Piaget's theory of cognitive development is lacking (although this is less true with the recent publication of the several short books noted in the first Bibliography); and second, this account should illuminate Piaget's ideas on moral development.

Jean Piaget is a very remarkable man. He has no formal qualifications in psychology and yet he has contributed one of the most important and provocative theories of child development in a field dominated by psychologists. He was born on August 9, 1896, at
Neuchatel in Switzerland and was obviously a precocious child. He took a very early interest in serious study and between the ages of seven and ten years he was successively engrossed in the study of mechanics, birds, fossils and sea shells. He published his first paper when he was ten years old - a brief note on an albino sparrow which he had seen in a park - and from this time he assisted the director of the local natural history museum in the evenings; from the age of fifteen years he began to publish articles on the mollusks of Switzerland, the field in which he had helped at the museum. Piaget notes (1952) that these early publications led to some amusing experiences, such as his having to decline meetings with foreign colleagues and his being offered the position of curator of the natural history museum in Geneva.

Piaget received his baccalaureate degree in 1915 and his doctorate in the natural sciences three years later when he was twenty-one. Even before his University days he had begun to form the idea that the problems of epistemology (the genesis and development of knowledge) could be given a biological explanation; he realized that this was a field which had been little developed and, in fact, it was to occupy him for the whole of his academic life. Piaget is a biologist by training; he has no formal qualifications in psychology although he read widely in the fields of philosophy, religion, sociology and psychology in the years prior to and during his University attendance.
It was in this period that he developed several ideas which were elaborated only much later on.

First, as we have already noted, he thought that the problem of knowledge (which had up until then been discussed only by philosophers) could be given a biological explanation; however, he saw the need to bridge the gap between philosophy and biology. Only gradually did developmental psychology come to fill this need.

Second, Piaget believed that both external actions and internal thought processes would admit logical organization. In his later work this found expression in the idea that thought is essentially internalized action and in the use of symbolic logic to describe the organization of both.

Finally, Piaget had already thought about the forms of equilibrium which characterized totalities. Even at this time (when he was only nineteen) Piaget believed that reciprocal preservation of parts and whole was the most stable form of equilibrium; this process of reciprocal preservation is, in essence, Piaget's theory of equilibration.

These adolescent musings had their roots in biology; during the preparation of his doctoral dissertation, Piaget felt the need to move into the field of psychology in order to verify his beliefs. He was disillusioned by his first year in a psychological laboratory and, in fact, spent the following year studying mollusks so that he
could apply his mind to concentrate on concrete problems and avoid stagnation (1952, p. 244). He spent the years 1919-1921 at the Sorbonne and during this period he worked in Binet's laboratory under Dr. Simon on the standardization of Burt's reasoning tests. Although he undertook this task without enthusiasm it was to spark off an interest in the child's thinking which has occupied him ever since.

In his work at the Binet clinic Piaget became intrigued by the ways in which the children reached their conclusions, especially when these were false; he noticed that apparently simple reasoning tasks presented, for the child under 11 or 12 years of age, difficulties unsuspected by the adult. Piaget realized that some reorientation was needed and that the child's thought should be considered in isolation and not in comparison with that of the adult.

As a result of his investigations Piaget published three articles, the last one of which was read by Claparede who not only accepted it for publication but also offered Piaget the job of Director of Studies at the Institut J.J. Rousseau in Geneva. Piaget accepted the job for a trial period and has been there ever since; he has had the opportunity to develop his ideas through a variety of experiments and, latterly, in collaboration with many eminent workers in the field of developmental psychology.

Piaget's first five books, which reported the results of his work during the period 1921-1925, received much attention and are
still probably the best known of his publications. This fact is noted with some dismay by Piaget since he regarded them as tentative explorations of the field although they were accepted as final statements. In fact, the vast amount of research which has appeared subsequently from Geneva has represented the extension of this original work in three main directions. First, the cognitive processes of the child were investigated in relation to the concepts of space, time, probability and movement and, the area which perhaps more than any other has made the Genevan psychologists famous, the conservation experiments were developed. Second, there is a series of experiments in perception which rely on more rigorous experimental control and represent a step away from the clinical approach which typified the first set of investigations. Finally, Piaget has recently returned to his 'first love' - genetic epistemology; each year three distinguished scholars are invited to Geneva to discuss epistemological problems; the results are presented at a symposium composed of these three plus eight or nine other academics and their discussions are published in a series of monographs. This return to the epistemological problems was long overdue since Piaget had only intended spending three or four years on the study of cognitive processes in infants and children before attacking the problem of thought in general.

In all this concern with the child's intellectual development, Piaget's fifth book, *The Moral Judgement of the Child* (1932),
appears as something of an anomaly; Piaget's previous books and his subsequent researches represented attempts to understand the workings of the child's mind while the field of morality is generally thought of as involving the child's emotions or behaviour. However, Piaget was interested in moral development as a special aspect of the child's cognitive development; he was trying to establish what the child knew of the rules of behaviour and how the child's attitudes to these rules changed through time. Piaget's emphasis has been on the child's cognitive development and he published only the single volume in the field of morality. Certain of Piaget's findings from his investigations of cognitive development can be applied to his theory of moral development; in fact, several ideas expressed in The Moral Judgement of the Child anticipate more recent developments in Piaget's cognitive theory.

It was mentioned above that Piaget's 'famous five' books were widely read; they were also widely criticized on both theoretical and methodological grounds. Piaget's early clinical approach to the investigation of the child's behaviour denied the use of standardized questioning procedures; also he reports his sampling and results in only very sporadic fashion. The clinical approach was adopted as the most sensitive during the initial exploratory studies; more recently, standardized procedures have been developed and applied. The inadequacies in the sampling techniques and reporting derive from Piaget's biological training and his
suspicion of psychological statistics. Maier says that 'Piaget proceeds with the assumption that a detailed investigation of any small sample of a species will yield basic information inherent to all members of that species,' (Maier, 1965, p. 82). Many of Piaget's theoretical statements derive from his studies of his own three children (hardly a representative sample by any standards!); his six stages of sensori-motor development were evolved from the detailed diaries kept by himself and his wife recording the behaviour of their children. The trends reported in The MoralJudgement of the Child derive from the questioning of at least fourteen samples, the largest of which was about a hundred children. In relation to his earliest work, Piaget notes that statistics had little significance since the children were asked different questions. More recently Piaget has improved the sample size, standardization of procedures and reporting of data, and the many replication studies carried out by other workers have corrected these inadequacies as a matter of course.

The replication studies go to great lengths to show the need to modify Piaget's age-stage correlations to allow for such factors as the child's intelligence, social class, sex, nationality and religion; most of these factors were ignored by Piaget although he did give cursory acknowledgement to others as potentially important influences on the child's moral development. However, Piaget did indicate one area which he thought to be of crucial importance to
the child's development - this is precisely the area which has so far lacked any thorough investigation, namely the nature of the parent-child relationship. Piaget discusses some aspects of this relationship (especially heteronomous and autonomous control of the child) which he believed to be crucial to the child's rate of moral development and he implies several other dimensions (such as parental strictness and a democratic atmosphere in the home) which appear to link in with these.

A broad aim of this thesis is to seek some evidence of correlations between parental attitudes in several areas and the child's rate of moral growth. Piaget's discussion of the heteronomy-autonomy continuum is developed to suggest the dimensions along which varying parental attitudes might affect the child's development. From an investigation of moral development in the child using Piaget's story-situation approach (and during which the effects of such variables as the child's sex, social class, and intelligence were considered), it was possible to isolate exceptional groups of morally mature younger children and morally immature older children; the parents of these groups of children formed the basis of the investigation of the relationship between parental attitudes and the child's rate of moral development.

Before these aims could be realized, however, several theoretical problems needed clarification. A proper understanding of Piaget's theory of moral development is impossible without some
knowledge of his theory of cognitive development. This latter theory is extremely complicated and difficult to follow at first and there are many ways in which it can be approached; Chapter 1 of this thesis presents two of the more useful approaches. First is a chronological account of Piaget's stages of child development; this is the most straightforward approach to Piaget although many of the more important aspects of the theory become falsely relegated to a secondary position. For this reason another approach is included which attempts to explain and interrelate the major terms of Piaget's technical vocabulary; this approach overlaps the first to some extent but repetition and restatement are the only ways in which Piaget's theory can be fully understood.

Piaget's theory of moral development is discussed in Chapter 2 where his eleven moral dimensions are isolated and his suggestions regarding the educational implications of his work are noted. This chapter also includes the major methodological criticisms of Piaget's work in general. These are perhaps played down in comparison with other studies; however, Piaget's theoretical elaborations have for the most part stood the tests of time and replication even though they were based in poorly controlled samples and unstandardized procedures. It is amazing that any theory built on such shaky foundations should prove so durable; this fact can only reflect on the unusual qualities of original thought possessed by Piaget.

The modifications suggested to Piaget's original thesis on moral development are noted in Chapter 3. It is fair to say that
Piaget was interested more in the order of the stages of moral development than in the child's rate of development between stages; he notes differential rates of development without attempting to explain them in other than a very cursory fashion. The many replication studies of Piaget's work have indicated the need to allow for such factors as intelligence, socio-economic class, respondent's sex and explicit training (as in religious teaching) which have been shown to influence the child's rate of progress through Piaget's scheme; as we have already noted, they fail to give thorough consideration to the nature of the parent-child relationship as a factor influencing the child's development. An important distinction is made between the developmental and the non-developmental dimensions of Piaget's scheme; only responses to the former display trends which show a consistent increase in maturity with age. Finally, consideration is given in this chapter to equilibration as an explanation of change between levels of maturity in judgement.

In Chapter 4, theories of moral development are discussed which contrast with that of Piaget whose emphasis on the cognitive aspects of morality meant that he ignored other equally important features. In particular, attention is given to Freud's work on the development of the superego and to the attempts of the learning theorists to explain conscience as a conditioned response. Also, with the cognitive approach to moral development, Kohlberg's recently formulated theory is compared with that of Piaget. It is
suggested that Kohlberg's theory will in future have the major contribution to make to the academic and practical aspects of moral development and moral education.

The first four chapters comprise the theoretical section of this thesis; the practical aspects are discussed in the next three chapters. The first field-work exercises were undertaken with a sample of children in an effort to extend Piaget's investigation of the moral dimension of objective responsibility. Six tests were specially constructed after the fashion of Piaget, two each in the areas of clumsiness, stealing and lies. The details of sample and technique are reported in Chapter 5; the results are reported in Chapter 6.

The second part of the field-work involved the parents of the children in the two groups of exceptions noted above, plus appropriate controls. Responses to a forty-two item attitude scale were correlated with the child's rate of moral development. The scale used tested attitudes in six broad areas - democracy, autonomy, overprotection, strictness, verbalization and acceleration. Certain correlations were established which suggested a partial explanation for the different rates of development of children in the two groups of exceptions. The sample, technique and results of the investigation of the parents are reported in Chapter 7.

The final chapter is a reappraisal of the scope and findings of the present study and an indication of the major directions
which future research might be expected to take in relation to Piaget's general theory of cognitive development and his more specific theory of moral development. As a whole, it is hoped that this thesis will give the reader a better understanding of Piaget's theory of cognitive development and a better perspective on his theory of moral development; this perspective is achieved in three ways: by a comparison with Piaget's theory of cognitive development; by an indication of the modifications suggested by the replication studies; and finally, by comparison with alternative theories of moral development.

Piaget is a difficult author but his is an extremely important contribution to the field of developmental psychology; the insight which Piaget's work affords into the crucial area of child development is well worth the effort involved in grasping his ideas.
SECTION A

PIAGET'S THEORY OF

MORAL DEVELOPMENT IN PERSPECTIVE
Jean Piaget has spent the past fifty years investigating many aspects of child development. The number of studies made by him and his associates is phenomenal; Flavell notes that Piaget had twenty articles published before he was twenty-one, and lists a hundred and thirty six works, in some of which Piaget was co-author, published between 1921 and 1961 (Flavell, 1963, p. 2 and pp. 454-60). There appears to be no abatement in this flow of original work more recently; nor are there any signs of declining interest in Piaget from other workers in the field of child development - the position is quite the reverse, in fact, with replication studies and interpretations of Piaget's ideas being published at seemingly shorter intervals.

This immense amount of original research and validation work is one very practical reason for an acquaintance with Piaget's ideas. Moreover, Piaget is important from a theoretical point of view; his was a new approach to child development contrasting markedly with the very early ideas that a child's personality was determined at birth, and with ideas such as Freud's in which great emphasis is laid upon the first few years of childhood. Piaget's work suggests a much more gradual development over a far longer period of time; indeed, this may
continue into early adulthood, and, although he has studied this period most carefully, Piaget does not lay so much stress on the importance of the pre-school years.

Piaget's work also stands in contrast to those psychologists following a stimulus-response approach to developmental psychology; Piaget claims that this approach considers the child as a passive agent on which experience stamps-in future behaviour patterns, whereas his own theory emphasizes the active part which the child must take during development.

In this section an attempt will be made to put Piaget's ideas on moral development in perspective relative to his more general theory of cognitive development and to other theories of moral development. Piaget was not interested in morality per se; rather, he studied the development of different types of moral judgement as evidence of certain universal trends in children and as an indication of a unilinear progression to be found in areas other than moral development. He has attempted to synthesize his ideas from a variety of particular studies into a comprehensive epistemology, trying to produce a theory of development generally applicable to the child in the many separate areas of his life.

Naturally this synthesis could only await the passage of time to allow enough of Piaget's own basic work plus substantial validation studies to be carried out. Recently such
a general theory has been formulated and these important ideas are discussed in Chapter 1. Chapter 2 explains the major ideas contained in *The Moral Judgement of the Child* before relating them to Piaget's general theory. Chapter 3 outlines the replication literature deriving from Piaget's work on moral development, while Chapter 4 considers some alternative approaches to the problems of moral development.
1. Preliminary Remarks

Piaget's style of writing is very difficult to follow; two or three readings are commonly needed before any clear understanding of his ideas is obtained. The books which attempt to interpret Piaget's work - notably Flavell (1963), Baldwin (1967) and Maier (1965) - are also difficult to follow and perhaps the best method of understanding them is to try to rephrase their ideas.¹

Piaget believes that in all areas of development the child proceeds in a unitary direction through a fixed number of stages which occur in a constant order. This presupposes a qualitative difference between one stage and the next, although an earlier stage forms the basis for the next stage and is closely bound up with the new experiences in it. There are distinct organizational differences between childhood and adult behaviour in all areas of human functioning, and all development reflects a change from the simple to the ever increasingly complex. All mature aspects of behaviour have
their roots in infant actions and evolve through all the subsequent stages of development.

Previous developmental acquisitions are kept as active ingredients through life and earlier behaviour may find expression in new situations. All developmental trends are interrelated and interdependent; developmental maturity is the final and total integration of all these trends. In fact, Piaget suggests that a consideration of the seeking of states of equilibrium, of which the final integration is the most stable, may be seen as a common element in the study of child development by the differing fields of physiology, psychology, anthropology, sociology, etc. (Piaget, 1960a, pp. 3-11).

2. The Functional Invariants Of Piaget's Scheme

In his theory of cognitive development, Piaget proposes a sequence of stages which reflect the increasing complexity of the child's system of thought. Although certain qualitative changes may be seen across the stages outlined by Piaget, there are also certain aspects of the child's development which are common to all of the stages.

In Piaget's theory the term structure refers to the child's activities as they approach systematic organizations. To the extent that the child's behaviour and thought show a greater organizational complexity (approaching in their later
forms aspects of logical groups) their structure shows the qualitative changes which form the basis of Piaget's developmental ideas.

In addition to any and all more or less complex structures are the functional invariants which also form a very important part of Piaget's scheme of development. According to Piaget, the child's mind is constantly active, trying to organize the events in his life into a more easily understood and better balanced unit. The static aspect of organization is reflected in the structures which characterize particular modes of thought; the dynamic aspect of organization is adaptation which includes the processes by which the child reorganizes his existing beliefs to cope more efficiently with his environment. It is during these processes that the structure of his thought changes.

The two sub-features of adaptation are assimilation and accommodation, which operate simultaneously in the child's activity. Whenever the child can incorporate an event into his system of beliefs without having to change the system at all, then his behaviour is said to display assimilation. However, whenever the child's system of beliefs must be modified in order that a new experience be understood then the process of accommodation has been invoked.

For example, the infant 'knows' his world by virtue of
the actions which he can perform on it; toys, say, which constitute a major part of his world, acquire their meaning through the activities in which the child can involve them. Typical structural elements of the infant's world are the sucking, banging and dropping schemas. Unfamiliar elements acquire familiarity through being incorporated into these schemas. Given a new toy the infant will explore it by rubbing it along his cot, shaking it, sucking it, banging it etc.; in short, he attempts to understand the toy by trying to assimilate it into his existing schemas.

On occasion, however, the infant may encounter an object which does not completely fit into his existing system, and under such circumstances the child must adjust his beliefs to allow for the anomaly; he must accommodate to the new situation in an effort to bring it into his - now slightly modified - system of beliefs.

For example, a balloon may be assimilated into the child's thought to the extent that it is round and red, like the ball with which he is already familiar. However, the balloon rises when it is pushed away, in contrast to all other objects which the child knows and this behaviour requires some accommodation of the child's beliefs if it is to be accepted into his system of thought (Richmond, 1970, p. 71).

Here we can see Piaget's four types of assimilation in
in operation. In the first place, the individual schemas derive from the infant's exercise of his originally reflex actions; this exercise of schemas for their own sakes is contained in the idea of functional assimilation. The infant repeats the behaviours of which he is capable over and over again, involving an increasing variety of objects in the outside world; in this way there develops a generalizing assimilation which implies the extension of existing schemas to a wider range of objects. Gradually, the infant begins to distinguish between the various objects with which he comes into contact and this aspect of his behaviour Piaget terms recognitory assimilation. This development implies Piaget's final type of assimilation - reciprocal assimilation. This concept draws attention to the fact that individual schemas of assimilation (e.g. visual and manipulatory) which form theoretically distinct areas of development do, in fact, become inseparably cooperational. Their joint operation (looking in order to grasp, say) arises from the function of reciprocal assimilation by which individual schemas combine into a single system.  

The close involvement of assimilation and accommodation is also illustrated here. In the original exercise of his motor schemas the infant learns to control his behaviour, he accommodates slightly to his environment. This
accommodation is more marked during the operation of the generalizing and recognitory assimilations as the infant makes greater efforts to incorporate more objects into his schemas and then to distinguish among them.

3. Criteria For Stages

The twin features of assimilation and accommodation interact to produce adaptation which allows the child a better understanding of the world. The failure of an existing structure to explain (i.e. incorporate) a new situation leads to an imbalance which, according to Piaget, the system cannot tolerate. It is through the accommodation of the system to the unfamiliar situation that balance is restored.

Adaptation leads to new states of equilibrium; and to the extent that it represents a more inclusive picture of the world, each new equilibrium level is more stable than the last. This in essence is Piaget's idea of equilibration to which we shall return later on. The reorganization involved in the seeking of new equilibrium states leads to a restructuring of the child's system of beliefs and thought. Certain of the changes produced are more important than others; the new structures which result from the more critical adjustments form the content of the stages of development which Piaget has isolated. Piaget proposes
several general criteria for the establishment of stages in development; the particular differences in content between stages will be apparent in the later discussion of Piaget's theory of cognitive development.

The recognition of a distinct chronology is the first of Piaget's criteria - stages appear in a constant order of succession. The average age for the appearance of a particular stage may vary but the order of stages is fixed. Inhelder states that the age of realization of any stage is always influenced by the 'environment' - a term which she interprets in a loose way to include the particular group of objects being studied, the opportunities for certain types of learning and the nature of the social interaction obtaining in the test situation.

Secondly, Piaget says that a further step towards the establishment of a programme of stages occurs when one can see an integration in the transition from a lower stage to a higher one. Inhelder elaborates this and says that the inferior becomes part of the superior - earlier modes of thought are not abandoned altogether but are incorporated into the newer levels.

Thirdly, any stage shows broad similarity with others since each is characterized by an aspect of achievement with respect to those going before and an aspect of preparation with respect to the stages coming after.
Fourthly, all preparations leading to a stage, and all achievements of this stage, are attributable to the existence of a general (or total) structure, or a structured whole. This concept refers to a consistency in behaviour rather than insights which might be interpreted as evidence of a superior stage but which are, in fact, isolated and untypical of the subject's actual level of achievement. Only when responses are consistently 'superior' can the achievement of the later stage be assumed, although the earlier 'flash-in-the-pan' is an essential part of the preparation.

Finally, Piaget sees each stage as a separate equilibrium level; the increasing stability of successive levels is dependent on the degree of integration and the proximity to the total structure discussed above.

Inhelder sums up Piaget's ideas on stages with the statement that they are structured wholes which follow one another in a constant order according to a law of integration (Inhelder, 1956, p. 85). Piaget proposes that this conception of stages can be applied to areas other than cognitive development in the general field of child development, although he does not expect any age correlations between stages in the differing specializations to appear; more useful, he feels, might be the consideration of any particular convergences when they do occur, and, perhaps most important, attention might
fruitfully be given to any correspondence in the mechanism of change from one stage to the next.

Against his own criterion of total structures as an implication of stages, Piaget contrasts other theories which emphasize dominant traits, with the criticism that these models of development do not exhibit the features which he advocates and to this extent are not acceptable. He points out that Freud speaks of an oral stage where the child already makes use of his anus, and of an anal stage where the child still makes use of his mouth; in similar fashion Wallon outlines an emotional stage at a time when the infant is exercising all sorts of sensori-motor functions and of a subsequent sensori-motor stage during which emotions are by no means absent. Piaget questions the criterion of dominance - is it statistical frequency (which may be difficult to establish)? Or is it arrived at from clinical impressions, which run the risk of being subjective? Dominance may be defined only in terms of relative importance from the point of view of frequency; or it may imply a tendency towards the integration of the other characteristics under the dominant one (which, says Piaget, approaches his own concept of structured wholes).

A link between the sets of ideas on stages outlined above can be found in the concept of equilibrium. Piaget maintains that stages:
cannot be considered as a product of subjective cuts arbitrarily made by the research worker in a rigorously continuous development. If stages do exist objectively, they can only consist of successive steps or levels of equilibrium, separated by a phase of transition or crisis, and each characterized by a momentary stability. The 'total structures' are 'equilibrium forms' and the 'dominant characteristics' are linked to a certain property of equilibrium, existing at least momentarily (Piaget, 1960a, pp. 12-13).

The concept of equilibrium forms an important part of Piaget's general theory, although its implications have not yet been fully explored. The concept is provoking increasing discussion, however, and it may prove to be one of the more enduring of Piaget's contributions to child development theory and research. This being so, it now seems useful and necessary to develop an explanation of the concept in more detail.

4. Equilibration As A Theory Of Development

Piaget proposes his ideas on equilibrium as an alternative theory of development to the two more commonly accepted theories of maturation and learning. According to maturation theory, development is an unfolding of the biological process of growth; characteristics of later stages can be largely predicted from a knowledge of preceding stages, and development is not tied to the environment but is linked more to a time schedule.

Learning theory has been criticized by Piaget at greater length. This theory points to the accumulation of learned
experiences as the driving force in development; these items are relatively independent of one another and of the chronological age of the child. Piaget thinks that learning theory is passive since it implies that the child has habits imposed on him by life experiences. In contrast, Piaget believes the child to be active in constantly acquiring new actions and reorganizing them into operational groupings.

Piaget stresses the activity involved in development, while others have considered the child's part to be solely receptive. In the development of the conservation of quantity, say, (see the water test, p. below) the learning theorist might point to experiences which the child meets accidentally in his environment, or which he is taught by his parents. Piaget thinks that such experiences are unlikely and he tries to show how the cognitive functions of the child become organized into coherent systems of thought - how they develop from more simple structures rather than being picked up in perhaps random fashion.

Piaget does not abandon these other theories altogether; rather, he incorporates them, along with his own ideas on equilibration, into a different theory of development. Piaget hypothesizes four groups of factors which contribute to an explanation of the process of development.

First he notes certain maturational forces, although his account of these is not very clear. Presumably he is implying
that a certain neurological maturity must be reached before some aspects of development can appear. For example, a baby needs a certain muscular development and a certain amount of practice to allow the refinement of its original spasmodic muscular contractions in co-ordination with visual stimuli in order consciously to grasp an object. Piaget also implies a physical maturation of the brain which allows the higher mental processes to develop.

Second, there are the opportunities for varied experience with the environment. This group of factors may be considered in terms of the 'richness' of the child's life and the extent to which his interaction with objects in his world is stimulated or restricted.

Third, the action of the social environment must be considered. Included here are the spontaneous, perhaps unique, experiences which might account for otherwise inexplicable personality developments in later life; in their extreme form these may be the traumatic experiences which the psychiatrist may have to uncover to effect the cure of his patient. There is also a whole set of influences which are not unique but are brought to bear consciously and consistently on the child. The sorts of experience included here are the implicit and explicit teaching given the child by his parents, his teachers, his friends etc. Important considerations in this respect are the
content of the teaching (what is taught) as well as its quality (the way in which the lesson is demonstrated).

Finally, there is Piaget's own process of equilibration which is set in motion whenever the child's system of beliefs develops far enough to contain self-contradictions and which results in the reorganization of the child's thinking to a more stable level at which the inconsistencies can be reconciled and more clearly understood. In his explanation of equilibration Piaget assumes that the individual gradually acquires some of the elements of operational (i.e. systematic) thinking; at some point these partial, unorganized ideas lead to a conflict and the resolution of this conflict is the process of equilibration.

Through this process, and independent of any further learning, the child is able to restructure his beliefs into a more coherent, harmonious and balanced system. This state of affairs is, however, temporary; each precarious state of balance contains the seeds of its own destruction, and further reorganization (re-equilibration) takes place at later times. Baldwin notes that while there is little evidence to support Piaget's ideas on equilibration there is not much to deny it or confirm an alternate hypothesis. Piaget certainly points the way to an important area in child development - the process by which the child acquires an organized system of knowledge (Baldwin, 1967, pp. 296-97).
5. **COGNITIVE DEVELOPMENT IN CHILDHOOD**

After this somewhat lengthy introduction we move on to a discussion of Piaget's theory of intellectual development and to some points of interest arising from it. Maier (1965) isolates five broad periods in Piaget's developmental theory; Inhelder (1953) and Flavell (1963) see four; and Baldwin (1967) three! This derives from a difference of terminology rather than from a conflict of opinion since, for example, all of Maier's points are included in the other outlines (see Figure 1).

(a) **Sensori-motor period**

All four authors agree that the first period lasts from birth up to about eighteen months of age and is marked off into six stages. There is a very gradual process of development in this first period of life, marked by a slow extension and mobility of schemas of behaviour which become more numerous and hence more inclusive while at the same time their interaction and joint co-ordination becomes more efficient.

This period is characterized by the emergence of intentional behaviour from reflex activities culminating in the invention of new means to various ends and some early forms of mental representation. It should be remembered that Piaget sees in each stage of development aspects of genesis and achievement; each is a preparatory phase for the
### Table I: Piaget's Periods of Development According to Four Authors

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**Source**
- Theories of Child Development (1967)
- Three Theories of Child Development (1965)
- In Tanner and Inhelder (1956)
- The Developmental Psychology of Jean Piaget (1965)
next stage as well as a phase of equilibrium relative to the preceding one. 9

In the first month or so of life, says Piaget, all actions are totally involuntary; they may be a continuation of prenatal activities 10 triggered off by external or internal stimuli, but these stimuli are unrecognized by the infant at first. The more important reflexes exhibit a kind of feedback such that the reflex produces its own eliciting stimulus; this in turn sparks off the reflex, which produces another stimulus etc., etc. The sucking reflex represents one of the earliest instances of this auto-excitation.

Sucking is elicited by the stimulation of the baby's lips. As milk reaches the back of the throat the swallowing reflex is triggered off; this is incompatible with sucking which momentarily stops. Now, immediately the milk has been swallowed, the lips are again stimulated by the breast or bottle and the sucking reflex begins again.

It is difficult to judge just when the sucking reflex is triggered by the pressure on the lips and when the infant anticipates the pleasure derived from sucking and so exhibits a learned response. This recognition of the breast as a source of comfort takes the child into the second stage of development - that of primary circular reactions (Flavell; Maier; Inhelder) or first acquired adaptations (Baldwin).
Reflexive behaviour is slowly replaced in the second month of life by voluntary movement. This requires a certain neurological maturity since the infant must have some control over his actions. The passivity of the infant's role is declining and behaviour becomes more deliberate. Behaviour is acquired, but its content is still based in hereditary mechanisms. For example, sucking is an hereditary reflex, but thumb-sucking is acquired - the child in this second stage can effectively take his own thumb to his mouth and keep it there; he does not have to rely on the random meeting of thumb and mouth to trigger off the reflex.

The primary circular reaction from which this stage derives its name is the first of three such reactions whose implications are best seen by comparison. In general, the term circular reaction refers to the child's tendency to repeat certain motor activities over and over again. The differences among the three levels of reaction are seen in the locus of behaviour (its involvement with the child's own body or his environment) and the extent to which the child actively pursues the behaviour.

By these criteria the primary circular reaction is extremely limited. It centres on the child's body - accommodation is minimized while assimilation is at a maximum. Accidental encounters with the environment (vaguely perceived as it is
by the young infant) lead to certain interesting reactions which the child attempts to repeat by re-enacting his original movements. Obviously, the first circular reactions are very haphazard and relatively unsuccessful affairs, but in their operation the responses become strengthened and consolidated into the earliest schemas of behaviour. Gradually, new aspects of the child's environment become assimilated into these schemas and some slow accommodation to the differing properties of various objects ensues. This interest in the external world takes the child into Piaget's third stage of sensori-motor development - the stage of secondary circular reactions.

This third stage lasts from about age 4½ months to age 9 months and has four interesting features (see Flavell, 1963, pp. 101-09). First, the secondary circular reaction itself can be seen as a more advanced form of assimilation, being concerned with objects in the child's environment rather than with his own body - it is allocentric rather than autocentric (Flavell, 1963, p. 102). The chance occurrence of an interesting event leads the child to repeat his sequence of actions in an attempt to recall the item. Whereas the child in the previous stage was concerned with grasping, sucking, etc. for their own sakes, now his interest lies with the effects which these behaviours are seen to have on the objects around him. This
represents in effect the child's first attempts at experimentation with his environment although the start of the sequence is as yet unintentional and triggered off only by chance.

Second, the child shows his recognition of familiar objects through an abbreviated repetition of the schemas associated with those objects. The child is content with an outline of his normal reactions to familiar objects but must still physically act out a part of them - this behaviour is a forerunner of purely contemplative recognition.

Third, Piaget points in this stage to a peculiar class of behaviours which he terms 'procedures for making interesting sights last'. By these behaviours, actions which the child previously found efficacious in recalling interesting effects (through the operation of secondary circular reactions) are now transferred to other similar situations although not necessarily in a successful manner. For example, the child may have discovered that the interesting noise made by a rattle can only be experienced when the rattle is shaken - he may later make shaking movements in order to maintain any sound he hears. In Piaget's terminology the child is assimilating the occurrence without accommodating to it at all; he is unable to alter his behaviour sufficiently to allow a proper recognition of the new event and the ways in which it might properly be recalled.

Lastly, the accomplishments of this stage mark a definite
step in the direction of intentional behaviour where the goal is the important factor and the means are subordinated to it. Piaget sets three criteria for intentionality. In the first place, behaviour is more intentional the more it is directed towards objects; this distinguishes it from reflex or accidental actions. A second criterion concerns the number of intermediate steps involved in goal achievement, since the child is satisfied only after a more or less lengthy series of actions and is not interested primarily in the intervening steps. Finally, an intentional act involves deliberate adaptation to a new situation rather than being a mere repetition of habitual schemas.

The behaviour of the child in the stage of secondary circular reactions is not, strictly speaking, intentional since it relies on a chance event to spark off the attempts at repetition. This stands in contrast to the recognition of a goal and the deliberate seeking of means to an end typical of tertiary circular reactions discussed later.

The fourth stage of the sensori-motor period lasts up to the child's first birthday and is a transitional time marked by the co-ordination of schemas. Familiar schemas are combined in new situations and used as a means to an end - for example, the child may push aside one object (first schema) to grasp another (second schema). There appears
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the ability to execute in an intentional manner old behaviour patterns in new situations; pushing aside is not now enjoyed in itself but is a means to an end and appears automatically in the pursuit of the second behaviour.

A second variety of intentional behaviour may be briefly noted, as when a child makes use of objects as instruments in attaining a goal. Thus a stick may be used to set a doll swinging or to draw-in another object out of reach of the child's hand.

Stemming from this intentionality, but with a somewhat different emphasis, the child shows evidence of anticipation and can respond to future actions which are implied by signs (e.g. he may cry if his mother puts on her coat since he associates this with her leaving him). In his exploration of unfamiliar objects the child shows a subtle change; he becomes more interested in the object's features and, in contrast to the previous stage, the incorporation of objects into secondary circular reactions is not given first priority.

The stage of tertiary circular reactions, or the discovery of new means through active experiment, lasts from about twelve and up to about eighteen months of age. The child performs activities he has never previously displayed; he engages in the deliberate variation of behaviour around familiar schemas and this ability is a valuable tool for problem solving.
Problems may be solved in two ways - the solution may be stumbled on by chance, or the subject can, by trial and error, vary conditions so that the solution has a better chance of appearing. In the stage of secondary circular reactions the child was able to profit from pure accidents - he was able to reproduce interesting events which occurred by chance in the course of his activity. The more sophisticated approach is experimentation, the intentional variation of actions which increases the possibility of a solution; this type of behaviour makes its appearance in this fifth stage of the sensori-motor period.

In the previous two stages the child was concerned with incorporating objects into his familiar schemas and in combining these schemas to allow more complex behaviours which implied intention. This assimilation now gives way to increasing accommodation as the child tries to alter his schemas around a particular object; he experiments 'in order to see'. Although a chain of events may have been inaugurated through a secondary circular reaction and the child's subsequent desire to reproduce the sequence of events, this behaviour is extended as the child tries out new actions so as to see their different effects on the object.

The final stage of the sensori-motor period lasts up to
about two years of age and during this time there occurs a shift in focus from actual experiments to increasing reflection about them. The child does not now have to act out his various behaviours in order to know their consequences; he can mentally anticipate the effects of his actions and can go straight into the required pattern of behaviour without overt trial and error.

These accomplishments mark the end of the sensori-motor period. This does not mean that the child no longer develops in his sensori-motor behaviour, but rather that Piaget's emphasis changes. The last stage in the sensori-motor period saw the emergence of symbolic thought and the child's ability to think things out rather than having to perform them physically. Piaget now follows through the later development of the intellectual processes since the more important developments in the child's capabilities take place on a conceptual-symbolic level and not on the sensori-motor level.11

(b) Pre-operational period

So far the four authors have agreed on lines of demarcation and rough age levels at which particular forms of behaviour change. As can be seen from Figure 1 above, absolute congruence is lost for the period two to fifteen years. Maier and Baldwin are most in agreement - in fact Baldwin's second phase includes Maier's next two and his third phase Maier's last two; in contrast, Inhelder and Flavell are
less insistent on strict age demarcation for the stages they propose. Again, the differences are semantic since analysis reveals the same behaviour patterns in all four descriptions. Inhelder's is perhaps the best outline to follow (as would be expected from Piaget's closest colleague) but the others provide useful elaborations of her somewhat confusing pattern of development.

Inhelder's second period of development in fact lasts up to about 11 years of age. To complicate the situation, Inhelder points out that there are really two overlapping phases in the later part of the child's development - one from 2 to 11 years and another from 7 to 15 years. For convenience she makes a break at 11 years and further subdivides the first period into formation or genesis from 18 months to 7 years and equilibration from 7 to 11 years. It is the first of these periods (most commonly known as the preoperational period, although Maier terms its constituent parts the stages of Preconceptual thinking and Intuitive thought) which concerns us at the moment.

During this period the child continues his slow elaboration of symbolic thought; there is a change in emphasis from sensorimotor activity to mental representation, and language is increasingly important, being the major form of symbolic representation for the preliterate child.
The main point which separates this period of development from the next is that the child now sees objects as individual members and not as part of a larger group or class. The child does not yet understand either that each member of a class is different from the rest, or that they are all alike in a certain respect. He may concentrate on either the whole of a collection or on an individual member of a group of objects but is unable to do both at once.

Piaget has been very much concerned with invariances - with the recognition of the conservation of number, volume, weight, space, etc. when certain plastic materials are rearranged or reshaped. It is Piaget's belief that the acquisition of these conservations depends upon the form of the child's intellectual structures. The child needs to develop certain related structures - such as reversibility, non-egocentric thought, decentered thought and non-transductive reasoning - before his thinking can be sufficiently organized to cope with conservations. The thought of the preoperational child is typified by egocentric, irreversible, centered, transductive structures and is severely limited in comparison with even the concrete operational child.

In a classic conservation experiment, water is poured from one of two identical jars into a taller, but narrower, container. The preoperational child maintains that there is a different amount of water in the second jar; there are
four possible explanations of this unusual behaviour. First, the child may fail to integrate temporally separate events. It would be difficult for an adult to judge the amounts of water in different shaped jars if he had no previous knowledge of the quantities. The preoperational child may be in this position after the transfer of liquid since he forgets the previous equality. Flavell (1963, p. 157) notes this limitation as the inclination to focus attention on successive states rather than on the transformation by which each is achieved. The child cannot link the separate states into an integrated whole.

Secondly, the child may suffer from a lack of reversibility — he may not be able to conceive of the water being poured back and regaining its former quantity. He may also have difficulty in keeping constant the premises of his arguments, showing contradictions in his beliefs all the time. This makes the possibility of returning to an original starting point very difficult if not impossible for the preoperational child.

Piaget notes two distinct forms of reversibility which he terms inversion and reciprocity (see, for example, Piaget and Inhelder, 1969, pp. 136-38). In the water test, reversibility by inversion is seen when the water can be mentally poured back into the original container; it is also demonstrated when a movement in space is retracted.

A second Piagetian test should illustrate reciprocal
reversibility. The materials for this test comprise twenty wooden beads, eighteen brown and two white (see Phillips, 1969, pp. 79-80). The preoperational child may admit that the class 'wooden beads' includes both sub-classes of 'white beads' and 'brown beads' and that to isolate either of these two sub-classes would leave the other. However, if the child is asked which would make the longer necklace, the brown beads or the wooden beads he replies the brown ones 'because there are only two white ones'. The preoperational child accepts that the class 'brown' is included in the class 'wooden' (i.e. that $B < W$) but is unable to reverse this relationship (such that $W > B$) and appreciate that there are more wooden beads than brown ones. With the development of operational thinking the child is able to acknowledge this form of reversibility which Piaget terms reciprocal.

Both forms of reversibility may operate in the same problem. We have already seen the operation of reversibility by inversion in the water test - the water may be poured back and regain its former shape and quantity. In the same problem reciprocal reversibility may operate as well; the child may recognize that in the transfer of liquid to a tall, narrow vessel the increase in the height of the column of liquid (such that $H_2 > H_1$) is accompanied by a decrease in width of the column ($W_2 < W_1$). The combination of these two
observations as compensatory factors in the conservation of quantity involves a reciprocal reversibility such that the child is able to move from the one relationship (taller) to the other (thinner) and back again. Piaget refers to this form of comparison as a regulation and its absence is a third explanation of the preoperational child's failure to conserve quantity in the water test.

Both forms of reversibility are developed by the preoperational child and used by the concrete operational child, but both children are able to recognize only one or the other at a single time in the explanation of a problem. In contrast, the formal operational child combines the two types of reversibility into a single system by which to explain conservation.

Finally, the preoperational child may be unable to recognize that if nothing has been added and nothing taken away then the amount remains constant; this is especially true when the levels in the jars are so different.

One aspect of the preoperational period which Piaget considers very important in limiting the child's development may now be briefly discussed. This is the child's egocentricity which is most clearly typified by his inability to assume the role of another person. The egocentric child is unable to recognize that his own viewpoint is only one
among many and so he cannot contrast his own ideas with others in order to realize the contradictions and illogicalities of his thinking; thus he cannot start on the process of regulation and reequilibration. Also, the preoperational child cannot think about his own thinking - he may run through an explanation once but be unable to repeat it exactly (hence the difficulties for reversibility by inversion). Piaget points to social interaction, and particularly to argument and disagreement, as the force behind the move away from egocentric thought.19

In the later part of the preoperational period, the child can frequently feel his way through to a solution without any clear idea of the concepts involved. For example, in one experiment the child was shown three strung beads (one red, one yellow and one green) which were put inside a tube; the tube was rotated through 180° and the child was asked to predict the order of the beads (i.e. 'Which bead would come out of this end first?'). There are only two possible solutions: R-Y-G rotated through 180° becomes G-Y-R, while a further 180° rotation restores the order to R-Y-G. The preoperational child does not recognize that an odd number of half-rotations reverses the order of the beads and an even number maintains it. This concept is not understood, and yet the child may cope successfully with two or three rotations while being unable to follow seven.
He may fix his attention on the red end of the tube, say, and be able to predict where the red bead will appear, but he may have trouble in placing the other two - the concept of fixed order is not apparent; if the child's attention is diverted from the red end he may become completely disorientated. The child is unable to view the parts and the whole at the same time; he may concentrate on one but he will lose the other.

Piaget proposes a process which he calls decentering (or decentration) as the mechanism by which the child moves away from fixation on particular aspects of a situation to a consideration of parts and whole simultaneously. Inherent in the decentering process is the notion of reversibility; when the child can consider the parts and the whole at the same time he can move freely from one to the other.

Towards the end of this period, then, several aspects of the child's thought show distinct changes. To quote Flavell:

The rigid, static, and irreversible structures typical of preoperational thought organization begin . . . to 'thaw out' and become more flexible, mobile, and above all decentered and reversible in their operation (Flavell, 1963, p. 163).

This statement seems an admirable summing-up of the complex explanation needed for this preoperational period. However, many of the aspects of the child's thought which needed detailed discussion by means of introduction need
only brief mention in the outlines of the final periods of intellectual development which follow.

(c) Concrete operational period

After about 7 years of age the child enters the first of the two periods of operational thought. In the previous period, the child had been able to carry out certain mental actions; Piaget requires that these actions be reversible and incorporated into a system of similarly reversible items before they can be considered operations. In the preoperational period, inconsistencies and lack of clear definitions in the child's thinking are typical; in the periods of concrete and formal operations the child's thinking becomes far more stabilized and equilibrated due to the organization of operational thoughts into interrelated systems.

Concrete operations involve infra-logical groupings relating to relationships between the parts and the whole of a concrete group of objects; the child must be able to see the group in order to manipulate it. This contrasts with formal operations which involve logical classes; a class is an abstraction and all members cannot be seen at once, although certain relationships can be inferred among the members. The younger child may be able to solve problems that he cannot answer in an abstract way once he can perceive the objects in a physical collection; the formal operational child is not
Piaget believes that both forms of thinking develop simultaneously and that logical concepts (typical of formal operations) are not necessarily built on a previous understanding of physical groups (developed during the period of concrete operational thought). Even after the establishment of formal thought processes some concrete operations are newly established whilst reversion to a concrete level is not uncommon in the understanding of an unfamiliar problem (e.g. it may be easier to work out a problem on paper than mentally).

Piaget considers there to be nine basic groupings (or groupements) which the child develops in the period of concrete operations. A grouping is a structure in which elements are so arranged that there is some kind of transformation, pathway or relationship that links every item to every other one; relationships are reversible and contain alternative pathways.

One method of testing the presence of these groupings is to give the child a variety of objects which might be classified in different ways and asking him to put together those that are the same. In the period of concrete operations the child learns all the various groupings and is able to apply them to objects he meets in the concrete world. The
groupings contain all the relationships necessary for hypotheti-
cal thinking which the child cannot as yet successfully
manage.

(d) **Formal operational period**

Formal operational thought begins at about 11 years of
age and reaches its state of equilibrium at about 14 or 15
years. The child is now able to consider relationships
other than those presented to him; in the period of concrete
operations the child may understand all the relationships
presented but he does not extend these to the other logical
possibilities of the material in the way that the formal
operational child might.

Another of Piaget's experiments should help clarify the
differences between this final period of development and the
previous one. The child is presented with five bottles of
colourless solutions; a few drops from one of these bottles
is added to two beakers which the child is told contain some
of the other four liquids singly or in combination. In one
of these beakers the liquid turns yellow, while there is no
change in the second; another of the liquids removes the
yellow colour. The problem the child is set is to identify
the liquids in the bottles which cause and bleach the colour;
the experimenter's interest lies in the process by which the
child attempts to determine the correct reaction.
Very young children commonly mix pairs of liquids in a quite random fashion and soon stop since they think they have exhausted all the possibilities; they cannot even repeat the combinations they used. In older children the major difference between the concrete and the formal operational child is that the latter begins his consideration of the problem by invoking all the possibilities implied by the data; this may even involve writing down all combinations of pairs, trios etc., and in some cases may take the form of permutations such that Bottle 1 plus Bottle 2 may have a different result to Bottle 2 plus Bottle 1 and this possibility must be accounted for. The concrete operational child shows the beginnings of systematic thought; he may try the liquids in sequence and may with prompting exhaust the possible pairs of liquids but he does not show the planning ability of the formal operational child.

The child in the period of formal operations begins his consideration of a problem by invoking all the possible relationships implied by the data; he then tries by experimentation to see which combinations do in fact hold true. This is a reversal of the process observable in the concrete operational child who makes only limited inference and extrapolations from the material presented. The adolescent can consider the non-present and the hypothetical while the
younger child's thought is much more restricted to his perceptions of the immediate situation.

This is the last stage in Piaget's theory of development. He leaves unanswered the question of what happens next — whether the formal operations represent a sufficient level of conceptualization for the rest of his life or whether the child refines them in a still later period. Presumably, since formal operations represent a high level of logical sophistication, they are sufficient and develop further only insofar as they take in more and more aspects of the child's behaviour.

6. A Terminological Approach To Piaget's Theory

Although a chronological account of the child's development such as that attempted above as an explanation of Piaget's theory of intellectual development is useful, a second approach is also very effective. We have already noted the functional invariants (adaptation, organization, accommodation and assimilation) which apply in Piaget's scheme to all levels of development; we have also noted in passing several features which Piaget's periods of development display in common although the structure of these features changes with each period. In this context we
discussed egocentric thought, reversibility, centering, etc.

At this point, it seems necessary and useful to give brief consideration to each of these features by way of summarizing what has already been said somewhat disjointedly with reference to individual periods. There are perhaps six factors whose developments have important consequences in limiting the form which the child’s system of thought can take. These may be described under the headings of egocentricity, reversibility, centering (centration), states v. transformations, transductive reasoning and equilibration. All of these have been discussed or implied already but the inclusion of a further outline here is defensible in view of their importance in the Piagetian model of development.

Certainly, all six factors are interrelated but the form of this dependance is not always immediately apparent. For example, while the process of decentering may be seen as a common background feature in reversible thought, part-whole relationships and the decline of transductive reasoning, its relationship with egocentric thought is not obvious; since non-egocentric thought is defined in terms of its reversibility, decenteredness, systematic organization to include part-whole relationships, etc., it should be regarded as a result of the other features and not their cause as a cursory reading of Piaget’s work might suggest.
Piaget is anxious to develop a definition of the term 'egocentricity' which is divorced from its common usage. The value judgement implied in the everyday explanation of egocentricity as selfishness indicates an intentionality on the part of the individual; in fact, childish egocentricity is completely unintentional and denotes a difficulty in understanding differences in points of view between the child and another person (Piaget and Inhelder, 1969, p. 118). The child believes that all other people hold the same opinions as himself. It is the child's gradual accommodation to alternative viewpoints that marks declining egocentricity.

One result of egocentric thought noted by Flavell et al (1968, e.g. p. 8) is the child's inability to 'tailor' his statements to allow for a different level of understanding in his audience. He rarely makes the explanations which are so often necessary in the transfer of information from himself to another, assuming in his egocentricity that because he understands then everyone else does.

Piaget notes three distinct times in the individual's life when egocentricity characterizes his thought. For the infant, the world acquires meaning through his actions on it, his mental image of the world is severely limited; this is egocentricity in its most severe form. The preoperational child develops more sophisticated mental representations of
his world but believes that all other people view phenomena in the same way that he does; it is this level of egocentric thought to which Piaget has given most attention, seeing in its decline the start of concrete operational thinking and the child's acquisitions of the first conservations. The third level of egocentric thought appears in adolescence when the individual romances, using his power of formal thought to explore certain possibilities in idealistic fashion while failing to relate these adequately to the real world or to alternative opinion; however, the adolescent does have the ability to perform this comparison whereas the younger child does not - in this sense the adolescent reflects the selfishness which typifies the common interpretation of egocentricity rather than the cognitive deficiency which typifies Piaget's interpretation of the term (Phillips, 1969, p. 102).

Piaget's definition of egocentricity revolves around the inability of the preoperational child to appreciate alternative points of view and not around his deliberate ignoring of them. In fact, Piaget has adopted the clumsy phrase 'symbolism centering on the self' to explain the arguments behind the term egocentricity; he has taken this step 'in deference to the criticisms from many psychologists who are still not familiar with the practice in the exact sciences of using a term only in accordance with the definitions proposed,
irrespective of its popular meaning or associations'! (Piaget and Inhelder, 1969, p. 61n). However, in the face of an increasing interest in what Piaget means (as opposed to what his translators and transcribers think he means) this deference is likely to be temporary.

Perhaps the next most important aspect of Piaget's work is the concept of centering. This implies the child's concentration on one particular feature of a situation and his inability to consider even two features at one time. This forms a part of the explanation of egocentric thought since it indicates the child's blind recognition of only his own point of view. It has a wider application in relation to the Piagetian problems, however, in that the preoperational child centers his attention on a single aspect of the situation and ignores the others. We noted in the water test the fact that the preoperational child might say that there was more liquid in the second vessel because the column was taller, or that there was less because the column was thinner. Only by decentering and considering height and width simultaneously as compensatory factors can conservation be achieved.

The decentering of affective and social constructions (implied in the recognition of other people's opinions) and that of cognitive constructions (as in the water test) are
inseparable for Piaget (Piaget and Inhelder, 1969, p. 95) and they allow the developments which mark the decline of the remaining restrictions on the child's thought. We have already discussed the two forms of reversibility— inversion and reciprocity. Both imply a decentered view of the situation so that successive steps may be related and retraced.

Two further features of decentered thought contribute to this reversibility; these are the decline of transductive reasoning and the linking of states and transformations into an integrated whole. Transductive reasoning may best be understood in relation to two other forms of reasoning. Induction involves reasoning from the particular to the general; deduction involves reasoning from the general to the particular; in contrast to both of these forms, transduction involves reasoning from the particular to the particular. Events are related not to a more general system but instead to any other events which happen to be in juxtaposition. In fact, the juxtaposed events may be connected, in which case the reasoning relating them may be correct; however, in other cases they may not be connected and the child's reasoning is inaccurate.

A much quoted example from Piaget relevant to transductive reasoning is the connection of a person's running
hot water with his shaving. On occasion this will be a correct line of thought but there is no necessity for the one to precede the other (perhaps an electric shaver is used) nor for the one to follow the other (the water may be used for washing). A decentered view of the events, in which each is related to a classification of similar events (e.g. water for shaving, washing dishes, washing people, etc.; or shaving using an electric shaver, soap and water, an aerosol foam, etc.), allows a better representation of the possible relationships and more accurate prediction of the behaviour which might follow.27

The second limitation of the more general aspect of centered thought is the preoperational child's inability to integrate temporally distinct events into a structured whole; he concentrates on the successive states rather than on the transformations which link them. In the water test, for example, the child centers on the water levels after pouring but does not include the act of pouring in his system of thought; hence, he cannot conceive of the water being poured back. Also he apparently forgets that the water was poured at all; he may fail to recognize both the former state and the intervening process.

A specific test of the child's ability to focus on transformations required him to draw the successive positions
of a stick as it falls from a vertical position to a horizontal position. The young child commonly drew the two end states but ignored the intermediate positions (Phillips, 1969, p. 64).

The aspects of egocentric thought, centering, reversibility transduction, and states v. transformations are related in complicated ways although it appears that the basic processes are those of decentering which lead directly (and indirectly through the decline of transductive thought and the recognition of both states and transformations) to reversibility which is the criterion for operational thought and which marks the decline of egocentricity. Diagramatically this may be expressed as in Figure 1. This model does not explain the decline of egocentric thought completely, however, since it fails to account
for causal factors in the process of decentering. To make this explanation we must return to Piaget's outline of the factors which contribute to intellectual development.

First is a biologically determined maturation force which sets an upper limit on the physical and mental activities of the child. The unfolding of this force is influenced by (and to a certain extent has an influence on) the social universe of the child - the factors brought consciously to bear in an effort to socialize and educate the child and those unique experiences which occur in random fashion.

These factors influence the child's development by limiting to a greater or lesser degree the activities to which the child must accommodate, for it is only through the accommodation process that the child progresses. There can be no progress if all incoming stimuli can be fitted into the child's existing system of beliefs - such extreme assimilation would result in a developmentally static system.\(^{28}\) It is the child's efforts to accommodate to new experiences which produce change in the system by necessitating the development of new structures to account for anomalies.

It is through the accommodation processes that the child gradually realizes the limitations and inadequacies of his beliefs. This produces a circularity which eventually
snowballs to fruition in the decentering processes and the acquisition of conservations. The child very gradually notices items which he cannot fit into his existing system; the very act of accommodating to these inconsistencies will sharpen up further anomalies to which he must accommodate, and so the process continues.

Thus, above the main box in Figure 1, and related causally to it, we must add this other group of factors which Piaget considers in his general discussion of development. There is, however, one factor yet to be taken into account; this is Piaget's concept of equilibration which appears among the group of general developmental influences as well as being the final one of the six headings proposed at the start of this sub-section.

We have discussed the way in which the child accommodates his system of thought to new experiences where these cannot be assimilated; this leads to a change in the system but not to a radical reorganization each time. Rather, each accommodation produces a series of compensations within the system so that previous structures are modified and re-integrated and are not merely discarded in the face of conflicting evidence.

Piaget sees the child's system of thought as an equilibrium state and he sees the process of development as
a succession of more and more stable levels of equilibrium. The equilibrium in this sense is a self-regulating system and equilibration is a 'series of active compensations on the part of the subject in response to external disturbances and an adjustment that is both retroactive ... and anticipatory' (Piaget and Inhelder, 1969, p. 157). The child's mind forms a system which is in a state of delicate balance; change in any of its parts leads to compensations throughout the system which results in a new temporary equilibrium. This state is never perfectly stable, however, and the idea of a dynamic equilibrium ever poised for change is Piaget's model of the organization of thought.

It is as difficult to sum up an exposition of Piaget's theory as it is to give a clear and full account of it. It is hoped that the chronological account of the scheme is clarified somewhat by the explanation of the major terms in the Piagetian technical vocabulary. The general aspects of Piaget's theory should be borne in mind during the discussion of his theory of moral development which follows, for it is argued in this thesis that certain theoretical threads especially those deriving from the decline of egocentric thought - may be seen linking the two.
CHAPTER 2

PIAGET’S THEORY OF MORAL DEVELOPMENT

1. Introduction

Noticeable by its absence from the earlier account of Piaget's general theoretical approach to child development is a discussion of his specific theory of moral development in children. This theory is built upon some of his earliest investigations which are reported in his fifth book, *The Moral Judgement of the Child* (1932). This is not a direct sequel to his four previous volumes but certain theoretical threads can be seen to connect this study with the previous ones. The chapter which follows is a summary of the trends noted in *The Moral Judgement of the Child* and is thus an outline of Piaget's theory of moral development.

There are four lengthy chapters in *The Moral Judgement of the Child*; Piaget's style is as difficult as ever, and yet the book repays rereading for then the ideas seem clearer and it is easier to follow the extended arguments. The first three chapters of the book are experimental and theoretical, while the last is purely theoretical. Very
briefly for the moment, the first chapter is concerned with the child's attitudes to the rules of a game; the second discusses the child's judgements of the gravity of various misdeeds presented in story form; the third chapter maintains the story situation method, but switches its attention to what the child considers to be fair and unfair punishments and rewards for various group and individual misdemeanours or good behaviour; the final chapter reviews some earlier theories of morality and includes Piaget's criticisms of them together with his suggestions for using the knowledge gained from his own research in helping the child realize his full developmental potential.

Piaget considers eleven separate dimensions of moral development which will be described in detail later on (see especially Tables II and III). Each dimension comprises two extreme modes of thought, the first typical of younger children and the second of older children. Piaget contends that these occur in an invariant sequence such that successively older children exhibit progressively more mature modes of thought. We may briefly note that while this age progression has been subsequently demonstrated for six of Piaget's dimensions, recent work has shown the invalidity of the hypothesis of constant improvement along the remaining five, where the trends were either curvilinear or absent.
Piaget's experimental work may be considered in two broad parts. For the first, Piaget's desire to establish the meaning of respect for the rules from the child's point of view led to his analysis of the child's game of Marbles (1932, p. vii). He believed that boys have a better developed legal sense than girls (1932, p. 69) and so he concentrated on a boys game; his particular choice seems limited for it is difficult to think of a collective game other than Marbles which has not been formalized by adults in the way that school sports have, for example.

In contrast to the 'natural' setting of these investigations of Marbles, the second broad area of Piaget's work involved the child's discussion of hypothetical situations. The bulk of the data reported in The Moral Judgement of the Child was derived from discussions of this sort involving a variety of misbehaviours.

2. The Rules Of The Game

The first part of The Moral Judgement of the Child describes an investigation of children's attitudes to, and behaviour regarding, the rules of the game of Marbles as played in and around Geneva and Neuchâtel in the middle 1920's (Piaget, 1932, Ch. 1). Piaget and his associates first collected details of the many variations in the game
of Marbles in preparation for their more detailed study. The questioning was divided into two sections: the first related to the child's grasp of the rules of the game - the extent of his knowledge of the differing methods of play and of the procedures for deciding who goes first, or the particular set of rules to be used etc.; the second set of questions related to the child's attitude to the rules, particularly who invents rules, why rules are binding and how permanent they are.

During the initial investigation, Piaget feigned ignorance of the game and asked the child to show him how to play. Obviously, the fewer rules a child knows, the less he will conform to accepted standards. Piaget distinguished four stages in the development of the consciousness of rules.

The first is typified by the child's incorporation of the marbles into his own sensori-motor schemas. The materials are used as free-play objects and, at best, the child develops private rituals of play and does not attempt to adapt his behaviour to social rules. Piaget found that children up to about 3 or 4 years of age played with the marbles in a variety of ways (dropping, 'cooking', piling, rattling, etc.) but that repeated motor activities were often evolved so that each child would prefer his own individually developed activity to all other uses of the marbles (1932, pp. 19-26).

The second stage sees a slight decline in the child's
egocentricity during the period 3 to 7 years as the child begins to imitate aspects of the rule-regulated play of older children. However, the knowledge gained is still fragmentary and is still used in individual play schemas; the child does not interact with others but continues to play in a world of his own, without regard for other children. Each child is immersed in his own game, the competitive element is missing and everyone can win.

The decline of egocentricity continues through the third stage which lasts from about 7 years to about 11 years of age as the child begins to interact with his peers according to a mutually agreed set of rules. As yet, the child is a follower; his knowledge of the rules is incomplete and he must rely on older playmates at times when too fine a point of practise or theory is raised in the course of a game.

After about 11 or 12 years of age all rules are completely understood and obeyed to the letter by all. Children in this stage of codification of rules are, in effect, the 'reference books' to whom the younger children turn when in doubt. The children at this level know every variation of the game and may go out of their way to elaborate a pre-game ritual of side choosing, of agreeing which rules to use on the day, and other strictly unnecessary refinements such as fixing a time limit, or stipulating what should happen if
a game is interrupted before a proper finish.

Piaget proposes three stages in the development of the child's attitude to the rules. The first stage lasts up to about 4 years of age and for the child this young the rules are irrelevant; they are just not a part of his life except insofar as the motor rules mentioned above evolve. The second and third stages represent opposite ends of Piaget's first moral dimension - the fixity v. the flexibility of the rules (see Table II).

For the 4 to 10 year olds rules are eternal and unchangeable. The child may attribute them to parental or divine origin, and he will resist any attempt to invent new rules or alter old ones since 'they would not be fair', even if all other children agreed to abide by them. However, since the child's knowledge of the rules is incomplete until 11 years or so, he now unwittingly breaks rules at every turn and may in fact be playing in a unique way whilst denying the fairness of rule invention.

From 10 or 11 years onwards the child recognizes rules as existing for the convenience of the group and capable of being changed accordingly. Corresponding with the stage of rule codification above, much discussion takes place in deciding which rules to use today, although once agreed the rules are binding, for that game at least. The child accepts
<table>
<thead>
<tr>
<th>Age (yrs.)</th>
<th>Fixity of rules</th>
<th>immanent justice</th>
<th>objective responsibility</th>
<th>absolutism of value</th>
<th>expiation v. restitution</th>
<th>wrong defined as punished</th>
<th>Age (yrs.)</th>
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<tr>
<td>4</td>
<td>rules irrelevant</td>
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<td>rules</td>
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<td>6</td>
<td>sacred and untouchable justice</td>
<td>belief in immanent justice</td>
<td>judges by outcome</td>
<td>egocentric thought</td>
<td>need for severe punishment</td>
<td>actions wrong if punished</td>
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<td>9</td>
<td>rules exist for the convenience of the group</td>
<td>no belief in immanent justice</td>
<td>judges by intentions</td>
<td>recognition of alternate points of view</td>
<td>restitution</td>
<td>wrong defined independent of punishments</td>
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Children of these ages not questioned
### TABLE III  The Non-Developmental Dimensions of Piaget's Scheme of Moral Development

<table>
<thead>
<tr>
<th>Age (Yrs)</th>
<th>duty defined as obedience to authority</th>
<th>punishment by authority v. retaliation</th>
<th>reciprocity in rights and obligations</th>
<th>collective responsibility</th>
<th>distributive justice</th>
<th>Age (Yrs)</th>
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<tbody>
<tr>
<td>4</td>
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<td>6</td>
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<tr>
<td>7</td>
<td>accepted</td>
<td>prefer telling authority figure</td>
<td>reciprocity ignored in favour of adult rules</td>
<td>all should be punished</td>
<td>fair</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>other considerations more important</td>
<td>see nothing wrong in retaliation</td>
<td>appeals to co-operation and equality</td>
<td>none should be punished</td>
<td>absolute equality demanded</td>
<td>8</td>
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<td>equity observed</td>
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<tr>
<td>13</td>
<td></td>
<td></td>
<td>all should be punished</td>
<td></td>
<td>equity observed</td>
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<td>16</td>
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</table>

Children of these ages not questioned
that rules have probably changed considerably since the game first began and that, subject to peer approval, it is perfectly valid to invent a new rule.

Certain shortcomings of this part of Piaget's book are already apparent; some of the methodological weaknesses apply to his later studies as well. The discussion of the rules of the game is restricted almost entirely to information collected from boys; this is a possible source of bias additional to any other arising from the selection of the sample. Piaget gives no clear indication of his sampling or interview techniques and so it is impossible to assess the validity of his data\(^1\) and more carefully controlled replication studies are always needed before his ideas can be fully accepted. Piaget does suggest that girls tend to elaborate their games far less than boys do (1932, pp. 69-76) although quite considerable variety can be seen in, say, the girl's game of 'Two-ball' (see Lydiat, 1967). In fact, sex differences in the rate of moral development have generally proved insignificant although Bull finds 'striking sex differences . . . evident in almost all areas of moral judgement (1969, p. 17).\(^2\)

As usual, Piaget's interest lies in the sequence of stages rather than with age/stage correspondences or with factors which might accelerate or retard the child's
achievement of a particular stage. Recent validation work has suggested several factors which seem important in affecting the rate at which a child achieves a particular stage and these are discussed in detail later on (see Chapter 3).

On a broader and more constructive theoretical level, Piaget points to the decline of egocentricity (as a result of biological maturation plus increasing peer cooperation) as the main driving force in the development between the stages he notes. Here can be seen the first and perhaps the most important, link between Piaget's theory of moral development and his theory of cognitive development. Piaget believes that important factors in the child's development are his relationships with other people and his increasing ability to notice flaws in his own beliefs as he compares them with those of others.

In this respect chronological age is doubly emphasized. In the first place it sets a rough limit to the child's neurological development which, in turn, modifies his behavioural capabilities. Secondly, chronological age is commonly taken as an indication of the type of social relationship into which the child is supposed to enter; this is shown in anthropological studies of puberty rites and is also evident in our own society in the extra-special celebrations marking a twenty-first birthday. A more traditional aspect of age considerations is adult acceptance
of older children as equals whilst taking offence at 'cheek' from younger ones.

Age is also an important factor limiting the extent to which the child's opinions are brought into family decisions this is particularly relevant to Piaget's general thesis that the more immature types of judgement and behaviour, especially in the area of moral judgement, result from relationships of constraint, while the more mature forms stem from relationships of co-operation and equality.

3. Adult Constraint And Moral Realism

Piaget next focusses his attention on the child's ideas of moral rules laid down by adults, in contrast to those developed among children (Piaget, 1932, Ch. 2). He regards the typical adult-child relationship as one which restricts the child's development considerably since it is based in unilateral respect; Piaget's immediate interest lies in a comparison of the moral judgements of the younger children who must endure such relationships of constraint with those of older children who enjoy relationships of co-operation with their peers and, increasingly, with adults.

Piaget believes that moral constraint combines with the young child's egocentric thought to produce what he terms moral realism, whose features give rise to the immature modes of thought along several moral dimensions and whose decline
allows the more mature modes to develop. Moral realism has three important features: in the first place, it gives rise to a heteronomous attitude to rules as sacred and untouchable — any act which shows obedience to a rule is good; secondly, moral realism requires that the letter and not the spirit of the law be observed — thus deviation from the rule is condemned and must be expiated by a punishment; the third feature of moral realism is its objectivity — there is no place for individual motives to be taken into account, actions are judged in accordance with their exact correspondence to the rule and consequences are more important than intentions, which are completely ignored.

Several of Piaget's moral dimensions are implied in this outline of moral realism. The fixity of rules has already been mentioned in the discussion of the game of Marbles; the idea that rules could never be changed gave way gradually to a recognition of the flexibility of rules subject to peer group approval. The restrictive effect of moral realism may be noted in the discussion of the other dimensions which follows.

(a) **Objective responsibility**

Objective responsibility is the term which Piaget applies to the younger child's tendency to judge situations by their consequences alone (1932, pp. 116 ff.). This mode of thought is gradually replaced in older children by a subjective
responsibility in which the intentions that motivated the act are considered (see Table II).

Evidence for the decline with age of objective responsibility is taken from Piaget's investigation of children's attitudes to some hypothetical moral situations relating to clumsiness and stealing. For each part of the investigation the subject is presented with a pair of stories and is asked to judge the relative culpability of the actors. Each of a pair of stories differs from the other in two respects - with regard for the seriousness of the consequences of the acts and with regard for the intentions which motivated the acts.

A few examples taken from The Moral Judgement of the Child should clarify the differences: in one of a pair of stories, a girl cut a big hole in her dress while trying to cut out a piece of sewing to help her mother - in the other story, a girl was playing about with a pair of scissors and she cut a small hole in her dress; in a second pair of stories, a boy was called to dinner and knocked over a tray of cups which lay behind a door in such a position that he could not see them - the second boy was trying to get some jam from a cupboard when his mother was out and he knocked one cup over; in another pair, a girl steals a bird from a cage because she is sorry to see it locked up - the other girl takes some sweets when her mother is out, then hides and eats them all up (Piaget, 1932, pp. 118-19). The differences are apparent -
in each case it is the child who has the better intentions who causes the most material damage.

Piaget suggests that a morality of constraint, typified by reference only to objective consequences in the judgement of right and wrong, obtains among children up to about 8 years of age. The average age of children relying on a morality of constraint was 7 years; for those relying on a morality of co-operation it was 9 years, although responses from each category were found at all age levels. Piaget links the change from judgement based on outcome to that based on intention to the nature of the parent-child relationship.

Piaget suggests that there are two extreme forms of parent-child relationship. In one, the child's misdemeanours are judged solely by their consequences; Piaget points out that most of the children he saw came from very poor districts and that the average housewife would be more angry over the breakage of fifteen cups than one, say, and independent up to a point of the child's motivation (1932, p. 129). This adult behaviour reinforces the child's objective attitude in evaluating stealing and clumsiness.

Piaget recognizes a second type of parent-child relationship in which the parents try to give their children a moral education based on intention and which 'can achieve very early results as is shown by . . . the few examples of
subjective responsibility we were able to note at 6 or 7'. (Piaget, 1932, p. 130). \textsuperscript{4} Even with such a sympathetic parental attitude, it is likely that the younger child will judge situations in which he finds himself according to the material damage done and not according to intentions. Perhaps he has met other adults less sympathetic, or his own parents have lapsed occasionally into the much more spontaneous reaction of anger to damage; such experiences may have a much more profound effect than all the subsequent explanations of motive, and are likely to give rise to guilt feeling or judgements based on a morality of constraint rather than co-operation.

(b) Lies and morality

Two further moral dimensions implied in the features of moral realism are isolated during Piaget's discussion of lies (1932, pp. 135 ff.). Piaget sees lying as a natural tendency rooted in the young child's egocentricity; the egocentric child contradicts reality without his realizing it, although this unintentional aspect of the behaviour makes it difficult to apply the term 'lie' in a strict sense.

Adult constraint combines with egocentric thought to give the earliest definitions of the wrongness of lying. Children are told not to lie by adults and any act showing disobedience to authority is wrong. Second, lies are wrong because they are punishable, because you get slapped or
told off if you lie. The first of these dimensions is gradually replaced by its more mature form of duty defined in terms of conformity to the expectations and obligations of peer group relationships of equality. For the second dimension, there is the gradual appearance of judgements made independently of sanctions (see Tables II and III).

In the next stage of the development of the child's attitude to lies, the gravity of a lie is judged according to its content - the technical quality of the lie (its credibility) is the criterion for judgement. A harmless lie which could not be believed is judged worse than a deceitful lie which might be believed.

During a third stage, the idea gradually forms that intent to deceive is the important criterion. Whereas, previously, a lie may have been judged worse because it had serious consequences, intention to mislead is now taken into account. This is further evidence of the decline of objective responsibility noted above. Additionally, younger children tend to regard lies to adults as worse than lies to children; this aspect gradually becomes irrelevant - extra support for the decline of the definition of duty as obedience to authority.

(c) Egocentricity and moral judgement

The final dimension which Piaget outlines in his
discussion of the child's attitudes to adult rules is that of absolutism of value v. relativism of value (1932, especially pp. 84 ff.). This dimension is a direct result of the child's egocentricity which prevents his appreciating viewpoints other than his own. Childish egocentricity and the limits which it sets on intellectual development have already been discussed (see Chapter 1); since the child can conceive of only his own perspective on an act, he believes that all other people are of his opinion. In cases of clear conflict, however, the adult view is always held to be the correct one since, for younger children, duty is defined as obedience to authority.

This absolutistic approach is replaced in the older child by a relativistic view of value and the recognition of shades of right and wrong as motives are taken into account. The remarkable influence of this dimension on others mentioned previously can be easily seen (see Table II).

(d) The child's social network

In his discussion of the first five moral dimensions (rule fixity, objective responsibility, duty as obedience to authority, wrong defined by sanctions and absolutism of value) Piaget notes a common factor facilitating the child's progress from the immature to the mature modes of thought. This factor is the nature of the child's social relationships. 5
The younger child is typically constrained by a one-sided relationship involving fairly strict adherence to adult authority; this heteronomous control reinforces the immature modes of thought of the younger child. Peer co-operation and an increasing equality with adults allows the older child more freedom of thought and action and the gradual realization of autonomous control. Adult rules and societal norms become internalized and the child now conforms to stipulated behaviour patterns since he recognizes their utility and not because he is afraid of the consequences of deviance.

Critics of Piaget (e.g. Bull, 1969; Kohlberg, 1963b) have pointed out that his more mature autonomous stage does not represent self-rule proper but implies conformity to social norms. Sometimes, individual considerations may transcend norms of behaviour and even laws, and autonomous thought is more mature than socionomy (Bull, 1969; Ugurel-Semin, 1952) or a morality of conventional role conformity (Kohlberg, 1963b, p. 13), invoking as it does principles of individual conscience.

While Piaget has drawn attention to an important shift in the child's level of moral judgement, he was incorrect in assuming that his second level (of autonomous thought) was the most mature form of reasoning. It is probably the
highest level at which the oldest children with whom Piaget dealt could function (given a double limitation of the subjects' ages and the naivety of Piaget's situations) and it may represent the typical mode of thought for many adults (Bull, 1969, p. 33) but it is insufficiently mature to account for the reasoning of some people. Necessary extensions to Piaget's theory are suggested by Bull and by Kohlberg.

4. Co-operation And The Idea Of Justice

In his investigation of co-operation between children insofar as the concept of justice is concerned Piaget isolated the remaining six moral dimensions (Piaget, 1932, Chapter 3). Piaget's attention now focusses on children's ideas on the fairness of punishments for various misdeeds and rewards for good behaviour.

These last dimensions may be seen as extensions of the first five, especially in the young child's high regard for adult authority and his concern with punishments in the definition of bad behaviour.

(a) Expiation and restitution

Piaget argues that at any age level children regard certain forms of punishment as being fairer than others; the relative fairness of different punishments varies with
the age of the child. Piaget proposes a continuum of severity of punishment and suggests that older children regard less and less physical punishment as most fair and increasingly favour social sanctions as the means of control. The younger children think that strict punishment is both just and necessary to expiate misdeeds; the child who has been punished will conform more in the future. For older children, fair punishments are those which entail putting things right or making the wrong-doer realize the consequences of his behaviour; this can be achieved without resorting to physical punishment (1932, pp. 197 ff.).

Expiative justice is typified by strict, painful physical punishment; it is arbitrary in the sense that it is not normally related to the offence in a logical manner. Reciprocal punishments, in contrast, involve helping the child realize why his behaviour is wrong by inflicting a punishment logically related to the offence. Piaget distinguishes six levels of reciprocal punishment roughly representing progressively less severe measures (Piaget, 1932, pp. 205-07).

First is the offender's exclusion from the group. As a temporary break in the social bond this is probably fairly common in the child's relationships with both
peers and adults, as when children refuse to play with someone who cheats all the time, say, or when an adult will not take a child for a walk when he has shown that he cannot behave on such occasions.

A second group of punishments relates to the child suffering the consequences of his misbehaviour - for example, having no bread for dinner if the child has refused to fetch some and there is insufficient to share all round; being put to bed if he has pretended to be ill; or having a cold room if he has broken a window pane.

As a third form of punishment, the child may be deprived of the misused object should he wish to borrow it again - he may not be allowed to look at a book which he has defaced, say.

Reciprocity proper appears in the fourth group of punishments by which the 'eye-for-an-eye' philosophy is applied. The child is punished by actions exactly the same as those by which he misbehaved - one might break his toys if a child had damaged those of another. While this form of punishment is perfectly legitimate in making the child understand the results of his actions, it can become irritating and absurd on occasion.

Purely restitutive punishments form a fifth group; the child is made to pay for the damage he causes. This
may be completely divorced from the censure involved in punishment, but commonly the child is told off as well as having to pay for the damaged property.

Finally, punishment may take the form of censure only without any attempt at retribution. The child would have explained to him why his actions were wrong and what adverse effects his behaviour had. This form of punishment seems unfair and inappropriate to younger children who see the necessity of physical punishment to expiate the misdeed. Thus we have come full circle in discussing the fairness of punishments as seen by children (see also Table II).

(b) Collective responsibility

Quite commonly the consequences of some misbehaviour may be discovered without evidence of the culprit's identity. This is perhaps more typical of the classroom setting where there is relative safety in numbers and certainly a much greater chance of escaping detection and punishment than in a smaller group such as the family. Under such circumstances the question is what should the teacher do, and how fair do children think the alternative courses of action are? (1932, pp. 231 ff.)

There are, in fact, three possible situations. Firstly, the teacher may punish the whole class without making any attempt to discover the offender. This course of action is
denounced even by the youngest children whom one would normally expect to regard all adult actions as being fair. They all insist that the teacher should make some effort to discover the guilty party.

Secondly, the teacher may try to discover the culprit who is additionally known to the class. Should the guilty person not confess and should the class not give him up then a rather confused pattern of replies is found. The children might believe that the teacher is fair in punishing the whole class - the younger children say that an offence has been committed and at least this way the guilty party would be punished as well as the rest (this derives from the young child's belief in expiative justice); for older children it is the group solidarity (which renders everyone an accessory after the fact) which is punishable rather than their failure to cooperate with authority per se. Alternatively, it might be maintained that nobody should be punished since the teacher does not know who is responsible and does not have the right to ask the class to tell tales.

In a third situation the class may not be aware of the identity of the culprit. Again, younger children see the necessity for some form of punishment to expiate the wrong, and so the whole class must suffer. Older children believe that no-one should be punished - it is worse for the innocent
to suffer than it is for the guilty party to go free.

The child's age, commonly linking in with the nature of his social relationships with adults, is proposed by Piaget as the important factor in this discussion of collective responsibility. The young child's respect for adult actions, and his desire that punishment should always follow a misdeed, lead to a belief in collective responsibility. Older children lack this awe of authority and can compile many arguments to modify this strict belief in the necessity of punishment.

(c) Immanent justice

Stemming from the young child's acceptance of expiative justice Piaget notes the development of belief in natural punishment such that objects are thought to deal out automatic retributions for misdeeds; this phenomenon Piaget terms *immanent justice* (1932, pp. 250 ff.). One of the situations which Piaget uses to illustrate the development of belief in immanent justice describes how a boy is disturbed while stealing apples; he runs away across a rotten bridge which collapses. The problem is: why did the bridge collapse? (Piaget, 1932, pp. 250-51). Younger children see it as a natural punishment for stealing - the bridge collapsed because the boy had been misbehaving; older children say that the bridge would have collapsed
Parental teaching may well reinforce the belief in immanent justice. The statements 'It serves you right' or 'It wouldn't have happened if you'd behaved yourself' or something similar are commonly heard after the child is hurt while messing about. Equally true, aspects of immanent justice may persist in older children and even adults; it is fairly common for one to seek out past misdeeds in partial explanation of present misfortune. The decline of belief in immanent justice is due partly to changing parental admonitions and partly to intellectual development and increased experience of the world.

(d) Distributive justice

We have already noted the child's attitudes to collective punishments; in a somewhat similar vein Piaget investigated situations where an adult favours one child more than another in the allocation of rewards or attention (1932, pp. 262 ff.). Typically, the obedient child is favoured at the expense of the others. This non-reward approach to punishment of disobedience may be legitimate from the point of view of retributive justice but not necessarily from that of distributive justice. Some familiar trends may be seen in Piaget's data.

Younger children see nothing wrong in unequal treatment
since all adult actions are fair and binding. Slightly older children (up to eleven or twelve years of age) demand absolute equality of treatment regardless of behaviour. Still older children modify this rabid equalitarianism with considerations of equity by which each case is judged on its individual merits (see Table III).

(e) The child as a punisher

Obviously, if a child has suffered some wrong at the hands of another there are two broad courses of action for which he might opt: he can redress the wrong himself or he can seek out an adult to administer a punishment. Once more, Piaget proposes an age progression such that the younger children favour telling an adult while older children increasingly prefer to fight their own battles. 9

The younger child's attitude is based in his reverence for adult authority. In the first place, the adult says that fighting, stealing, cheating etc. are wrong - the young child is therefore bound not to do these things even in retaliation. Secondly, since adults impose the sanctions it is their duty to inflict the punishments. Thirdly, telling an adult may be the only way a smaller child can seek restitution from a bigger one.

Piaget contends that the retaliation of the older child is based more in considerations of justice and equality than
in coldly calculated revenge which is in fact condemned (1932, p. 304).

(f) Rights and obligations

In connection with the child's attitude to the rules of marbles we noted that younger children held rules to be sacred and fixed, while older children recognized the right of the group to make and change rules. This dimension leads to another concerned with why it is wrong to cheat in games - the increasing importance of reciprocity (1932, pp. 304 ff.).

From the younger child's reverence for rules develops the notion that cheating is wrong because it is naughty (i.e. forbidden by adults) or because it is against the rules. In older children this strict adherence to rules for their own sake is replaced by the recognition that cheating makes co-operation impossible, that it undermines the security of the group relationships and is contrary to equality, being unfair to the others (see Table III).

This increasing reciprocity in defining rights and obligations observable in the child's attitude to cheating was also present in Piaget's data on lies, and while younger children said it was worse to lie to adults than to children, older children thought that both were equally bad.
5. Co-operation And Constraint

The eleven moral dimensions proposed by Piaget indicate slight differences in emphasis around the general problem of what constitutes fair or unfair forms of behaviour in children and adults. As we have seen, several of the dimensions can be linked together directly and underlying them all Piaget recognizes the heteronomy-autonomy continuum of adult-child relationships. He claims that relationships of constraint hinder moral development and produce the immature aspects of the dimensions while moral progress is facilitated by relationships of co-operation between peers and, more importantly, between adults and children. Piaget concludes his experimental investigations in The Moral Judgement of the Child with these remarks:

we find in the domain of justice, as in the other two domains already dealt with [moral realism and the rules of the game], that opposition of two moralities to which we have so often drawn the reader's attention. The ethics of authority, which is that of duty and obedience, leads, in the domain of justice, to the confusion of what is just with the content of established law and to the acceptance of expiatory punishment. The ethics of mutual respect, which is that of good (as opposed to duty), and of autonomy, leads... to the development of equality, which is the idea at the bottom of distributive justice and of reciprocity. Solidarity between equals appears once more as the source of a whole set of complementary and coherent moral ideas which characterise the rational mentality. ... But
what is certain is that the moral equilibrium achieved by the complementary conceptions of heteronomous duty and of punishment properly so called, is an unstable equilibrium, owing to the fact that it does not allow the personality to grow and expand to its full extent. As the child grows up, the subjection of his conscience to the mind of the adult seems to him less legitimate, and except in cases of arrested moral development, caused either by decisive inner submission (those adults who remain children all their lives), or by sustained revolt, unilateral respect tends of itself to grow into mutual respect and to the state of co-operation which constitutes the normal equilibrium (1932, p. 324).

Piaget's argument here is that the nature of the child's social relationships is the crucial factor affecting his moral development. We shall see later on (in the consideration of the validation work of Piaget's theory of moral development) that many factors other than the child's social relationships have been suggested as important variables in this respect and that, in fact, unilateral constraint is more effective in retarding the child's development than is mutual respect in accelerating it.

6. Educational Implications

In the final chapter of The Moral Judgement of the Child Piaget attempts to summarize his findings as they relate to earlier ideas on morality and to the child's moral and general education (1932, Ch. 4). Underlying his eleven
moral dimensions Piaget again stresses the continuum of adult-child relationships from those of heteronomy and constraint to those of autonomy and co-operation.

Piaget notes that Fauconnet (1920) demonstrated an historical change in justice and penal law from objective to subjective responsibility - the very same trend which Piaget found in the child's development. Fauconnet's work derived from that of Durkheim (19 ) whom Piaget criticizes for not recognizing the binding nature of relationships of equality, insisting as he did that moral rules were imposed by the group on the individual. There does, however, appear to be a way of reconciling this apparent conflict between Piaget and Durkheim.

Accepting that norms may derive from relationships of constraint or co-operation, both sets influence the individual in similar ways. Although their sources are different their effect is the same and both assume the authority of rules which exist above and beyond the group as a means of controlling its behaviour. While developing from seemingly opposite premises (heteronomous and autonomous control) they operate in identical fashion and with this interpretation the views of Piaget and Durkheim complement each other.
Piaget argues that a further modification of Durkheim's theory of morality is made by Bovet (e.g. 1912) who considers moral obligation as having two components - commands and respect for those issuing commands. However, Piaget thinks that Bovet shares Durkheim's weakness of ignoring relationships of equality as a source of moral norms.

In Piaget's opinion Baldwin's (1897) theory is also inadequate because, although Baldwin implies a process similar to Piaget's own of declining egocentricity as the driving force behind moral development, he maintains that the child's intelligence is the crucial factor in the development of an autonomous moral conscience. Piaget points out that declining egocentricity lies at the root of both intellectual and moral development and so it is invalid to explain the one by the other.

The general educational implications of the constraint-co-operation continuum are very important to Piaget. He believed that the child's final and most mature level of moral and cognitive development is achieved through discussion, comparison, criticism and reorganization made possible by relationships of co-operation and reciprocity. The typical adult-child relationship is one of constraint and unilateral respect, at least until the child attains what the adult considers to be a minimum level of maturity.
The criterion for this level is most likely to be the child's chronological age and the relationships of constraint which apply until then have been suggested by Piaget as reinforcing the childish egocentricity which marks the more immature levels of reasoning.

Similarly, the school situation is typically one which relies heavily on relationships of constraint between teachers and pupils. Faced with the problems of controlling a large number of children the teacher demands immediate obedience, order, quiet etc. It is clearly easier for the teacher to impart knowledge under such conditions rather than by allowing the children to experiment and compare results for themselves. This is, however, exactly what Piaget advocates - individual ideas contrasted through discussion and criticism; different aspects of a single problem taken up by separate groups and compared later on; co-operation among equals rather than the imposition of knowledge by a person in authority. These arguments had been advocated before Piaget by Dewey, Sanderson, Cousinet and others under the general collective description of the Activity School. Only recently, however, has any attempt been made to apply these suggestions in school situations and even now this application is limited to Primary school work.
7. **Summary And Conclusions**

In this chapter Piaget's theory of moral development has been described through an outline of his book *The Moral Judgement of the Child*. Eleven moral dimensions were isolated, although several of these could be seen to interconnect in various ways; Piaget traced these interconnections back to the nature of the child's social relationships. Piaget's criticisms of earlier theories of moral development were also noted briefly.

A major qualification of Piaget's theory should be borne in mind, however. In the next chapters we deal with modifications of Piaget's theory by considering direct validation work and by considering theories of moral development which approach the problem from perspectives other than the cognitive one (i.e. psychoanalytic and learning theories). The validation studies have suggested many factors other than the adult-child relationship as being influential in the child's moral development; even where this specific factor has been considered results have not been at all consistent and there is some doubt about the developmental status of those moral dimensions which invoke relationships of co-operation as an impetus for change through Piaget's scheme.
A partial explanation of the inconsistent links established between the child's social relationships and his moral development may lie in the limited attention given to the problem. For this reason, and also because of its crucial position in Piaget's theory of moral development, the seeking of possible relationships between parental attitudes to the child and the child's moral development seems an important area of study.

As we shall see, the different approaches of psychoanalytic and learning theories to moral development suggest that Piaget's cognitive theory is only a partial explanation of the problem; even for the cognitive aspects of moral development Kohlberg has suggested an alternative scheme which is far more sophisticated and extensive than that of Piaget.
CHAPTER 3

THE VALIDITY OF

PIAGET'S THEORY OF MORAL DEVELOPMENT

So far we have discussed Piaget's theories of cognitive and moral development. We noted some similarities between the two, especially insofar as the child's performance on Piaget's tests of moral judgement are dependent on certain intellectual abilities (e.g. non-ego-centric thought); thus, it is after the age of eight years or so that the child exhibits both non-ego-centric thought and the more mature modes of moral judgement (see Chapters 1 and 2).

Piaget's approach to moral development has been termed cognitive, since it deals with what the child knows about good and bad, right and wrong, better and worse etc., and since this knowledge is largely dependent on the child's mental abilities. Furthermore, this cognitive approach has been contrasted with other approaches, notably a behavioural one followed by Hartshorne and May, for example, and an emotive one typical of Freudian analysis (see Wright, 1968;
Kohlberg, 1963a). The major purpose of the present chapter is to review the findings of the validation studies of Piaget's work on moral development. First consideration will be given to the content of Piaget's scheme as the studies concerned with the characteristics and order of succession of stages are discussed; later consideration is given to the mechanism of moral development and to attempts to explain rather than describe the process of development.

1. Some Early Studies Of Moral Development

Before discussing the validation literature, however, it is interesting to consider some studies of moral development published before that of Piaget. The tremendous impetus given by Piaget to the investigation of the child's moral development means that his is commonly thought to be the first study in this field. In fact, there were at least six studies prior to that of Piaget and, although they had no direct connection with his work, some of their discoveries were replicated by him.

At the turn of the century, Barnes (then Professor of Education at Stanford University) edited several series of Studies in Education. All the reported studies involved very large samples; a group questionnaire was administered to each sample. One study, Punishment as seen by Children, used information collected from about two thousand children
aged 7 to 16 years who were asked to report examples of fair
and unfair punishments they had received (Barnes, 1894).
Barnes noted the fact that punishments were often considered
to be just, merely because they came from adults; also, the
idea that offences could be paid for in terms of pain became
less frequent with age (c.f. Piaget's ideas on the decline
of expiatory punishment).

Piaget's work on the development in the child's attention
to intentions and consequences in misbehaviour was fore­
shadowed by Schallenberger's (1894) study of three thousand
children aged 6 to 16 years. She posed a situation where a
girl painted the dining room chairs 'to make them look pretty'
and was sent to bed as a result. She found that younger
children were inclined to demand that the girl be punished
severely, a tendency which declined with age; older children
said that the mother need only explain why the girl was wrong.
Schallenberger concluded that 'younger children judge by
results, older children look at the motives which prompted
them' (1894, p. 96).

Barnes (1902) attempted a validation of Schallenberger's
work when he posed the same situation to over a thousand
English children aged 8 to 14 years. He noted that most of
the children he studied came from working class or lower­
middle class backgrounds, the first time that the class
factor had been mentioned in such studies. Again, Barnes found the recommendation of punitive measures to be more typical of younger children, while older children thought that explanation would be sufficient to impress on the child the seriousness of his actions.

These three studies, some thirty to forty years before Piaget's, focus on issues similar to those with which Piaget concerned himself, and they adopted a similar developmental approach in linking age with type of response. Concern for the moral education of the child gave rise to two more pre-Piagetian studies. McGrath (1923) administered a number of tests to children aged 6 to 18 years in order to obtain information which could be used as the foundation for a course in moral instruction.

Macauley and Watkins (1925) took the idea of 'wickedness' as the basis of their work. They asked 2,420 children aged 7 to 18 years and from a variety of social backgrounds to 'make a list of the most wicked things anyone can do'; they also asked each child to choose their 'ideal person'. The experimenters' aims were to seek any changes in type of response with age, to attempt correlations between moral development and moral ideals as shown in the choice of ideal person, and to note the effects of environmental influences on moral development.
Macaulay and Watkins argued that there were four broad stages in moral development. Up to about 9 years of age, the child lives in a 'small world of immediate personal relationships . . . . He states as crimes those small personal acts which he has been taught to consider wrong by the categorical prohibitions of parents or teachers.' (1925, pp. 19-20). This implies two of Piaget's dimensions - egocentricity and respect for adult commands. The second stage of moral development lasts from 9 to 14 years of age and in it the child learns to generalize from particular events to more broad conceptions such as stealing, murder, fighting etc. However, these abberations are still judged in terms of conventional moral codes and mitigating circumstances are not taken into consideration. During the third stage, adolescence brings an upsurge of rebellion which is shown in the child's greater concern with offences against parents. Lastly, at about 19 years, the child (sic) adopts self-control and autonomous judgements become important.5

To conclude this review of the pre-Piagetian work, brief mention must be made of Hartshorne and May's three volume study of moral conduct (1928-30). They were interested in behaviour in about a hundred test situations where subjects were tempted to deviate (cheat, lie, steal
etc.). The children involved were under the impression that there was no risk of detection, although this was not the case, of course. This study produced two important, if somewhat negative, results: firstly, there seemed to be no generalized morality of conscience (specific situational variations caused different responses); and secondly, there was no correlation between the exhibition of good conduct and attendance at Sunday School, Boy Scouts etc.

2. The Replication Studies

The publication of The Moral Judgement of the Child heralded the start of a new approach to the consideration of morality; Piaget's ideas have persisted to the present day to a remarkable degree. This section reports the findings of some two-dozen studies carried out in an attempt to validate and extend Piaget's ideas. Such validation studies are essential, especially in view of the methodological weaknesses of Piaget's earliest work. The major shortcomings of Piaget's methodology have already been discussed, but briefly they include a lack of standardized procedures for information collection, lack of concern with sampling techniques and extremely sporadic reporting of results.

The earliest validation studies were concerned with
more than mere replication, however. Important as this function was, they also tried to isolate the variables which might accelerate or retard the child's development through Piaget's stages. The most common variables considered were social class, national culture and intelligence, although more limited discussion has been made of such factors as the specific nature of the test items, the sex of the child, religious teaching and adult pressures. The role of each of these variables will be considered in due course.

We noted in the outline of Piaget's theory that he discusses eleven different dimensions of moral development (see Chapter 2). Each of the two-dozen or so most commonly quoted validation studies of Piaget's work considers a different combination of these dimensions in isolation or in relation to a variety of environmental factors which might be expected to influence the child's rate of development (see Table IV).

During a very thorough review of the research literature in moral development, Kohlberg (1963a) suggests that not all of Piaget's dimensions show sufficiently consistent age trends for them to be thought of as genuine developmental dimensions. Kohlberg argues that the validity of such a dimension is indicated by responses which become
regularly more mature with age regardless of the nature of the situations about which the child is questioned, and regardless of the child's own social environment. The results of the validation studies have been consistent enough to suggest that six of Piaget's dimensions are developmental while the results from the other five have varied considerably from study to study. This is an important distinction since the modifying effects of the variables discussed below apply almost entirely to the developmental dimensions only; favourable factors show their effects in similar fashion to increasing age, by stimulating an increase in the maturity of response along the dimension.

Kohlberg points out that one can detect a fairly clear-cut distinction between the developmental dimensions and the other dimensions in that the former group reflect an increasing cognitive ability to know what is right and wrong, while the latter reflect the child's attitude to adult authority. The validity of constructing these two groups of dimensions will become apparent during the discussion of the variables which follows.

In this section, the role of the individual variables listed in Table IV will be considered in relation to each dimension. Later, we shall discuss the developmental and
non-developmental dimensions by way of summarizing the main effects of individual variables; to avoid repetition this second discussion will be only brief. The findings discussed below are those of the twenty studies of moral development given in Table IV. These findings are summarized for the developmental dimensions in Table V and for the non-developmental dimensions in Table VI.

(a) **Chronological age**

Of course, the crucial test of a developmental dimension is that responses relating to it become more mature at successively later ages. It is this fact which defines the developmental dimensions and distinguishes them from the rest.

Piaget thought that chronological age was an important factor in influencing the child's level of response for two main reasons. In the first place, it affected the child's intellectual maturation. This is important in Piaget's approach since we have already noted his concern with the cognitive aspects of moral judgement. The immaturity of the younger child's judgements may be largely explained by his egocentricity and this feature of the child's thought disappears in time (see Flavell et al, 1968).

Piaget proposed a second less important and less successful application of age as a factor influencing moral development. He believed that relationships of equality
with adults and peers were reserved for older children, while younger children were constrained in heteronomous relationships. Developing from this, Piaget thought that relationships of constraint restricted the child's development while those of co-operation and equality promoted it. We return to this point in the discussion of adult constraint and peer group participation later on.

 Naturally increasing age correlates with greater maturity of response for the developmental dimensions. This relationship was established in seven studies each of objective responsibility and immanent justice and in four studies of expiation v. restitution. One study of rule fixity and one of wrong defined by punishment supported this trend. The results for these last dimensions are obviously not as strong support for developmentality as the several consistent findings for the first three; however, there is no evidence to contradict their inclusion as developmental dimensions.

 It can be seen from Table VI that there is considerable inconsistency in the findings relating to the non-developmental dimensions. A curvilinear relationship was established between age and type of judgement for the dimensions of duty defined as obedience to authority, belief in punishment by authority and reciprocity in
defining rights; other studies established positive relationships between the two for the same dimensions and one study could establish no relationship at all for the dimension of reciprocity. The single study of belief in individual or collective responsibility established a positive relationship between age and type of response which ostensibly qualifies it for inclusion as a developmental dimension; however, in contrast to, say, the final developmental dimensions, each of which was also supported by a single study, the results of a consideration of other variables does not show the consistency expected of a developmental dimension.

It is somewhat misleading to speak of age as a variable in relation to developmental and non-developmental dimensions since age is the criterion by which a dimension is so judged. We have seen, however, the inconsistency in the findings for several of the dimensions and the remarkable consistency in others. Moreover, as we shall see, these consistencies are repeated in the data for the developmental dimensions when the other variables are considered while the data for the non-developmental dimensions display no consistency.

(b) **Intelligence**

Having established the dichotomy of developmental and non-developmental dimensions on the basis of the age trends
shown by each, it can be demonstrated that certain other factors influence progress along the dimensions in similar fashion to age; that is, they stimulate an increase along the dimension.

Higher intelligence is one factor which is favourable to the child's better performance on Piaget's tests of moral judgement. Again this is not surprising since we have noted several times the emphasis which Piaget's theory places on cognitive abilities.

The results of the validation studies show higher intelligence to have a far more noticeable effect on the developmental dimensions than on the others. Thus the accelerating effect of higher intelligence was noted in seven studies of objective responsibility, in three studies of expiation v. restitution and in two studies of immanent justice. The study by Abel (1941) of mentally subnormal girls found no relationship between higher intelligence and better performance along the dimension of immanent justice although she did establish such a relationship for objective responsibility and expiation v. restitution.

In contrast, the four separate studies which considered intelligence and performance along the (non-developmental) dimensions of duty defined as obedience to authority, reciprocity in defining rights and individual
and collective responsibility failed to find any correlations in any direction.

Intelligence, then, is a very important factor in influencing the child's performance and progress along the developmental dimensions of Piaget's scheme; no correlations between intelligence and performance were established by the few studies of the non-developmental dimensions.

(c) Social relationships

In fact this heading covers the two variables of adult constraint and peer group participation in Tables IV, V and VI. It will be remembered that Piaget proposed two ideal types of social relationship - one of constraint and one of co-operation (see Chapter 2); he believed that younger children were constrained by a heteronomous relationship with adults and with slightly older children, while relationships of equality with adults and peers were reserved for older children.

Piaget extended the implications of this typology into his theory of moral development. He thought that relationships of equality and co-operation promoted the child's development while those of constraint retarded it. In fact, data collected subsequently does not altogether support these two contentions.

Adult constraint related in a consistent fashion to the
child's progress along both developmental and non-developmental dimensions; a negative relationship was established between constraint and slower development in three studies of immanent justice, in two each of objective responsibility and duty defined as obedience to authority, and in one each of expiation v. restitution, individual and collective responsibility and punishment by authority v. retaliation. Three studies failed to find any correlations between constraint and some of the other dimensions (see Tables V and VI).\textsuperscript{11}

Peer group participation has been less extensively investigated. One study failed to find any correlation between peer group interaction and progress along the dimension of objective responsibility (Porteous and Johnson, 1965); Boehm's series of studies established correlations between peer group participation and more mature judgements along the (non-developmental) dimensions of duty defined as obedience to authority and punishment by authority v. retaliation (see especially Boehm, 1962a and 1963a).

In general, adult constraint appears more successful in retarding moral development than does peer group participation in promoting it.

(d) Social class

Social class affiliation has been shown to correlate with differences in behaviour and performance in many areas
Piaget did not realize the possible effects of social class variations but the findings of several studies have implications for his theory of moral development.

Middle class parents are more likely than working class parents to encourage their child's education at school and pre-school levels; they probably had a longer education themselves and would therefore, appreciate the benefits of qualifications in long-term career prospects; these social advantages in education supplement any genetic advantage inherent in the intellectual superiority of middle class parents. These factors give the middle class child an intellectual advantage over the working class child and, as we have seen, performance in Piaget's tests of moral development is dependent to a large extent on intellectual abilities.

A second set of factors which is pertinent to the problem of moral development, and which would also give the middle class child an advantage in moral dilemmas, relates to the measures of control used over the children in middle and working class families. The middle class parent is more likely than his working class counterpart to adopt non-physical forms of control with his children; these social or psychological measures have proved to be the more successful in the formation of the guilt aspects.
of conscience (see Kohlberg, 1963a).

The research findings reported in Table V support these implications of social class for the developmental dimensions of Piaget's theory of moral development. Children from middle class homes were found to be more mature than those from working class homes in three studies of objective responsibility, in two studies of expiation v. restitution and in one study each of immanent justice and absolutism of value.

For the non-developmental dimensions the general picture is one of no correlation with social class (see Table VI). Two notable exceptions appear from Boehm's (1962a) studies of punishment by authority v. retaliation and duty defined as obedience to authority where she found working class children to return more mature answers than middle class children. Boehm explained this anomaly by pointing to the greater freedom allowed the working class child outside the home (fewer checks on friends, activities, time of return home, etc.) and the more prolonged contact with peers which results. Working class children therefore show more independence from adults in redressing wrongs and show an earlier rejection of the concept of goodness seen in terms of obedience to adults. 12

In general social class appears to correlate with different rates of moral development to the extent that it
## TABLE IV  Distribution of Dimensions and Variables by Author

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**KEY**

Dimensions - (1) objective responsibility; (2) immanent justice; (3) expiation v. restitution; (4) wrong as punished; (5) fixity of rules; (6) absolutism of value; (7) duty as obedience to authority; (8) reciprocity in rights; (9) punishment by authority v. retaliation; (10) individual and collective responsibility; (11) favouritism in the distribution of rewards and punishments.  

Variables - (12) age; (13) I.Q.; (14) adult constraint; (15) social class; (16) situational differences; (17) nationality; (18) cognitive affective differences; (19) religion; (20) sex; (21) peer group participation.
### Table V: Findings of Twenty Studies by Dimension and Variable

#### The Developmental Dimensions

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**KEY:** + this variable would assist child's development along this dimension; - this variable would retard the child's development along this dimension; e no effect found.

a The studies are referred to by the number given to each in Table IV. b See Chapter 2 for an explanation of each dimension. c See Kohlberg (1963a) plus explanation in the text. d True of cognitive aspects only. e True of affective aspects only. f here means that cognitive and affective stimuli elicited different levels of response maturity. g Girls more mature than boys.
The Non-Developmental Dimensions a

<table>
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<th>reciprocity in rights</th>
<th>Punishment by authority v. retaliation</th>
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KEY: + this variable would assist child's development along this dimension; - this variable would retard child's development along this dimension; e no effect found; o/ relationship was curvilinear (made at about 10 years) a See Chapter 2 for an explanation of each dimension. b These totals are summarized across both developmental and non-developmental dimensions. c Working class children did better than middle class children.
influences other intermediary factors such as intelligence, parental control of the child and peer group participation. (e) Situational differences

Moral judgement and behaviour are not unvarying concepts. Similar situations may evoke different responses at different times. This problem is very important since it throws into doubt the lay conception of morality as a general code of conduct and substitutes seemingly hedonistic considerations of risk and profit. This problem reflects on Piaget's theory of moral development; different test situations may effect the apparent maturity of a child's response.

Hartshorne and May (1928-30) noted the ways in which variations in the particular situations facing the child affected his behaviour; under conditions where they were tempted to lie, cheat and steal, the children behaved according to specific situational cues (for example, the chances of detection) rather than acting in any consistent manner which could be taken as an indication of strength of conscience.

This same effect has been suggested of Piaget's work - it may be easier to respond in a mature fashion to some test situations than to others. This tendency has been suggested in five separate studies of the dimensions of objective responsibility, immanent justice, duty defined
as obedience to authority, reciprocity in the definition of rights and punishment by authority v. retaliation. It applies equally to developmental and non-developmental dimensions.

A special aspect of the situational variations has been noted by MacRae (1954) and Boehm (1962b); this aspect concerns the cognitive and affective components of the test situations in studies of moral development. It is argued that the child may be able to identify better with some situations than others, and that these affective components influence the maturity of his response in a different fashion to the cognitive aspects which only require knowledge of right and wrong. For the affective aspects, the child is much more emotionally involved, giving evidence of his own anxieties and concern for the opinion of others. It is suggested that middle class children (who have the intellectual advantages noted previously) advance more quickly with regard to the cognitive aspects of moral development while working class children (who enjoy more prolonged peer group interaction) do better in relation to the affective aspects (see Boehm, 1962b; MacRae, 1954).

Porteous and Johnson (1965) attempted a similar distinction but could not separate the maturity of
responses to the cognitive and affective aspects of moral judgement at a significant level. This disagreement with the findings of Boehm and MacRae may be partly explained by the different techniques which Porteous and Johnson used to assess affectivity; whereas the first two studies looked for cognitive and affective aspects within Piaget's situations Porteous and Johnson used a separate projective test for the affective components and regarded Piaget's tests as purely cognitive.

(f) Nationality, religion and sex

The final three variables may be dealt with together since their investigation has been very limited and no clear patterning across the dimensions is as yet discernible.

To the extent that nationality differences in the child's rate of moral development can be seen, they tend to reflect the relative opportunities for peer group relationships and freedom from adult constraint. Boehm (1957) attributed the greater maturity of American preschool children compared with Swiss children to the earlier American peer group involvement; Liu (1950) proposed that the closeness of the Chinese-American family is a favourable factor in the acceleration of the moral development of the American born Chinese children when compared with native born American children.
Explicit training appears to be an important factor in the recognition of intentions in behaviour. This aspect is emphasized in the Catholic and Jewish religions (Boehm, 1962a & b, 1963a) as well as in Confucianism (Liu, 1950). Religious participation in general does not, however, correlate with more mature moral judgement (see, for example, Bull, 1969) or with better behaviour (Hartshorne and May, 1928-30).

There is some limited evidence that girls mature more early than boys in their moral judgements. Bull (1969) noted that the girls in his sample showed a spurt in moral development some two years before the boys, although this finding must be modified in view of the higher intelligence of the girls at each age level which would give them an advantage in any case. Porteous and Johnson (1965) also reported the greater maturity of girls' responses. This might be partly explained by the quicker biological matur­ation of girls, although the sex factor does not seem to have been an important variable in the several other validation studies which have used mixed-sex samples.

(g) Summary

In the discussion above of the results of the validation studies of Piaget's theory of moral development we noted the several variables whose operation it has been
demonstrated contributes to the child's slower or faster development.

On the basis of the consistency of age trends in maturity of moral judgement, a primary distinction was made between the six developmental and the five non-developmental dimensions of Piaget's scheme. Several of the variables discussed later showed consistent relationships to the developmental dimensions although there was much disagreement in the data relating to the non-developmental dimensions.

The two most immediately apparent differences between the developmental and the non-developmental dimensions are the number of replication studies for each and the consistency of the findings relating to each (see Tables V and IV). There have been far more studies of the developmental dimensions (twenty-nine compared with ten for the non-developmental dimensions) and there is much more agreement about which factors influence performance in tests in the developmental dimensions and what these effects are.

In the overwhelming majority of studies which attempted the correlations, better performance on all the developmental dimensions related positively with increasing age, higher intelligence and middle class background; other
important considerations were situational variations, nationality and sex of the respondents and religious teaching of the bases of moral decisions.

Despite the fact that it holds such an important position in Piaget's theoretical approach to moral development, the general area of the child's social relationships has been the subject of very little empirical investigation. Of the seven studies reported as considering the variables of adult constraint (see Table IV) only two (MacRae 1954; Johnson 1962a) attempt to assess parental attitudes; the others suggest that freedom from adult constraint is likely to be a partial explanation for the faster moral development they noted in some children, although this seems to be a hypothetical assumption derived directly from Piaget's discussion of heteronomy and autonomy.

MacRae (1954) was unable to establish any correlation between the strictness of parental control over the child and his performance on Piaget's tests along the dimension of objective responsibility; Johnson (1962a) was similarly unable to correlate parental attitudes with the child's performance along this dimension but he was able to do this for immanent justice and communicable responsibility. The importance of the adult-child relationship in Piaget's theoretical scheme, plus the fact that the area had received
little empirical attention, suggested the need for further work on the possible correlation of parental attitudes and moral development; the data reported later on (in Chapter 7) goes some way towards meeting this need.

Despite the smaller number of studies of the non-developmental dimensions, Table VI presents a much more confused picture than that shown for the developmental dimensions. The only consistent findings of any real importance are that of a positive correlation between adult constraint and retarded development, and the indication of the effects of situational differences on the maturity of the child's response; these data support the findings for these variables with the developmental dimensions.

Other consistent correlations may be noted for the non-developmental dimensions in relation to the minor variables of nationality, religion and peer group participation. Perhaps the major surprises of Table VI appear in the disagreement over age trends and in the lack of correlation of intelligence or social class with performance on most dimensions.

3. The Mechanism Of Moral Development

In the discussion of the replication work deriving
from Piaget's study of moral development, we noted that several of the moral dimensions outlined by Piaget showed age trends which allowed them to be called developmental in the strict sense of the term. In other words, for these dimensions at least, the separate stages proposed by Piaget followed one another in a fixed order and responses to test items relating to these dimensions became progressively more mature with age.

In this way the validity of the content of Piaget's theory of moral development was demonstrated. A separate problem, and one which has been given far less attention, concerns the mechanism of development from stage to stage. What is the process of moral development? What factors bring about the maturation of moral judgements? Why does the child gradually alter the premises of his moral reasoning? These are the sorts of questions involved in the consideration of this second major problem deriving from Piaget's theory, and the following section describes three attempts which have been made to supply some of the answers.

It is only fair to point out that although Piaget did not directly discuss the problem of the mechanics of moral development he has expounded at length a theory of intellectual development which contains an indication of
the process by which the higher mental structures evolve. It has been suggested that the process of moral development is the same as the process of intellectual development as described by Piaget; Kohlberg has proposed that moral development occurs through a mechanism of cognitive conflict by which the child must reorganize his beliefs to account for some newly recognized feature. This process is identical with what, in the cognitive field, Piaget has termed equilibration.

Now there are several ways in which a disequilibrium can be induced to which the child must adjust and so develop. The major variation among the studies discussed below concerns the source of the disequilibrium or conflict. Two of the studies are concerned directly with Piaget's scheme of moral development; the third is more directly relevant to Kohlberg's work but it is included here since the mechanism of change proposed is identical to that favoured by Piaget.

In broad outline, each of the three studies adopts a very similar approach. The first step is the assessment of the level of moral maturity of individual children in a sample; this assessment involves the placing of the child at one particular stage of development. For the next step, attempts are made to alter the level of the child's
thought through various training programmes; it is in this area that the studies differ most, each using a different reinforcement in its attempt to influence the child. The final step involves the retesting of the children to see what effects the training programme has had; again, slight differences are introduced here in the varying time span over which the children are posttested after the conditioning experiments.

The three studies used different training programmes in an effort to condition the child to alter his initial responses. The first tried to assess the importance of an adult model, the second that of discussion and prizes as a reinforcement and the third that of peer group opinion. The effect of all three conditioning attempts was to induce a conflict in the child's mind between what he believed and what some other person now suggested. The experiments indicate some techniques which might usefully be applied in a programme of moral education or the acceleration of moral development.

(a) **Adult model and verbal reinforcement**

Bandura and McDonald (1967) carried out the first investigation of the mechanism of moral development. They designed their experiment to show that moral judgement responses were less age specific than Piaget contended,
and that the child's moral orientation could be altered by the manipulation of rewards and by the provision of appropriate models after whom the child could fashion his responses.

Their investigation used situations relating to a single dimension of Piaget's work - objective responsibility. This dimension has been discussed at length (see Chapter 2) but briefly Piaget demonstrated that younger children tended to judge the seriousness of a misdemeanour by the amount of damage caused - they based their judgement on the consequences of the action. Older children were able to modify this type of judgement by taking into account the intentions of the actor. The mode of judgement of the younger children was termed objective by Piaget, and that of the older children was termed subjective.

Bandura and McDonald used a total of 42 test items, 6 of which were taken directly from Piaget (1932) while the rest were specially constructed. Children were assessed as objective or subjective in their judgements of Piaget's 6 items as a pretest; for the experimental work, groups of children were chosen whose responses were consistently objective or subjective, those with mixed responses being ignored. In this way, 36 children assessed as objective and 48 assessed as subjective in their moral judgements
were picked from a total sample of 165 (78 boys and 87 girls aged 5 to 11 years). Boys and girls were equally represented in this sub-sample as were younger and older children.

The aim of the experiment was to alter the maturity of response of each group of children such that those showing objective judgements would later show subjective judgements and vice versa. The training sessions used to realize this objective involved the presentation of a further 24 test items; these were administered under different conditions to three separate sub-groups of children (with 12 boys and 16 girls in each) in the following way.

For the first condition, the child was questioned in the presence of a colleague of the investigator; the child and the colleague were each given twelve test items which were presented alternately, beginning with the child. The colleague always responded on a level of maturity opposite to the child's original mode of thought and it was expected that the presence of this model would influence the child to alter his level of judgement. As the model responded he was rewarded by the investigator who said 'That's fine', 'Very good' etc.; this verbal reinforcement was similarly applied whenever the child adopted the model's mode of thought i.e. altered his own original mode. This ex-
Experimental condition was termed model plus reinforcement by Bandura and McDonald.

The conditioning for the second group was similar to that for the first except that the child was not praised for adopting the model's mode of thought. Again, twelve items were administered to child and model alternatively and again the model was praised for an answer phrased on the level of moral judgement opposite to the child's. The child was questioned and his responses noted without comment from the investigator. This condition was termed model only.

For the third experimental group, no model was present; the child answered all twenty-four test items. However, the investigator praised any response opposite to the child's original mode of judgement. This condition was termed reinforcement only.

Immediately after his conditioning experiment, each child was given a posttest comprising the twelve remaining test items; the child's responses to this posttest allowed a check on the success of each condition in altering his mode of thought.

Bandura and McDonald found that the first two experimental conditions were more successful than the third in securing a change in the child's mode of thought; they could not distinguish between the first two conditions at all. In other words, reinforcement alone was the least successful of all three
conditions used. This fact suggests that the presence of the model was the most important influence even in the first condition where both reinforcement and the model were used.

A number of weaknesses of this experiment may be mentioned. Bandura and McDonald do not make any distinction between the groups of children who were originally objective or subjective in their moral judgements; that is, they imply that their efforts were as successful in accelerating the child's development (from judgements based on consequences to those based on intentions) as they were in producing a regression in children already judging by intentions. This point is taken up later in the discussion of the final study in this section.

A problem which will be emphasized during the discussion of the next two studies is that of the durability of experimentally induced modes of thought - is the child likely over a period of time to revert to his original level of judgement? This is an important consideration if any extension from these types of experiment is attempted into a programme of moral education or acceleration of moral development; it is vital that the most effective influences be isolated and applied. It is possible for the child to recite parrot-fashion, responses which are rewarded whether or not he really understands the reasoning behind the response.
This problem has been tackled in the field of intellectual development by Smedslund (see especially 1961c) but his warnings have implications for moral development as well. Smedslund had induced conservation of weight in children who had previously demonstrated a lack of conservation. In a later attempt at extinction of the concept, Smedslund noticed that it was much easier to achieve this in children with whom conservation had been induced than in those who had achieved conservation naturally; the first group were apparently only making rote responses which were easily reversed in appropriate circumstances.

Now, if these findings are adapted into the field of moral development, it seems possible that any changes induced by Bandura and McDonald could be reversed if the necessary training programme were adopted; it is also possible that the child might revert to his original mode of thought naturally when the effects of the conditioning experiments had been forgotten. Unfortunately, Bandura and McDonald give no analysis of responses over a period of time which would allow any pattern of reversion to appear.

A final weakness of this experiment is that Bandura and McDonald use test items along a single moral dimension - objective responsibility. It is by no means certain that their experimental conditioning would be successful if applied to other dimensions.
(b) Discussion and moral content

Crowley (1968) attempted a refinement of the work of Bandura and McDonald; he used a more intensive programme of training with his groups, gave a stronger reinforcement (poker chips exchangeable for prizes instead of mere praise) and also assessed the pattern of responses over an eighteen day period after the training sessions.

Again, Crowley restricted his test items to situations based in Piaget's dimension of objective responsibility, but he concerned himself only with accelerating children assessed as objective in their moral judgements to a level taking account of intentions.

For the training sessions Crowley devised what he termed 'simple' situations; he regarded Piaget's original situations as 'complex' since they involved the manipulation of two dimensions - intentions and consequences. The test situations involved the comparison of actions in a pair of stories; Crowley's situations held constant the consequences of the actions in each pair of situations and the child had to base his response on the intentions or else just guess at an answer.17

Crowley used four separate experimental groups plus a control group; his rather complicated division of experimental conditions needs some explanation. The four conditions
can be considered in terms of a $2 \times 2$ table which has as one dimension the moral or non-moral content of the stories and as the other the reinforcement of responses by labelling or by labelling plus discussion (see Figure 2); these dimensions need further clarification.

<table>
<thead>
<tr>
<th>Content</th>
<th>Moral</th>
<th>Non-moral</th>
</tr>
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<tbody>
<tr>
<td>Labelling</td>
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<td>plus</td>
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<tr>
<td>Discussion</td>
<td></td>
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</table>

**Figure 2** The Four Experimental Conditions of Crowley's Study

Crowley devised ninety pairs of test situations of which forty-five were moral in content (similar to those which typify Piaget's work except that, as mentioned previously, the consequences in each pair were held constant); the other forty-five pairs were non-moral in content involving a judgement of skill in hitting a target deliberately or by accident, say. The children were asked of the moral situations 'Who was the naughtier?' and of the non-moral 'Who was the better shot?'.

The first condition along the reinforcement dimension involved the mere labelling by the investigator of the child's answer as right or wrong; the child was given a
poker chip for each correct answer. For the second reinforcement, the investigator indicated whether a response was right or wrong and awarded a chip for correct responses; however, he also entered into a discussion of each answer with the child so that the child would be aware of the reasoning behind correct and incorrect answers.

Crowley's training programme involved three separate sessions with each child using fifteen different situations each time (a total of forty-five situations in all for each child). A twelve item posttest was administered eighteen or nineteen days after the final training session.

Generally, Crowley's results were superficially impressive. On the posttest, the groups trained on non-moral situations did better than the control group (significant at the 0.05 level) while those trained on moral situations were even more successful than this. Comparisons of reinforcements revealed that there were no significant differences between the labelling and the labelling plus discussion conditions.

It appears then that mere reinforcement of acceleratory tendencies, with or without discussion of the principles involved, is successful in leading the child to adopt a more mature mode of thought. Training in the moral situations led to a greater maturity in the (moral) posttest situations than did training in the non-moral situations; the training
in the moral situations is perhaps more easily transferred to similar situations.

On the basis of these results, Crowley wondered why the shift from consequence- to intention-based judgements takes so long in the Piagetian scheme. In answer, he pointed to the factor noted previously deriving from Smedslund's work on the problem of conservation; Smedslund (1961c) showed that conservation of weight induced by training can often be extinguished by an opposite reinforcement schedule. Only children who support conservation in the face of (apparently) opposing evidence had attained the concept proper; the other children were making rote responses which were easily reversed in appropriate circumstances.

Similarly, Crowley implied in his own work that some children who have apparently been accelerated to operate on a level considering intentions in judgements might easily be trained to regress to a consequence-oriented mode of judgement (c.f. Bandura and McDonald, 1963). Crowley did not believe that the change in response he was able to elicit represented a true conceptual change; rather, it was a situational response pattern without any underlying generalized rationale. In support of this argument Crowley observed that children rarely gave the
principles underlying their choice spontaneously, that discussion of the principle was no more effective than mere labelling and that training on non-moral situations was not generalized to moral situations. This particularization (as opposed to generalization) is one aspect of Piaget's general cognitive theory which he calls centration (see Chapter 1). Crowley concluded that centration appears to be a major factor in moral judgements.19

(c) Peer group pressures

While Crowley was concerned with advancing the child through the stages of moral development, Lefurgy and Woloshin (1969) approached Bandura and McDonald (1963) more closely in that they attempted to reinforce the opposite modes of thought of both mature and immature children. Lefurgy and Woloshin used test situations from Kohlberg's work rather than Piaget's but the study has relevance since the process of change is the same for both authors (cognitive disequilibrium for Piaget, cognitive conflict for Kohlberg).

Turiel (1966; Rest, Turiel and Kohlberg, 1969) demonstrated that opinion change is brought about by a complex interaction between the child's present mode of thought and the highest level of moral logic which he can comprehend; Turiel showed that children could be more easily influenced to adopt a level of thought directly
above their own than they could to adopt yet higher levels or the level immediately below their own. LeFurgy and Woloshin were trying to see the long term patterns which experimentally induced regression or advancement of this sort might show. 20

LeFurgy and Woloshin's experimental procedure was in five phases over an average period of 100 days. First there was a pretest of ten items (from a battery of thirty-five tests) on the basis of which subjects were assigned to one of two groups, above and below the population mean on a relativistic/realistic scale. Kohlberg's situations typically oppose two sets of moral orientation - the one relating to some commonly held norm or rule of behaviour and the other involving considerations which would affect only the individual concerned. For example, a man faces the dilemma of returning some money he has found or else using it to finance an operation for his wife; in another dilemma a student considers seeking illegal help with his work to avoid being failed by an unfair teacher. In LeFurgy and Woloshin's study, children were termed realistic if they judged consistently in favour of the rule; the more mature form of judgement is the relativistic one where the need for strict adherence to the rule is modified in terms of individual extenuating circumstances.
The next day, the experimental exposure was started; subjects (27 boys, 26 girls aged 13-14 years) were brought to the laboratory in sets of six and assigned to a six unit console with headphones. Each was told that he was to take part in some more tests but that he would also hear the opinions of the other five people; in fact, what each heard were pretaped responses opposite to his original mode of thought. This procedure was maintained for twenty test situations which were not used subsequently; any effects of this exposure to peer group opinion had therefore to be generalized to the new test situations. Control groups heard the twenty items but were not exposed to other opinions.

Immediately after this training session the subjects were given a ten item test programme to which they responded and, a week later, another ten item programme was administered. The last phase of the experiment was a repeat of the ten item pretest, and this was given on the first occasion that individual subjects returned to the laboratory during the next few months (presumably for other experiments). The average duration between pretest and final issue was 100 days.

Results showed first that adolescent peer group pressures had a very strong influence on the individual subjects. Both sexes responded to opinions opposed to their own by a dramatic shift in the direction of the commonly held view. The
patterns through time were different for the originally realistic and relativistic groups, however, and tended to support previous views (Smedslund, 1961c; Turiel, 1966) that children are more susceptible to acceleratory than to retrogressive elements; the long term influence was more marked in the case of the group of realistic children who were advanced by experimental exposure.

LeFurgy and Woloshin suggested that disequilibrium induced by peer group pressures in a developmentally advanced direction is quite easily resolved by accommodation in this direction. The results for the experimentally regressed children were less permanent, however; certainly, disequilibrium induced by peer group pressures in a developmentally retarded direction had significant short term effects but accommodation to this idea (which had, of course, been previously discarded) was gradually dissipated over the next 100 days. The fact that return to normal was only gradual suggested that there was some residual effect of exposure.

Again, the question of concept attainment must be raised. Are the exhibited responses merely learned and repeated in rote fashion, or do they represent an underlying conceptual change? The gradual return of the regressed subjects to a relativistic mode of thought suggests that this level is in
fact their real conceptual level, and they tend to revert towards this level when peer group pressures are relieved or forgotten. Presumably those who reverted to their former level most quickly had the stronger, more stable concepts originally. The real conceptual level of the experimentally advanced group is more difficult to ascertain; this study suggests that they would immediately revert to their former level if exposed to appropriate peer group opinion. The problem is, would they later return to the more advanced level as they should if this level has been attained on a conceptual rather than a purely mechanical basis during the first conditioning? This is surely the important criterion for any training programme designed to have long term beneficial effects; it is crucial that the concept be understood rather than a parrot-like repetition being achieved. Some support for the view that the higher level concept is attained is provided in the generalization from the twenty training sets to the ten posttest situations; the lessons learned in the training sessions were transferred to the new situations. Attempted extinction of the concept should separate the truly relativistic subjects from the rote repeaters (c.f. Smedslund, 1961c).
(d) **Equilibration as a process in moral development**

We have noted the several limitations of the three attempts to clarify the problem of the mechanism of moral development. The two studies which used test situations most similar to those of Piaget (Bandura and McDonald, 1963; Crowley, 1968) considered in effect only the dimension of objective responsibility; similar treatment of the other dimensions of Piaget's scheme (especially the five other developmental dimensions) would be useful. The most ambitious of the three experiments (LeFurgy and Woloshin, 1969) used test situations taken from Kohlberg's work but was included here since the mechanism of development proposed is identical to that which Piaget calls equilibration.

A traditional S-R approach to development is insufficient to account for all the findings reported above; superficially, it seems possible to argue that changes in response were induced through the presentation of some reward (praise, a poker chip or conformity with peer group standards) and that this explains the shift of opinion seen in each case. However, closer examination reveals that the long term effects of the conditioning varies with the direction of the change in level of thought induced. Children who were conditioned to operate on a level less mature than their real level reverted to their original mode of thought...
more quickly than did children who were conditioned to operate on a more advanced level (LeFurgy and Woloshin, 1969). This suggests the presence of something more permanent and less specific than the normal S-R paradigm implies; responses were generalized from the training conditions to the posttest situations and so were not solely dependent on the rewards offered in training. Also, the greater difficulty experienced in maintaining long term regression suggests a further weakness of S-R theory in this context.

Equilibration theory can provide adequate answers to these problems. It seems that the child's exposure to more mature opinions is sufficient to induce a change in his own views. According to equilibration theory the child's intellectual system cannot tolerate inconsistencies and must reorganize previously held beliefs in order to come to terms with an unfamiliar situation. What the experimental conditioning achieves is the child's forced awareness of a more mature point of view; this awareness would appear more gradually naturally but the process is the same in any case.

The child settles down more easily following a reorganization in the direction of greater maturity than he does if his judgements are regressed experimentally;
this is shown by the long term patterns for accelerated and regressed children where the latter group revert to their original level more readily than do the former (LeFurgy and Woloshin, 1969). The more mature modes of thought are permanent acquisitions; since the child apparently reverts to his original higher level more quickly it seems reasonable to suggest that the conditioning was not entirely successful, that disequilibrium was produced between the child's real, more mature level of thought and that suggested in the experiment, and finally, that the child tends to reorganize towards this more mature level soon after the training programme is discontinued.

The operation of equilibration in this manner suggests a way to check on the proper acquisition of the higher level concepts which it might be the aim of a programme of moral education to induce; this attainment could be compared with rote learning responses in the following way. Any higher level concept which has been properly understood and to which the child has reorganized his beliefs is more difficult to extinguish than is a response induced merely by rewards. If the child has not fully adjusted to the higher level operation his opinion can be easily altered; if he has made this adjustment he is likely to argue against suggestions contrary to his beliefs.
This kind of process is suggested in the sphere of cognitive development by the work of Smedslund on experimentally induced and extinguished conservation of weight\textsuperscript{22} and in the field of moral development by the findings of LeFurgy and Woloshin (1969) in particular. Much work remains to be done in this area of accelerating moral development, however, and there seems a much greater willingness to adapt the findings of studies of moral development into programmes of moral education.\textsuperscript{23}

The experiments reported above suggest another link between Piaget's theories of moral and cognitive development. We have already noticed that it is around the age of eight years of age that important changes take place in the child's cognitive and moral ordering of his world; these changes were attributed to the decline of egocentric thought. Now, we suggest that the process of development in both areas is the same, namely one of equilibration. In this way the two most important features of Piaget's scheme of cognitive development (equilibration and the factors contributing to the decline of egocentric thought) appear to have a critical part to play in moral development as well.
CHAPTER 4

ALTERNATIVE THEORIES OF MORAL DEVELOPMENT

1. Introduction

The purpose of this section is to consider the contributions of three further approaches to the problem of moral development. These theories derive from the work of Kohlberg, who has developed a cognitive scheme of morality more extensive than that of Piaget, from the psychoanalytic work of Freud, and from the findings of the learning theorists whose experimental work has involved animals rather than children.

These three will be contrasted with Piaget's theory of moral development which was discussed at length in the two previous chapters. This comparison is vital since no single theory is sufficient to give a complete explanation of moral development; each emphasizes a separate area of the problem and concentration on any one at the expense of the others must provide a distorted picture.

The comparison of each theory with that of Piaget
is complicated somewhat since each stands in contrast to separate parts of Piaget's scheme. Thus Kohlberg's is a stage-dependent theory of moral development much more extensive than Piaget's and although the age/stage correlations proposed by Kohlberg differ from those of Piaget both authors concentrate on the cognitive aspects of conscience and both invoke a mechanism of equilibration as an explanation of the process of change and development. Psychoanalytic theory allows a comparison of both the content of the stages outlined by Freud and the mechanism of change between stages.

In contrast to the theories of Piaget, Kohlberg and Freud which were developed specifically to explain the growth of moral standards, the approach of the learning theorists has been adapted to the study of morality from more obvious problem-solving experiments. The only issue here is the mechanism of development since no stages of moral growth have been proposed by any learning-theorist.

In order to avoid duplication the reader is referred to Tables II and III in Chapter 2 where Piaget's theory of moral development is presented in outline for each of the eleven dimensions he considered. In a general way it may be noted that most of the changes to what Piaget considered more mature modes of thought occur at about eight years of
age. It will also be remembered from the description of Piaget's general theory of cognitive development that it is at about this age that egocentric thought begins to decline most rapidly allowing the development of concrete operational thought. This is not mere coincidence for it is the decline of egocentric thought (especially the young child's tendency to centre on individual aspects of a situation) which allows a consideration of motives as well as consequences in any moral dilemma.

The decline of egocentric thought also apparently allows the child a more accurate perspective on adult commands and requests. The child gradually realizes that adult opinions have no specially sacred quality and his early regard for adults as omnipotent rule and decision makers declines as his own thought becomes increasingly autonomous.

It is the child's willingness and ability to take an independent view of a situation which provides part of Piaget's solution to the problem of moral development. The other important part of the developmental process derives from the inability of the child's system of thought to tolerate any inconsistencies or imbalances. Any disequilibrium (to use Piaget's terminology) triggers off a series of compensations and rationalizations by which the
inconsistencies are reconciled and a more accurate model of the real life situation is developed.

These are the main arguments of Piaget's theory of moral development which should be borne in mind during the discussion of the theories of Kohlberg, Freud and the learning theorists which follows.

2. Kohlberg's Theory Of Moral Development

Like Piaget and Freud, Kohlberg proposes a developmental scheme of moral development; he believes that there are six qualitatively different stages in the process of moral development and these are discussed below. However, in contrast to these other two theorists (and also learning theory) Kohlberg's scheme extends over a much longer age span. He says that the other theories assume that the basic characteristics of adult conscience are developed in early childhood; this assumption is necessary if morality is to be seen as survivals of infant experiences as is implied by all three theories (Kohlberg, 1963a, p. 321). Kohlberg believes that conscience proper (the internalization of standards as opposed to guidance by sanctions) does not appear until quite late, certainly not before late adolescence. These important age variations appear as a result of Kohlberg's different interpretation of the
mechanism of the moral development process which is brought out later on.

(a) **The scheme**

Kohlberg bases his six part typology of moral development on work carried out with 72 boys aged 10, 13 and 16 years; half his sample were from lower to lower-middle class and half from upper-middle class backgrounds. The basic data for Kohlberg's study came from a two-hour taped interview with each boy discussing nine hypothetical moral dilemmas. The technique has also been used by Kohlberg with two dozen 16 year old delinquents, with the same number of 6 year olds and a group of fifty 13 year old boys and girls (Kohlberg, 1963b, p. 12); other workers have applied Kohlberg's techniques in America, Taiwan, Malaysia, Turkey, Mexico and among the Mayan Indians (Kohlberg, 1967, p. 170), so there is considerable data available and the trends which Kohlberg proposed have been validated.

Kohlberg isolated thirty separate aspects of morality from the interviews he taped (1963b, p. 14) although more recently he has reduced this number to twenty-five (Kohlberg, 1967, p. 170 and Table 2 pp. 172-73). These aspects form the basis of Kohlberg's analysis and he claims that any statement can be assigned to one of these aspects which are grouped into seven broader Codes; two of these Codes are
detailed below along with a brief outline of the other five.  

Code I relates to the locus of value and comprises six aspects of the mode of attributing value to acts, persons or events or of assessing the value consequences of a situation. The aspects of this first Code are the consideration of motives in judging action, the consideration of consequences in judging actions, the subjectivity v. the objectivity of the values assessed, the relation of obligation to wish, identification with the actor or the victim in judging action, and the status of the actor or victim as changing the moral worth of the situation.  

Code II in Kohlberg's scheme relates to the subject's choice of mechanism for resolving or denying the awareness of conflicts; the three aspects of this Code are the limitation of the actor's responsibility by shifting responsibility to others, a reliance on discussion and compromise and a distortion of the situation so that conforming behaviour is always seen as being in the best interests of all concerned. 

In similar fashion, Kohlberg outlines a further sixteen aspects of morality in the five more general Codes of sanctions and motives, rule conceptualization, the definition of rights and authority, positive justice (which relies on reciprocity and equality) and, finally, punitive justice.
Now, in addition to its placement in one of Kohlberg's twenty-five aspects of morality, the individual statements received were given an estimate of maturity along a six-point scale. This brings us on to the developmental side of Kohlberg's scheme, the areas discussed previously being more descriptive and analytically useful. The six stages of moral development are grouped in pairs on three moral levels (after McDougall, 1908) in the following manner (see Kohlberg, 1963b, pp. 13-14 & 1967, p. 171):

**Level I  Pre-Moral Level:** moral value resides in events, bad acts or in needs rather than in persons and standards.

This level corresponds with McDougall's stage in which instinctual behaviour is modified by rewards and punishments.

**Stage 1  Punishment and obedience orientation** - this stage is typified by the child's submission to a more powerful authority and a desire to avoid punishment. It is also typified by reliance on objective responsibility (judgement in terms of consequences rather than intentions).

**Stage 2  Naive instrumental hedonism** - this stage is typified by the belief that right action is that which satisfies the self's needs and, occasionally and incidentally, those of other people. There
occurs the slow development of reciprocity and relativism of value (derived from Piaget's underlying dimension of declining egocentricity). This stage represents some internalization of the attitudes of Stage 1 such that rewards and punishments are anticipated and behaviour is altered accordingly.

**Level II** Morality Of Conventional Role Conformity: moral value resides in the performance of roles recognized by the community as good or right and in the maintenance of conventional order and the expectations of other people. In McDougall's scheme this corresponds with the stage in which social control is achieved through the anticipation of blame or praise; these verbal controls replace the physical sanctions of the previous Level. Both stages in this level imply the child's ability to assume the role of another person - in other words, they are dependent on role-taking capacities.

**Stage 3** Good-boy orientation - this stage is typified by an orientation to helping and pleasing other people and a conformity to stereotypes of good behaviour. Intentions, rather than consequences, now become important in the judgement of right and wrong.
Stage 4  Authority maintaining morality - this stage is typified by an orientation to duty defined in terms of respect for authority and the social order independent of the personality considerations which typify Stage 3; the organized social order is defined in terms of rights, duties and rules.

Level III  Morality Of Self-Accepted Principles: moral value resides in conformity to shared standards, rights or duties. Attempts are made to achieve autonomous decisions with regard for rules and the law where possible but transcending these considerations in favour of more general principles or moral ideals in many cases. In McDougall's scheme this Level represents the stage in which behaviour is regulated by ideals which seem right regardless of the praise and blame of the immediate environment.

Stage 5  Contractual legalistic orientation - this stage is typified by the recognition of the arbitrary nature of laws and rules although duty is defined in terms of contract, avoidance of the violation of the rights of others and concern for the welfare of the majority. There is heavy reliance on the law for the definition of right and wrong although the possibility is recognized that legal and individual or legal and societal
concerns may conflict. The legal rules are seen as having an arbitrary, though mutually agreed, basis in contrast to the earlier (Stage 4) sacred regard in which they were held.

Stage 6 Conscience or principle orientation - this stage is typified by an orientation to wider principles as well as (and often in opposition to) existing social or legal rules. Conscience is interpreted as a guide to choice rather than as a punisher (through guilt feelings) in cases of rule infringement.

This scheme is a logical one - each stage shows qualitative differences from the others and they are arranged in an order which demands progressively more mature and more complex modes of thought. The combination of these six stages of maturity and the twenty-five aspects of morality gives a matrix of one hundred and fifty cells which Kohlberg uses to classify the individual statements received during the discussions of his moral dilemmas.

Before turning to the experimental evidence of the invariant nature of Kohlberg's six stages we must consider the nature of the dilemmas which he uses. These are in fact, more complicated than are Piaget's situations and often there is no obviously right or wrong decision. In fact, Kohlberg states that the action alternatives chosen
by his subjects allowed none of the expected trends to appear; more useful in this respect was the way in which the subject posed the conflict and his reasons for his choice of action (Kohlberg, 1963b, p. 12).

Here are three of Kohlberg's dilemmas (Kohlberg, 1963b, pp. 13, 18-19 and 22-23):

1. Joe's father promised he could go to camp if he earned the $50 for it, and then changed his mind and asked Joe to give him the money he had earned. Joe lied and said he had only earned $10 and went to camp using the other $40 he had made. Before he went, he told his younger brother Alex about the money and about lying to their father. Should Alex tell their father?

2. In Europe, a woman was near death from a special kind of cancer. There was one drug that the doctors thought might save her. It was a form of radium that a druggist in the same town had recently discovered. The drug was expensive to make, but the druggist was charging ten times what the drug cost him to make. He paid $200 for the radium and charged $2000 for a small dose of the drug. The sick woman's husband, Heinz, went to everyone he knew to borrow the money but he could only get together about $1000 which is half of what it cost. He told the druggist that his wife was dying and asked him to sell it cheaper or let him pay later but the druggist said: "No, I discovered the drug and I am going to make money from it". So Heinz got desperate and broke into the man's store to steal the drug for his wife. Should the husband have done that?

3. (As a continuation of the above.) The doctor finally got some of the radium drug for Heinz's wife but it didn't work, and there was no other treatment known to medicine which could save her. So the doctor knew she had only about six months to live. She was in terrible pain, but she was so weak that a good dose of pain killer like ether or morphine would make her die sooner. She was delirious and almost crazy with pain, and in her calm periods she would ask the doctor to give her enough ether to kill her. She said she couldn't stand the pain and she was going to die in a few months anyway. Should the doctor do what she asks and make her die to put her out of her terrible pain?
Other situations contrasted family and public concern as when a life-boat captain learns that his family have been hurt in a car crash just as he is about to embark on a rescue mission, and when an air defence warden has to choose between staying at his post in a bombing raid and going to see if his family is safe.

As an illustration of the form of responses obtained and as an indication of the ambiguity of action choice and the greater utility of the subject's reasoning, Kohlberg gives the following example derived from Story 1 above (Kohlberg, 1963b, p. 13). In defining the situation as a prelude to an actual choice of action, one respondent said that Alex might tell his father in order to avoid a spanking or he might keep quiet to avoid a beating up from his brother. According to Kohlberg, what matters in this answer is not the assertion that Alex would or would not tell his father; what is important is the reasoning behind the choice. In either case the decision would be made on a consideration of the physical consequences of the act - Alex's course of action would, according to this respondent at least, depend on the relative physical attributes of his father and brother. Kohlberg considers that this response shows Stage 1 reasoning (a punishment and obedience orientation).

Careful analysis of an individual's responses to a
variety of moral dilemmas allowed the isolation of a dominant stage of development for that individual. Naturally not all responses could be categorized into a single stage although there was considerable consistency in an individual's level of thought across the twenty-five aspects of morality previously outlined. Thus, Kohlberg mentions that of his original group of seventy-two boys, fifteen were classified as being in the first stage of moral development and 45% of the thinking of these boys was characterized as Stage 1; obviously any individual is likely to show certain fluctuations in the maturity of his arguments but Kohlberg maintains that one particular stage will be dominant.

Kohlberg claims preliminary support for the order of the stages in his scheme from a comparison of the incidence of the separate stages at different age levels. He shows that Level I modes of thought (Stages 1 and 2) tend to decrease with age, while Level II (Stages 3 and 4) modes increase to age 13 years and then stabilize and Level III modes (Stages 5 and 6) increase up to 16 years of age (Kohlberg, 1963b, Fig. 1, p. 16). These trends are supported (with slight variations) by cross-cultural data although Kohlberg suggests that the last two Stages (comprising Level III) do not develop clearly in pre-literate village or tribal communities (Kohlberg, 1967,
Kohlberg derives additional support for the invariant nature of his scheme from a Guttman quasi-simplex correlation matrix among his six stages of moral thought. In this way it was shown that particular modes of thought correlated less and less with more and more distant modes as would be expected if they formed a fixed sequence.

Kohlberg maintains that the later stages of moral thought represent augmentations rather than replacements of the earlier ones, and while a particular mode of thought is dominant in any individual he may still oscillate between earlier and later forms in any argument or real-life judgment. The beauty of Kohlberg's scheme is that it can be applied to any speech, debate, etc. as a yardstick for assessing the degree of moral sophistication of the arguments used.

(b) The validity of Kohlberg's scheme

Kohlberg's theory raises two immediate problems - the validity of his work as demonstrating a developmental scheme in the strict sense of the term; and second, the modifications which it suggests of Piaget's theory of moral development. The first point, which has already been dealt with in brief
fashion as we saw in the exposition of Kohlberg's theory above, has been taken up by Kohlberg's postgraduate students who report both experimental and longitudinal studies of the scheme; the comparison with Piaget is discussed in the next section of this chapter.

Turiel's study (1966) was designed specifically to test two major hypotheses derived from Kohlberg's work. If, as Kohlberg proposes, the six stages form an invariant sequence then it follows that an individual's existing mode of thought restricts which new modes he can acquire; it was therefore expected that subjects would be more susceptible to reasoning immediately above their own level than to that at even higher levels. Secondly, it was proposed that each stage represented a reorganization and displacement of earlier stages rather than mere addition to them; therefore, subjects should be more susceptible to reasoning above rather than that below their own mode of thought.

Turiel's sample comprised forty-four boys aged 12-14 years of age; all came from middle-class backgrounds. The boys were presented with six of Kohlberg's nine dilemmas as a pretest and were allocated to one of Kohlberg's stages; in fact, they were all in Stages 2, 3 or 4. The scores on the dominant stage were at least double those on the next most dominant stage; twenty-five subjects had been discarded from an original sample of sixty-nine on
this basis. The forty-four subjects remaining were assigned to one of four conditions, three experimental and one control. Subjects in the three experimental groups were presented with Kohlberg's three other dilemmas but, before making any choice they were exposed to two opposing sets of advice. (The control group obviously received none of this exposure.)

For example, in the case of the druggist (Story 2 above) the subject would be asked to assume the role of Heinz and would be given by one friend several reasons in favour of his breaking into the store and by another friend several reasons for his not breaking in. However, both sets of advice can be phrased in terms of any of Kohlberg's six moral stages - we have already noted that Kohlberg found the reasoning rather than the actual action choice to be useful in establishing a pattern of development. This is where the different experimental conditions appear.

In one condition subjects were exposed to reasoning one level above their own dominant stage (this is referred to as a +1 treatment). The second group was exposed to reasoning two levels above their own (a +2 treatment) and the third to reasoning one level below their own (a -1 treatment). Turiel uses the example of the druggist to illustrate the advice given and phrased on a Stage 3 level of reasoning.
(a) You really shouldn't steal the drug. There must be some better way of getting it. You could get help from someone. Or else you could talk the druggist into letting you pay later. The druggist is trying to support his family; so he should get some profit from his business. Maybe the druggist should sell it for less, but you still shouldn't steal it.

(b) You should steal the drug in this case. Stealing isn't good, but you can't be blamed for doing it. You love your wife and are trying to save her life. Nobody would blame you for doing it. The person who should really be blamed is the druggist who was just being mean and greedy (Turiel, 1966, p. 613).

Advice phrased on the appropriate level and in the appropriate directions was concocted for each of the three dilemmas used in the experimental conditioning. Turiel's hypotheses, phrased in more simple terms than above, were that a +1 treatment would be more successful in securing a change of level of reasoning than either a +2 treatment or a -1 treatment.

Turiel discusses his results in two sections. Kohlberg's whole nine-dilemma programme was used as the posttest in Turiel's study; consequently, subjects (except for the control group) were faced with three situations for which they had received advice at a level of reasoning different to their own and six situations for which they had received no advice. Data obtained from the three situations are referred to as direct scores since here the subjects had been directly influenced; these are contrasted with the indirect scores obtained from the six situations in which any changes must
be generalized from the experimental conditioning.

Analysis of the direct scores showed that Turiel's hypotheses were correct; the +1 treatment had most success, first in securing any change at all and second in leading to the adoption of a mode of thought one level higher than before \( (p<0.005) \). The -1 treatment was more successful in achieving a -1 level of thought than was a +2 treatment in achieving a +2 level of thought \( (p<0.10) \) and this indicated that some subjects could be influenced to regress in their moral judgements, at least temporarily.

Turiel's analysis of the indirect scores revealed trends similar to those noted for the direct scores but at only minimally significant levels. The +1 treatment was again most successful in securing any change at all, although it was not significantly more successful in achieving a +1 level of thought. These trends suggested that there was a process at work which was more than mere rote learning of specific situational responses (as might be true of the direct score trends) and that some generalized qualitative change in moral concepts had been induced.

Turiel's support for the developmental nature of Kohlberg's scheme is duplicated by the findings of another study; again it was found that 'children assimilate thinking that is directly above their own stage more readily than
thinking that is either one stage below or two stages above their own' (Rest, Turiel and Kohlberg, 1969, p. 237). However, the main aim of this second study was the clarification of the process of change between stages and this point is taken up during the comparison of Kohlberg's scheme with that of Piaget.

It should be briefly mentioned here that Kohlberg's scheme is a complete one in addition to being developmental in the strict sense of the word. Kramer (1968, Kohlberg and Kramer, 1969) has demonstrated that Stage 6 reasoning is the most advanced level and that there are no Stages 7 or 8 for adults; instead, there occurs a generalization of Stage 6 reasoning so that more and more moral judgements are included in it.

(c) Comparison with Piaget

Obviously Kohlberg's scheme has a far greater applicability than has Piaget's. It is viable for a much wider age range, indeed it is applicable to moral development in its entirety. In comparison, Piaget's scheme is limited in two main respects - first he did not consider development after about twelve years of age; and second, the test situations he developed are too naive to be usefully applied at ages much later than this. Kohlberg is superior on both these counts. Nonetheless the question remains: to what extent can the two theories be reconciled, and to what extent has Kohlberg's work modified Piaget's ideas?
Kohlberg believes that his own Stage 1 and 2 value orientations coincide descriptively with Piaget's heteronomous and autonomous stages respectively, although he interprets these coinciding stages differently from Piaget. Thus, Stage 1 judgements show concern for consequences rather than intentions, a lack of awareness of the relativity of value and involve defining right action as that showing obedience to authority. Piaget interpreted such trends as evidence of the child's inability to judge for himself and his consequent reliance on adult authority; and he saw the young child's orientations to punishment as evidence of the child's reverence for adults and adult-derived rules. In contrast, Kohlberg prefers the interpretation that the child's definition of wrong in terms of punishment simply reflects the desire to avoid punishment rather than reverence for the adult.

Kohlberg also challenges Piaget's account of the stage of moral autonomy, which he equates with his own Stage 2 reasoning. Like Piaget, Kohlberg found an increase in peer reciprocity up to ten years of age along with increasing moral relativism in judgement and the denial of the superiority of adult authority. However, Kohlberg doubts that the resulting Stage 2 morality is based in mutual respect among peers since he found some boys who, while operating on this level, yet had
no sense of obligation to others, merely seeking their own satisfaction and using their peers to suit their own selfish purposes.

Kohlberg saw the need to extend Piaget's typology to take in the more mature modes of thought in adolescence and adulthood, to embrace an orientation to social norms or internally held standards. He therefore, developed his scheme to include these later forms of reasoning which Piaget's theory could not encompass.

Kohlberg, then, criticizes Piaget's interpretation of the modes of thought of children up to twelve years or so, particularly insofar as Piaget's dimension of respect for authority v. respect for peers is concerned. We have seen that Piaget placed great emphasis on the constraining effects of the unilateral respect typically operating in a relationship between the child and the adult; he also stressed the beneficial effects of relationships of co-operation between adults and children. Kohlberg denies the importance of these social relationships, preferring other explanations of the child's reasoning.

It is difficult to compare the schemes of Piaget and Kohlberg on a chronological basis. We have already noted the several areas of moral development studied by Piaget and have indicated the age levels assigned to stages in each case.
(see Tables II and III in Chapter 2). Kohlberg's scheme is compartmentalized even less definitively than that of Piaget. In his chronological accounts of his theory of moral development Kohlberg prefers graphical representation of the trends shown by each of his six modes of thought to a tabular description of six separate stages of development (see, for example, Kohlberg and Kramer, 1969, Figs. 1a and 1b, p. 104). Thus, Kohlberg's first two modes of judgement decline quite rapidly after about ten years of age, and his next pair increase to about thirteen years of age when they stabilize. In fact, these form the dominant mode of thought for most adults being superceded only occasionally by the last two most mature forms of reasoning.

There remains, however, one vitally important area of agreement between the theories of Kohlberg and Piaget; this concerns the process of change from one moral level to the next. Kohlberg rejects the approach to moral education which involves 'thoughtless moralizing' by teachers when children commit minor infringements of rules or engage in behaviour which irritates the teacher; and also he rejects attempts to inculcate majority values, especially those derived from vague stereotypes of morally good and bad character. In contrast, he prefers a moral education system which has as its goal the stimulation of the child's 'natural'
moral development, and of the capacities for using appropriate moral judgements in the control of his own behaviour.

This approach assumes first that we know what the pattern of moral development is and at what point along it the child is situated; Kohlberg has developed a six-part typology to cater for this. A second assumption is that we know how and why a child develops morally i.e. what causes a change to a new mode of thought. It is in the discussion of this aspect that Kohlberg approaches Piaget most closely.

Turiel (1966, p. 617) argued that at the root of transition from one stage to another in Kohlberg's scheme there was a process of cognitive conflict. This is identical to Piaget's theory of equilibration (see Chapter 1) but Turiel says that Piaget did not refine the concept sufficiently. The process has been demonstrated in the sphere of cognitive development by Smedslund (e.g. 1961b) who showed that a challenge to an existing equilibrated system (lack of conservation) can produce a reorganization of the system to a more stable equilibrium state (acquisition of conservation). A similar process seems to occur in respect of moral development; thus, change occurs when a conflicting opinion is recognized (thereby disturbing the present equilibrium) and a new equilibrium level is sought through the reorganization of previous beliefs.
It will be remembered that Turiel exposed subjects to reasoning one level above, two levels above and one level below their own level of thought and found the +1 treatment to be most successful in inducing change. Rest, Turiel and Kohlberg (1969) build on this discovery and suggest an explanation for the greater success of a disequilibrium which tends to advance rather than retard the child. Their argument involves three components of the child's thought - preference, comprehension and assimilation. They find evidence to support their hypothesis that children prefer concepts above their own predominant stage to concepts below; however, children find thinking two stages above their own level more difficult to comprehend than that one level above and find thinking one level below easiest of all three. Therefore, the child will assimilate reasoning at the level immediately above his own more readily than that at any other level (Rest, Turiel and Kohlberg, 1969, p. 237).

Again an invariant sequence is found in the process of development from latent appreciation of a higher level structure to its active expression; thus, preference precedes comprehension which in turn is followed by assimilation and usage in new situations. It can be seen that Kohlberg, like Piaget, considers that the driving force in development is a process of organism-environment interaction rather than
the unfolding of a biologically inherent and latent hierarchy. Rest, Turiel and Kohlberg (1969) have also expounded a second approach to the problem of disequilibriial advance. They explain why children at each particular level reject the earlier levels. They considered children at Stages 2, 3 and 4 of Kohlberg's scheme and suggested that children at Stage 2 reject Stage 1 reasoning because it is rooted in fear and because it involves an irrational reliance on physical punishment as a rule enforcer; Stage 2 morality is rejected by children exhibiting Stage 3 judgement because it is egoistic (it makes the individual think only of himself; one should not make the decision merely in the hope of being paid back) and because it ignores moral feelings; Stage 4 children reject Stage 3 reasoning because it is based on individual considerations rather than moral rules. The trends noted are taken as evidence that children can comprehend lower levels of thought but reject them in favour of higher levels.

The problem of precocious moral development is given a psychological explanation by Kohlberg; Piaget's work, in contrast, suggested a sociological explanation by invoking the nature of the child's social relationships as an influential factor on the rate of moral development. Kohlberg adopts Vygotsky's (1962) idea of zones of proximal development.
whereby children ostensibly at the same level of development as others may be helped towards the solution of problems more appropriate to older children; thus, some children can solve problems one year in advance of their own level, while others can achieve a level say four years in advance of their own (Rest, Turiel and Kohlberg, 1969, p. 248). The children who have the ability to solve the more advanced problems (those who have the wider zones of proximal development) tend to do better in their school work. Kohlberg contends that this might also apply in the moral sphere.

However, there are two restrictions on development according to equilibration theory. When a child has only recently achieved his present level and is in the process of organizing this level (i.e. he is in the process of stabilizing his stage) then he is not susceptible to upward movement. Also, when a child has fixated at a particular level due, perhaps, to a personality disorder and thus tends to respond defensively to stimuli which conflict with his beliefs, then he too is not likely to move up a stage (Rest, Turiel and Kohlberg, 1969, p. 249). Rest, Turiel and Kohlberg found some support for these views. They found that older children at the higher levels (Stages 3 and 4) have a greater comprehension of the moral development hierarchy than have younger children who have apparently just
attained the same level; and secondly, they note that the older children at the lower levels (Stages 1 and 2) figure more in the low comprehension than in the high comprehension groups, suggesting that they had fixated at this level.

(d) **Summary**

Kohlberg has proposed, and he and his students/colleagues have validated, a theory of moral development more comprehensive and eminently more practical than that advanced by Piaget. However, it should be noted that Kohlberg opts for a process of development identical to Piaget's theory of equilibration in cognitive development; this similarity between cognitive and moral development further strengthens the view that the two processes are similar in certain respects.

3. **Psychoanalytic Theory**

The psychoanalytic theory of moral development derives from the work of Sigmund Freud. The aspect of his theory which is of immediate interest for a consideration of the child's moral development is the formation of the child's conscience, particularly his guilt feelings.

Freudian theory supposes that the individual's adult personality represents some form of balance between three elements - the *id*, the *ego* and the *superego*. Each of these
elements develops at successively later ages although none disappears altogether from the personality structure. Personality development is basically an adjustment of various instinctual drives - the biological tensions produced in the individual and the activities in which he engages to satisfy them. These states of tension and the processes of their release are discussed by Freud under the heading of the id. The id is governed by the pleasure principle, the desire to reduce pain and maximise comfort; moreover, it is concerned with immediate gratification.

Clearly, this level of operation is a severely limited form of behaviour. Its selfishness and impulsiveness render it inappropriate for moral functioning proper, which implies empathy and the recognition of the possible consequences of an act such that gratification can be delayed to a more suitable occasion or an alternate course taken (see Peters, 1960). Even for the infant, the id may restrict his satisfaction, for example when immediate gratification is not available and the id turns to wish-fulfillment - the imagining of the desired object as a means of release. This unsatisfying state of affairs leads to the frustration of the id and to the development of the ego which regulates the energy of the id and channels it into proper tension-release behaviours.
The principle governing the ego is that of reality - behaviour aimed at tension release is postponed until the desired object can be secured. The ego controls the id's irrational expenditure of energy in the pursuit of an image; instead, these energies are diverted away from immediate gratification-seeking in the form of reflex actions into reflection and problem solving which allow more accurate and efficient perception of the situations facing the child. Since it is consistently more successful than the id in satisfying the child's needs, more and more energy becomes devoted to the ego.

So far, the child has learned more efficient ways of obtaining the satisfaction of his needs. The child is yet amoral - his concern is for himself alone and he has only developed the capacity to adjust his behaviour insofar as this is instrumental to his own needs. The social aspect of behaviour and control is included in the development of the superego which is the judicial branch of the personality concerned with ideal activity. The superego develops from two sources - fear of punishment and desire for approval - both of which are attributable to the child's relationships with his parents. Both sources of the development of the superego contribute to the process of identification.

Although, for the most part, Freud did not clearly
separate the aspects of fear from those of approval-seeking in his theory of superego development, this distinction has been suggested by more recent authors. The term anaclitic identification is used to refer to the mechanism which involves loss of love, while the element of fear is contained in the idea of aggressive identification. Kohlberg (1963a) calls the two forms of identification developmental and social power respectively. Involved in the first, he says, are such factors as parental affection and nurturance, the extent of parental interaction with the child, the use of 'love-withdrawal' discipline techniques, and clarity and consistency of parental role-modelling. In the second type of identification, parental power over the resources desired by the child, the relative power of each parent and physical control of the child are important variables.

Identification is proposed by Freud as the means by which the Oedipus and Electra complexes are resolved. In each case, the child forms a sexual attachment to the parent of the opposite sex and sees the same-sex parent as a rival; the child then tends to adopt the characteristics of the same-sex parent. He may do this to secure a loved and loving object (anaclytic identification) - for example, a boy may emulate his father in order that his mother might give him more attention; or perhaps he adopts these characteristics to
avoid the threat of aggression from the same-sex parent who might regard the child as a rival for the spouse's affections (aggressive identification). It is likely that both aspects are inextricably mixed in the identification process.

Whatever the process of identification, its result is the child's adoption of the same-sex parent as a model for his own behaviour. This ego-ideal sets a standard which is gradually internalized into the superego and which then performs the function of regulating the child's behaviour through the provision of negative and positive sanctions (guilt and pride respectively). The superego opposes both id and ego (both of which are selfish in their operation and lack a social orientation) by forcing an idealistic view of the world taking account of the social implications of any course of action.

This account of identification is no doubt oversimplified and one may note several possible modifications of it. The process is not entirely fortuitous - there are social pressures that boys should become masculine and girls feminine and parental models may be fashioned accordingly. For example, boys are not normally given dolls to play with while this is seen as an important aspect of a girl's life in that she is supposed to act out her future role as a mother. 15

As a second modification it can be noted that parents
are not the only models which a child might adopt and that there are at least three aspects of any model after which the child might pattern himself. These are the model's overt behaviour, his personal motivations or his aspirations for the child. These three are not necessarily consistent and identification with each may produce a different personality structure in the child. Nevertheless, contained in the superego is an ego-ideal, a list of 'dos and don'ts' to which the child must accommodate to avoid the negative aspects of conscience (guilt) and achieve the positive (pride or self-praise).

In Freud's scheme, the superego is seen to develop independently of specifically peer group relationships. These form an important part of Piaget's theory and stand as a first contrast between the two. In Freud's analysis of identification processes the parent is seen as an authority figure over the child and it is the child's awe of this authority which induces his adoption of the characteristics of the parental model. In contrast, Piaget proposes a relationship of equality between adult and child as the most beneficial to moral development; Piaget believes that the child's subjection to relationships of constraint can only restrict his development.

The most obvious and important difference in approach
between Piaget and Freud is that Piaget's is a cognitive approach to moral development while Freud's is emotional. Piaget is concerned with what the child knows about good and bad behaviour; Freud concentrates on the child's conscience, especially insofar as this inhibits his deviance or results in guilt feelings after transgression.

In the same vein, both Piaget and Freud recognize a scheme of development (although their schemes are different). Piaget lays initial stress on the most highly developed end of the scheme and indicates the way in which the child has arrived there. In contrast, Freud emphasizes the roots of development and the ways in which the child must progress. Both indicate the possibility that the individual may not complete the course, may fixate at a premature level, although Freud has spent more time in accounting for partial development and possible ways of helping those whose development is incomplete than has Piaget who stresses the use rather than the usefulness of his model of development (Boyle, 1969, p. 147).

4. Learning Theory

In this section it will be argued that stimulus-response theories of moral development do not provide clear cut explanations of the child's behaviour or thought, any more
than do the theories discussed so far. The failures of S-R theories give additional weight to the importance of situational factors involved in moral judgement and re-emphasize the need to give separate consideration to the positive and negative aspects of social control.

Learning theory suggest a point of view long held in lay circles - namely that character development is a process of training in 'good habits' and training out 'bad habits'; traditionally, tuition, example and reward could achieve the former while physical strictness was applied for the latter ('spare the rod ...').

Hartshorne and May (1928-30) failed to find hypothesized links between honesty and exposure to moral training in Sunday School, Boy Scouts or even character education classes. Their data suggested that children were influenced greatly by situational cues (for example the chance of being caught; or what one's friends were doing) rather than by a general underlying code of honesty. These findings contradicted the popular belief that moral development was merely a matter of correct training or upbringing and stand in opposition to the classic paradigm of the learning theorists.

The approach of learning theory to moral development derives from the finding that animals could be made to perform certain activities through the experimenter's manipulation of
rewards and punishments. If animals could be trained in this manner to behave as the experimenter wished then it should be possible to condition children to adopt socially desirable forms of conduct.

One difficulty of this transfer from overt conformity in animals to human morality is that, at least on the behavioural level, the animal is trained to perform a certain action while the child is trained to avoid certain deviant action. The conditioning procedures of the learning theorist are aimed at producing reflex responses to stimuli whereas the objective of moral guidance is the child's ability to distinguish good and bad and to act in a non-deviant manner through an anticipation of the expectations of others. In fact, as we shall see later, the use of strict physical punishment implied by learning theory to be effective in securing behavioural conformity tends to correlate with delinquency.

A second broad area of morality may be contrasted to behavioural conformity. This is anxiety or 'pangs of conscience', the internalized mechanism of control which determines the degree of conformity or deviance in any individual. Again, the fear of physical punishment which typifies animal learning experiments is less effective in developing this control (and hence conformity) than are the
psychological or love-oriented punishments.

The problem of the efficacy of physical and psychological punishments is highlighted in a recent statement by Eysenck in which he expresses the learning theory approach to moral development in lucid fashion. He says:

... A young child behaves in a socially undesirable manner i.e. by being aggressive, by indulging in overt sexual activity, by stealing, lying and cheating, or in whatever way anti-social behaviour is defined in a given society. There is an immediate sharp punishment - a slap, withdrawal of some privilege, 'shaming', exclusion from the family circle, or whatever it may be. This punishment produces pain and fear ... which in turn become attached to the type of situation and the type of action which call forth the punishment, thus producing a conditioned anxiety reaction whenever similar situations and action re-occur (Eysenck, 1960, p. 14).

This statement contains three elements which need examination in more detail. First, is the 'conditioned anxiety reaction' generalized to similar situations? Second, do psychological and physical forms of punishment have the same effects on the child? And third, does a conditioned response of the type described by Eysenck have the features of conscience proper?

We have already noted the doubtful nature of the first assumption in the light of Hartshorne and May's data. They found little correlation in any individual's scores on the several tests of moral conduct which they used; the particular
characteristics of the test situations were more important than any general trait of honesty. The tendency for moral behaviour learned under one set of circumstances to generalize to other situations is unsupported.

The second assumption of Eysenck's statement (regarding the form of punishment involved in avoidance learning) needs more detailed analysis. Eysenck makes no distinction between physical and social/psychological punishments as factors in the achievement of a conditioned anxiety response; physical punishment seems the less successful in instilling internalized standards which mark conscience proper from mere conformity. That is, while the threat or use of physical punishment might lead to immediate behavioural conformity (simply through a fear of the consequences of misbehaviour) this does not necessarily imply the presence of a general internalized control; it is likely to be a temporary state which might easily be reversed if the conditions of the punishment were changed. Conscience proper implies a more enduring orientation to right and wrong, indeed one which would be adhered to even in the face of physical threats. It implies an ability for individual reflection and decision rather than the exhibition of hedonistic expediency. Classic learning theory suggests that morality and a conscience can be forced upon the child through the proper manipulation of
rewards and punishments. In fact, this argument is largely unsupported by experimental evidence; Kohlberg's review (1963a) suggest that on a behavioural level parents of delinquents use more punitive, inconsistent and unreasoning modes of discipline, while opposite modes of discipline relate to social conformity.

The discussion above has touched on the third point arising from Eysenck's statement. Conditioned response in animals takes the form of an unthinking reflex action following a certain stimulus. Now the aim of moral guidance is surely not unthinking behavioural conformity? It is the fostering of the ability for individual judgement based on a consideration of the situation in hand. There are often extenuating circumstances whose presence may justify overtly deviant behaviour (c.f. Kohlberg's dilemmas) and it is unreasonable to expect the individual to judge a person's actions (or to personally behave) in an automatic and identical fashion time after time. The work of Hartshorne and May has demonstrated the importance of situational factors in determining children's susceptibility to stealing and cheating.

Considering for a moment Piaget's more general theory of cognitive development, it has been shown that traditional S-R techniques used in an attempt to accelerate the child's
development have been notoriously unsuccessful (see Flavell, 1963, pp. 370-79). This evidence was interpreted as suggesting the existence of an important maturational force in development; without the child's attainment of a certain level of physiological development other cognitive structures could not be induced artificially as it were. Piaget believes that development must precede learning contrary to the popularly held belief that learning promotes development (Boyle, 1969, pp. 113-14).

Perhaps the best work in this field has come from Smedslund (1961a, b, etc.) who has shown that a superficial acquisition of conservation could be trained into children but that it could just as easily be extinguished. In contrast, children who had achieved conservation naturally proved more resilient to attempts at extinction (see Flavell, 1963, pp. 372-75).

Similarly, in the case of moral development, it seems likely that any behavioural conformity induced through the fear of punishment or promise of reward is a limited form of morality in two ways. First, we have already noted that severe physical punishment correlates with delinquency while the psychological forms of control and punishment correlate with internalized standards and guilt feelings (Kohlberg, 1963a, p. 281). So the classic learning theory paradigm would appear unsuccessful in instilling elements of conscience proper.
Secondly, what the learning theory approach may be successful in achieving is an outward conformity without internal conviction; non-deviance solely through a fear of the consequences of misbehaviour. Such an unthinking conformity is the antithesis of the highest levels of morality and works against the advancement of moral standards. Moral progress has been achieved because individuals occasionally rebelled against the prevailing moral code and had the originality and courage to suggest new opinions and allegiances. This type of progress would be impossible if morality were developed according to the S-R theories of learning.

The discussion so far has made no direct reference to the work of Piaget although many of the criticisms of the learning theory approach suggest Piaget's contribution to an understanding of moral development. Piaget shows moral development to be a slow process in which the impetus for change is internal; moral development is not an arbitrary response to external pressures. Piaget notes and stresses the active part which the child takes in all areas of his development whereas the learning theorist views the child as a passive receiver of data. In Piaget's theory the child's declining egocentricity leads to his ability to see his own point of view as one among many and the ensuing possibility of his reconciling opposite opinions. In Piaget's termin-
ology, the child re-equilibrates a system which is unbalanced as he recognizes alternative points of view.

5. **Summary And Reconciliation**

   In this chapter we have considered the differing approaches to the problem of moral development of Kohlberg, Freud and learning theory. These were compared with each other and with Piaget's theory which was discussed at length earlier on (see Chapters 2 and 3).

   As we noted at the beginning of this chapter, it is difficult to make comparisons between Piaget's theory of moral development and the others since each stands in contrast to separate aspects of his scheme. This difficulty arises in part from the nature of the area under consideration. Morality and conscience are not unitary concepts but have several divergent features which admit little or no intercorrelations. In effect the individual theorists mentioned above have discussed separate aspects of moral development.

   Consider Figure 3, which shows the aspects of conscience which have been discussed by Piaget, Kohlberg, Freud and Learning Theory. Four of these aspects (inhibition of wrong behaviour, guilt feelings after transgression, seeking of altruistic actions and the discrimination of right and wrong) are derived from Wright (1968). It can be seen that there
is very little common ground among the separate approaches. Both Piaget and Kohlberg follow the cognitive approach to moral development by attempting to assess a sequence of stages typifying the child's knowledge of right and wrong behaviour. Freud and Learning Theory consider guilt and behavioural conformity although they each propose different processes of development. It is, in fact, only about the process of development that all four approaches have something to say, and even here we have noted differences among them. None of the approaches deals directly with the impulse to pursue virtue in an altruistic way although this is implied by Freud's notion of the superego and by Kohlberg's highest level of moral reasoning.

It is difficult to disagree with Wright's contention that the four features he outlines constitute independent dimensions along which people vary and that the factors which determine an individual's position on them will also vary independently (Wright, 1968, p. 54). Separate consideration of any of the dimensions isolated by Wright leads to an incomplete picture of conscience. While recognizing the low correlations among these aspects, their combination does allow a more accurate model of conscience to be constructed. An attempt at this construction is now made by way of drawing together the separate theories discussed above.
The major distinction to be made is that between knowledge and action. On the one hand there is the problem of what the individual knows about right and wrong, or good and bad etc.; this capacity is, by implication, largely dependent on his general intellectual abilities and this view is supported by the links established between performance on Piaget's tests of moral development say, and intelligence.

On the other hand, we have the individual's actual behaviour and the factors which influence it. In this case we adopt the approach of Freud and the Learning Theorists far more than that of Piaget and Kohlberg. We are concerned with the anticipation of praise and guilt which influences the individual's choice of action and the mechanisms by which these controls are internalized.
It is possible to construct a three dimensional model of conscience which combines the contributions of Freudian, learning and cognitive theories to the understanding of guilt, behaviour and knowledge of right and wrong. Such a model is shown in Figure 4.

The north-south axis of Figure 4 is the dimension discussed by Piaget and Kohlberg - the individual's knowledge that a course of action is right or wrong and the rationale underlying this belief. The east-west axis of Figure 4 concerns action; in any practical dilemma the individual may or may not act. The front-back axis of Figure 4 relates to the individual's guilt feelings. The dimensions forming the second and third dimensions have been developed from the work of Freud and the learning theorists.

It is useful to consider the various combinations of these three dimensions and to develop their implications. Consider first the case where an individual knows that a particular course of action which he is contemplating is wrong; this is shown on Figure 4 by looking at the model from Perspective A - underneath the model in fact. Now the individual has two choices - he may follow through his course of action, even though he knows it to be wrong; or he may abandon the project. Additionally, he may or he may not feel guilty whatever he decides to do.
Figure 4 Three-dimensional model of Conscience and Personality Types

- A: altruistic
- P: psychopathic
- N: neurotic
- Ns: slight neurotic
- n: normal

Axis:
- A: acts
- B: knows to be right
- C: guilt
- D: no guilt

Legend:
- knows to be right
- does not act
- acts
- guilt
Figure 4 (continued)

**Perspective A (action known to be wrong)**

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<tr>
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<th>does not act</th>
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<tr>
<td>guilt</td>
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**Perspective B (action known to be right)**

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<td>P</td>
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<td>guilt</td>
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**Perspective C (no guilt)**

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**Perspective D (guilt)**

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<td>knows to be right</td>
<td>A</td>
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<td>knows to be wrong</td>
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Now, since the individual knows that his intentions are wrong, if he follows through he is likely to feel guilty about his actions; this would be regarded as a normal reaction in these circumstances. However, some people are capable of committing themselves to courses of action which they know to be wrong and yet they feel no sense of guilt about this—this, in essence, is a definition of the psychopath.

In practice, there are various levels which must be taken into account along all three dimensions. Along the dimension of knowledge that an action is correct, one might want to know the reasons for this belief because some reasons might have greater validity than others. Piaget has suggested that a decision based on the individual's consideration of motives is more mature than one concentrating on the consequences of the act; Kohlberg has suggested three broad levels of maturity in the individual's reasoning and he maintained that a strictly hedonistic assessment of a situation ('What's in it for me?') is less mature than a consideration of the social implications ('What will my friends think?') which in turn is less mature than an appeal to the principles involved ('Is this right?).

The dimension of action appears fairly clear cut—either a person does something or he does not do it. Possible complications to this straightforward pattern arise if the
individual attempts to reverse his actions by premature curtailments (e.g. breaking into a shop but not stealing anything) or by an attempted compensation (e.g. returning stolen goods). In the long run, the effects of these reversals is the same as if no action had been taken, but they do not alter the fact that some deviant action has occurred.

There are also various levels of guilt and in some senses there are levels of guilt - absence. This consideration of the absence of guilt has implications for a definition of psychopathic behaviour since it seems likely that psychopathy is a continuum rather than a category. Probably all of us are capable of actions which would be regarded as psychopathic given a strict interpretation of the law or morals - many examples could be produced: the man who takes a pen home from work to give his child; the man who 'adjusts' his income tax form; the motorist who exceeds the 30 m.p.h. limit or who ignores the parking restrictions; the worker who asks his mate to clock him out and so give him an extra hours pay. All these activities are illegal, and yet few would give rise to any guilt feelings; indeed some (particularly tax and breathalyser 'loopholes') may be a source of pride. It is fairly easy to say that this particular action is anti-
social and dangerous and that another particular action is not - it is far more difficult to lay down rules beforehand to indicate which levels of psychopathic behaviour are acceptable and which others are not.

Nevertheless, the broad framework of the model presented in Figure 4 is still applicable at each level along each dimension. So far we have dealt with one aspect of one perspective on Figure 4 (the combination of action and guilt/no guilt); we must now deal with the non-action end of the scale. Again there is the dual possibility of presence or absence of guilt feelings. The normal reaction would be a replacement of guilt by a sense of pride for having acted 'sensibly' - i.e. for having refrained from deviant action.

However, there is still the possibility that the individual will suffer pangs of guilt - the mere contemplation of the deviant act may be regarded as enough cause for this. In Figure 4, Perspective A such a reaction is regarded as a form of neurosis, and once more this is likely to operate on various levels. In its more extreme forms this might be one precondition for religious confession - the individual may be overcome by guilt until he obtains absolution. (Alternatively, this might be regarded as a very shallow form of neurosis and guilt since all it takes to clear the conscience is the verbal admonition of another
person.) Strong and enduring feelings of guilt following the mere contemplation of a deviant act are interpreted in Figure 4, Perspective A as an abnormal personality adjustment rather than as evidence of a powerful conscience with its usual connotations of optimal personality development. This illustrates in extreme fashion the point noted earlier during the discussion of Freudian theory - the suggestion that a too highly developed superego might restrict the individual's activities enormously by requiring that they be ideal in many impractical ways.

So far we have dealt with the possible combinations of guilt/no-guilt and action/no-action when the individual knows that a particular activity is wrong. The modification of the individual dimensions to take account of various levels of knowledge, action and guilt should be borne in mind during the discussion of the other end of the cognitive dimension which follows. The general case of the individual contemplating action which he knows to be right is shown in Figure 4 by Perspective B - looking down on the model.

The individual who eventually followed through the contemplated course of action without any feelings of guilt would be regarded as having a normal personality; a second form of normality would be the appearance of guilt
feelings for failure to execute activities which were known to be correct - perhaps this most commonly takes the form of a mental 'ticking off' (e.g. 'I really should have stopped to help that man mend his puncture').

Altruism is given a special interpretation here in terms of extreme guilt for non-action rather than in terms of action for the sake of others. Of course, the outward expression of altruism is service to others on various levels up to self-sacrifice for the benefit of the group (e.g. Oates with Scott's expedition; or the Japanese suicide squads in World War II); but these are the outward manifestations of altruism rather than its cause. The implication of Figure 4, Perspective B is that to refrain from action known to be right would cause certain individuals extreme guilt under certain circumstances; in avoiding this guilt (i.e. by following through the accepted course of action) these individuals are likely to display activities which are thought of as altruistic.

Some individuals might refrain from activities which they know to be right and yet experience no guilt; these are interpreted as psychopathic personalities in Figure 4, Perspective B although once more there are many levels before this phenomenon is regarded as being dangerous. In
some ways, the person who recognizes the unfairness of two
skinheads attacking one Pakistani might be thought of as
displaying psychopathic traits if he did not intervene;
alternatively this might be regarded as a very normal -
i.e. probable and expectable - course of action! Watching
a person drown would be generally regarded as more immoral
(more psychopathic) than watching an unfair fight.

The final category of Figure 4, Perspective B (action
coupled with guilt) is interpreted as a case of slight
neurosis or embarrassment; some examples should clarify
this category. A person may walk around a supermarket,
fail to find anything he wants and yet feels nervous at
replacing an empty basket and leaving for fear of being
accused of taking something without paying; or a person may
feel embarrassed at having to interrupt a neighbour's party
to request less noise. These examples do not have the ex­
treme symptoms of neurosis proper but they do indicate some
mental discomfort which is of a similar kind.

The other two important aspects of Figure 4 are
Perspectives C and D (looking from the back and the front
respectively). Perspective C considers the absence of
guilt and contrasts the conditions of psychopathy (exe­
cuting actions known to be wrong; or not executing actions
known to be wrong) with those of normality (refraining from action known to be wrong; following through actions known to be right). Perspective D presents the other extreme - the presence of guilt feelings and the conditions under which they might be thought of as normal (following action known to be wrong), as neurotic (following mere contemplation of deviant action), as slightly neurotic (appearing even though the course of action is accepted as correct) or as a cause of altruism (extreme guilt would follow inaction).

One interesting side feature of conscience as presented in Figure 4 can be noted. For any action to be considered moral or immoral the individual must be aware of the prevailing moral code. Thus the cognitive dimension in Figure 4 is Action-known-to-be-right/Action-known-to-be-wrong rather than Action-known-to-be-right/Action-not-known-to-be-right. If the individual does not know what is right and wrong we must speak of amoral action which denies the appearance of guilt. The individual is not held responsible for his actions since he is unaware of right and wrong behaviour.

Two general cases of amorality may be noted. The first is that of young children - Piaget has shown that the child's judgements of right and wrong change as he grows older. In England, the child is not legally responsible until he is ten years of age; before this time he is regarded as being amoral
and afterwards he is delinquent if he breaks the law. The second special case is that of diminished responsibility, usually on the grounds of mental subnormality, where it is held that the individual could not realize that his actions were contravening the social or legal order. Under normal circumstances, however, ignorance of the law is not a valid excuse and is insufficient grounds for the waiving of prosecution.

It is only possible to use Figure 4 as a classificatory model; it does not allow any explanation of the process of moral development or act as other than a general guide to the dimensions of conscience. Any more detailed analysis must rely on the intricacies involved in the separate cognitive or psychoanalytical or S-R theories of moral development. However, the construction and application of a model such as that presented here does emphasize the diverse nature of the three main aspects of conscience. It also suggests that the contributions of theorists working in separate areas can be successfully combined to produce a more accurate representation of the problems and implications of moral development.
SECTION B

PROBLEMS AND SOLUTIONS
The work of Jean Piaget is fraught with theoretical and methodological issues; this is particularly true of his earliest studies. Piaget's style of writing is difficult to follow, his ideas are often complex even when they have been discovered, and the evidence with which he supports his theories is inconclusively reported.

These problems have been dealt with already (see Chapter 2) and we must now consider the methodological decisions needed for the present investigation, and the results which were obtained. This section sets out the experimental aims of the present study and the particular techniques selected in an attempt to realize them; also included is a discussion of the results obtained and their implications for Piaget's theory of moral development.

Basically there are two parts to this investigation. One is a straightforward validation study of some of the ideas expressed by Piaget in *The MoralJudgement of the Child*. For this it was necessary to obtain from a sample of children, responses relating to certain story situations; the sample, technique and results for this part of the study are reported in Chapters 5 and 6.
The second part involves a discussion of the home background of some children in an attempt to establish some links between parental attitudes to child-rearing and the child's performance in the Piagetian tests used in the first part. Piaget laid great emphasis on the nature of the adult-child relationship as a factor influencing the child's moral judgements; in fact, the implications of Piaget's models of social relationships have not yet been fully explored empirically. The approach and data reported in Chapter 7 go some way towards developing this aspect of Piaget's work.
Chapter 5

Aims and Techniques of Study

1. Introduction

In the previous section Piaget's theory of moral development was discussed in detail, as were alternate theories of moral development and Piaget's theory of intellectual development. Consideration was also given to the findings of the twenty or so studies which attempted to test and extend Piaget's ideas on the development of moral judgements in children. Undoubtedly a major concern from which the need for replication work derived was the obscurity surrounding Piaget's sample selection and experimental execution.

This same dissatisfaction with Piaget's methodology was an impetus for the present study, although the author was not aware of all the relevant literature until after the fieldwork was complete. There are several methodological shortcomings in Piaget's work. One of the Piagetian 'trademarks' is the clinical approach to questioning children and another, developing directly from the first, is a lack of statistics
to indicate the nature of the samples used or to support any trends suggested by the data.

In the clinical approach, Piaget adopts a very open form of questioning, letting the child's responses lead here and there around the central problem but with little standardization from one subject to the next. Since the questions asked of each subject are never the same, and since even the situations about which the subject is questioned may also be varied, it is more difficult to quantify the data obtained.

This type of criticism of Piaget's methodology is more appropriate to his earliest studies which were intended as exploratory rather than final. Inhelder has expressed her concern regarding the different interpretations of developmental trends which might result from the adoption of more standardized techniques of investigation. She points out (Inhelder, 1961) that in the first explorations of an area of development the Genevan psychologist use a very flexible approach, one which is highly adaptable and sensitive to the nuances so often missed or misinterpreted when more rigid methods of investigation are applied.

One gets the definite impression that Piaget explores particular areas in great detail and with much empathy until certain trends are suggested. He then accepts these trends
as universal and inevitable and moves on to a new area. In fact, many of the trends lightly traced by Piaget have been filled in more definitely by other workers using more standardized techniques of investigation and larger samples. Unfortunately, other trends have not found this support and while any new ideas need verification (and Piaget has been a veritable fountain of original thought) this applies even more strongly to Piaget's work. It is certainly true that Piaget, and particularly his colleagues, have recently applied themselves to large scale and longitudinal studies to check the validity of their ideas but Piaget published only the one volume in the field of moral development and its shortcomings remain.

It was suggested in the previous section that Piaget's ideas on the development of moral judgements had been largely incorporated into and superseded by Kohlberg's work (see Chapter 4); it seems inevitable that future research on moral development should take Kohlberg's stages as their frame of reference. Support for Kohlberg's scheme is relatively recent and restricted to his own and his colleagues research. The present study concentrated on Piaget's work rather than Kohlberg's since the validity and importance of the latter was not immediately apparent.
We must now gauge the extent to which the general criticisms of Piaget's methodological approach apply to his work on moral development; we must ascertain the weaknesses and obscurities in his research design in order to improve on them.

First of all it is exceedingly difficult to discover exactly how many children were involved in the questioning for *The Moral Judgement of the Child*. After careful scrutiny it is possible to isolate at least fourteen separate samples from the book (see endnote 1, Chapter 2); most of these are small, rarely exceeding a hundred, and several are of indeterminate size. Now, if the trends which Piaget proposes are universal and inevitable, then any fair sized sample should allow their appearance. This assumption of universality is made by Piaget and he ignores all kinds of variables which might affect the child's apparent level of maturity of judgement. This point will be returned to a little later on.

Secondly, Piaget investigated three broad areas of moral judgement - children's attitudes to the rules of a game, their opinions of rules laid down by adults and their concepts of justice and fairness (Piaget, 1932, p. vii). Further, it is possible to isolate eleven separate moral dimensions in *The Moral Judgement of the Child*, some of which appear to be
related although others are independent of the rest (see Chapters 2 and 3). Piaget implies a general code of morality which governs judgements along all the dimensions; in fact, the replication work indicates that only five dimensions have shown age trends sufficiently consistent to warrant their being called developmental, (see Chapter 3); the validity of such a dimension is shown in responses which become more mature at successive age levels irrespective of the nature of the situations about which the child is questioned and irrespective of any particular factors (e.g. intelligence, home background, social class, nationality, etc.) which will vary from subject to subject (Kohlberg, 1963b).

These considerations are the ones which (as implied above) Piaget ignored; they have been controlled in subsequent studies and their precise effects noted (see Chapter 3). In fact, with regard to the developmental dimensions, the effect of these variables is to accelerate or retard the child's progress through Piaget's scheme rather than suggesting the need for a different developmental sequence.

Thirdly, we must consider Piaget's research technique. Piaget believes the child's spontaneous remarks to be the most important source of insight into his thought processes; but an awareness of the relevance and importance of these remarks
is often impossible to gain without some general frame of reference provided by the more formal procedures of question-and-answer which typify any large scale investigation (Piaget, 1932, p. viii). Even so, Piaget has not adopted the degree of standardization present in most studies; he still uses a very free form of questioning without insisting on a fixed sequence, number or even structure of the questions asked. He talks with the child around the problem under consideration and later tries to pick out from verbatim reports the elements needed for analysis; indeed the typical 'statistics' which Piaget offers in support of his hypotheses are protocols selected from his verbatim reports. This is the only form of presentation he fully accepts since the conditions attaching to individual interviews were so different and quantification is therefore more difficult.

Before any more detailed exposition of Piaget's methodology is given a major focussing of the present study should be mentioned. It was decided, because of limitations of time and because the study was to be carried out by only one worker, to limit the investigation to a single dimension of Piaget's work, namely objective responsibility. The author had already carried out a limited study of the development of rules in children (Lydiat, 1967). The dimension of objective responsibility forms one aspect of moral realism in the child; moral
realism is the 'tendency which the child has to regard duty and the value attaching to is as self-subsistent and independent of the mind, as imposing itself regardless of the circumstances in which the individual finds himself' (Piaget, 1932, p. 106). Three important features of moral realism are the heteronomy of duty, the judgement of an act in terms of its exact conformity to a rule and the objectivity of the concept of responsibility.

These features of moral realism are closely related. Duty is heteronomous and any act showing obedience to any adult rule is good; rules are accepted and cannot be elaborated or even judged - rules exist and must therefore be obeyed. From this attitude develops the notion that deviance from the rules is forbidden, no matter how slight this may be. Exact conformity is demanded and it is the letter rather than the spirit of the law which is observed. This feature in turn leads on to the child's judgement of an act in terms of its consequences and not the intentions of the actor. This aspect of the child's moral judgements Piaget termed objective responsibility and he contrasted it with a subjective responsibility in which the intentions of the actors assume paramount importance.

Piaget believed that moral realism arose from the conjunction of two series of causes - the egocentric thought
of the young child and the relationship of constraint in which the young child typically finds himself vis-a-vis adults and even older children (Piaget, 1932, pp. 183 ff); therefore, the decline of moral realism is a function of declining egocentrism and increasing acceptance of the older child into relationships of equality by adults.

2. Technique

The technical problem is to distinguish between the two attitudes suggested by objective and subjective responsibility. Piaget's story situation approach does this in an amazingly simple fashion. He asked subjects to consider pairs of situations in which children misbehaved in a variety of ways. In one of each pair of stories a child misbehaves with quite serious consequences; in the second story the results of the misdeed are not as serious, but the intentions behind the act are much less noble. Some examples from Piaget's work should clarify the differences and hence the aim of the exercise:

I.A. A little boy who is called John is in his room. He is called to dinner. He goes into the dining room. But behind the door there was a chair, and on the chair there was a tray with fifteen cups on it. John couldn't have known that there was all this behind the door. He goes in, the door knocks against the tray, bang go the fifteen cups and they all get broken!
B. Once there was a little boy whose name was Henry. One day when his mother was out he tried to get some jam out of the cupboard. He climbed up onto a chair and stretched out his arm. But the jam was too high up and he couldn't reach it and have any. But while he was trying to get it he knocked over a cup. The cup fell down and broke (Piaget, 1932, p. 118).

IV.A. Alfred meets a little friend of his who is very poor. This friend tells him that he has had no dinner that day because there was nothing to eat in his home. Then Alfred goes into a baker's shop, and as he has no money, he waits till the baker's back is turned and steals a roll. Then he runs out and gives the roll to his friend.

B. Henriette goes into a shop. She sees a pretty piece of ribbon on a table and thinks to herself that it would look very nice on her dress. So while the shop lady's back is turned . . . , she steals the ribbon and runs away at once (Piaget, 1932, p. 119).

I. A. A little boy . . . goes for a walk in the street and meets a big dog who frightens him very much. So then he goes home and tells his mother he has seen a dog that is as big as a cow.

B. A child comes home from school and tells his mother that the teacher had given him good marks, but it was not true; the teacher had given him no marks at all, good or bad. Then his mother was very pleased and rewarded him (Piaget, 1932, p. 145).

Other stories posed situations where a boy caused a big ink blot while filling the inkwell to help his father and a girl cut a big hole in her dress whilst cutting out some sewing to help her mother; these were contrasted with situations where a boy made a small ink blot while messing about with the inkwell and where a girl cut a small hole in her
dress while playing with a pair of scissors. In another pair, a girl who steals and frees a caged bird for which she feels sorry is contrasted with another who steals some sweets and hides and eats them all up (Piaget, 1932, p. 119); a boy who is a poor artist and who lies about doing a drawing is contrasted with another who loses a pair of scissors and then denies touching them; a boy unfamiliar with the geography of a town misdirects a man who gets lost, while a second boy, who knows his way around, plays a trick and sends a man the wrong way although the man does manage to find the place he is looking for eventually; one boy pretends his feet hurt him when asked to go a message for his mother, while a second boy pretended he had been for a ride in a car (Piaget, 1932, pp. 145-46).

These nine situations (plus some unspecified stories in which children cause damage and lie about their part in it) form the basis of Piaget's investigations of the dimension of objective responsibility. In relation to each pair of stories he claims that two answers are possible to the question: "Which child is the worst?" Children subject to a morality of constraint tend to judge by consequences only (objective responsibility) and say that the boy who broke most cups, the girl who stole the (more expensive) bird, the boy who made the biggest blot, the boy who told the least credible lie about
the dog as big as a cow, etc. - these are the worst children, these are naughtiest, these should be punished most.

In contrast, children subject to a morality of cooperation tend to judge by the intentions of the actors (subjective responsibility) and say that the naughtiest children are the boy who was stealing jam even though he only broke one cup, the girl who stole the sweets for herself, the boy who told the deceitful lie about his school marks (the other boy was only joking or showing off), etc. Piaget suggested that both objective and subjective responses could be seen in his data for children up to the age of ten years, but that none of the first type were found after this age.

In fact, the story situation approach is an ideal way of separating the two moralities proposed by Piaget; stories may be easily constructed to oppose good and bad intentions coupled with great and little material damage respectively. However, the simplicity of these tests, both in construction and operation, limits their applicability to small age range, and particularly to children younger than thirteen or fourteen years. After this time the stories are too simple to allow any later developments to show. This criticism is made in retrospect and derives from the work of Kohlberg who had devised moral dilemmas
far more complex than those of Piaget which consequently allow more scope for discussion of the problem and suggest a more complicated six step pattern of moral development which extends into early adulthood (see Chapter 4). In fact the present study makes use of simple situations very similar to those of Piaget and so considers children up to twelve years of age only.

It is apparent from the discussion of Piaget's story situations that he poses problems in three separate areas of moral behaviour - stealing, damage to property through clumsiness, and lying. Piaget's implication is that the child develops equally quickly with regard to all three areas and indeed displays similar attitudes to each at any particular time. Piaget's failure to provide statistical data makes these correlations difficult to ascertain and the present study included items relevant to each area to test the hypothesis that children develop at different rates with regard to each area. In fact there were two tests, each comprising a pair of stories, in each of the areas of clumsiness, stealing and lies.

If, as Piaget proposed, the sequence objective responsibility is invariant then it should be observable no matter what is the composition of the sample questioned and irrespective of the nature of the stories used. To check on
the extent to which Piaget's trends were dependent on the particular stories he used, it was decided to compose new situations for the present study. The pair of stories comprising each test was made similar except for the two variables concerned - the intentions of the actors and the consequences of their actions; in this way it was hoped that the child's attention could not be caught by irrelevant issues but that he would be forced to concentrate only on these two variables. These are the test items used:

A. **Clumsiness**

**Test I Story (a)**  
One day, while his sister was out at work, John thought he would give her a surprise and clean her records for her. He started wiping them with a cloth but then he accidentally caught a pile with his elbow, knocked them on the floor and four records got broken.

**Story (b)**  
David had been told not to touch his sister's records. One day he was looking at them and he dropped one on the floor and it broke.

**Test II Story (a)**  
Susan liked to help her mother. One day while her mother was out shopping Susan decided to wash the breakfast plates. She had a pile of them in her hands and they were very slippy. She dropped them on the floor and six plates got broken.

**Story (b)**  
Jennifer was often a nuisance. One day, after her mother had washed up the breakfast dishes, Jennifer
started to mess about and splash in the sink. She wasn't very careful though and she knocked one plate on the floor and broke it.

B. Stealing

Test III Story (a) Carol wanted some sweets but she had spent all her pocket money. So she went into her mother's purse and took a shilling. She spent it on some chocolate and then ate all the chocolate herself.

Story (b) Pauline felt sorry for a friend who never got any pocket money from her parents. One day, Pauline went into her own mother's purse and she took half-a-crown. She spent it on some chocolate and then gave all the chocolate to this friend.

Test IV Story (a) Jean knew that the old lady next door was very poor and hungry, so one day she went into her mother's 'fridge and took some butter and eggs and cheese and she gave all these things to the old lady.

Story (b) Lynne took a small packet of sweets from her mother's bag and she hid behind a chair and ate them all up.

C. Lying

Test V Story (a) Stephen didn't like the dog next door. One day he went and told his mother that it had chased him and it hadn't.

Story (b) Richard went to the circus. Among the things he saw were a clown juggling and an elephant. The next day he told his friends that he had seen an elephant juggling.

Test VI Story (a) A boy was playing in the front room when he knocked over a china doll and broke it. He told his father that the cat had done it.
Story (b) A boy and his young sister were playing in the front room when the girl knocked over a china doll and broke it. The boy did not want his sister to get into trouble so he told his father that he had seen the doll walk to the edge of the table and jump off all by itself.

The rationale behind the first four tests (relating to clumsiness and stealing) is fairly straightforward; the child judging by objective responsibility will indicate John, Susan, Pauline, and Jean as the worse culprits since their actions had the most serious consequences; the child judging by subjective responsibility will consider the motives of each of these four actors and conclude that David, Jennifer, Carol, and Lynne are worse since their motives were inexcusable compared with those of the others.

The situations for lies are slightly less obvious; here the variables are the credibility of the lie and its consequences as well as the motives of the actors. Thus the child judging by objective responsibility would say that lies Vb and VIb were worse because they would not be believed; children judging by subjective responsibility would say that lie Va was worse because it was spiteful and because the other boy had made a mistake, while lie VIa was worse because it was selfish and because the other boy was only trying to protect his sister.

These test items were not checked on a pilot sample because of the lack of time available. However, their usefulness
in distinguishing the two forms of moral judgement proposed by Piaget is demonstrated by the results obtained from the main sample and reported in Chapter 6.

The adoption of Piaget's techniques for the investigation of moral development, immediately restricts the scope of this empirical study. It was pointed out earlier that there could be distinguished perhaps three general aspects of morality which were behaviour, guilt feelings after transgressions and knowledge of right and wrong (see Wright, 1968). Intercorrelations among these three are rare and it has been suggested that they function independently.

The present study focusses on the last of these three aspects of morality - the distinction of right and wrong, good and bad, better and worse, etc. in relation to somewhat artificial test situations. The child's verdict in such tests is not necessarily an indication of the way he would behave in similar circumstances; nor would he necessarily feel guilty should he behave in a manner which he now denounces. The ability to decide relative culpability is very important however and it is impossible for guilt feelings to appear without the individual's knowledge of behaviour which is prescribed, or more particularly proscribed, by his society or subgroup. Only when the individual has this ability to judge the relative worth of various actions can his behaviour
be said to be immoral or even moral; before this time it should be regarded as amoral and the way in which the capacity to judge the actions of others (and consequently those of oneself) develops is an important area of study (see Chapter 4, Figure 4).

3. Sample

It was suggested earlier that if the trend in moral judgement from objective responsibility to subjective responsibility was universal and inevitable, as Piaget believed, then any large sample of children over the relevant age range should show this progression. However, completely random selection of subjects allows no control over variables which might affect the child's performance and which therefore would be worth checking. A large sample stratified to balance out the variables of interest would perform the double function of testing Piaget's proposed developmental trend whilst giving an indication of factors which might influence performance in these tests of moral judgement.

In Chapter 3 we noted that such variables as social class, intelligence, sex, the nature of test items and the child's social relationships had all been related to performance along the developmental dimensions of Piaget's analysis of moral judgement. The present sample was stratified by sex to include equal numbers of boys and
girls and by social class to give a manual/non-manual dichotomy of 70%/30%. The first control over sex was to allow the testing of the hypothesis that boys and girls develop at different rates with regard to Piaget's tests of moral judgement; the equal distribution of boys and girls also conformed to the population figures for Sheffield schools where the sexes are more or less equally represented.²

The social class division was made to afford a generalization from any trends discernable in the sample to the Sheffield school population and to the general U.K. school population.

The sample was, of course, stratified by age groups within the range 7-12 years inclusive to compare with Sheffield school population data³ and a 1 in 100 sample yielded a sample size of 368 children which was small enough to handle fairly comfortably and yet large enough to allow the appearance of any developmental trends. This age range was selected because the story situations used appeared too simple for children older than twelve years and communication difficulties were anticipated with children of five and six years or younger. The age range studied includes Piaget's figure of 9-10 years which marks the final change from moral judgements based on outcome to those based on intentions.

The sample was selected from children in the two largest
comprehensive schools in Sheffield plus their respective feeder junior schools. Table VII reports the sample structure and the school population from which it was drawn at random.

Table VII: School Population and Sample Sizes by Age, Sex, and Social Class

<table>
<thead>
<tr>
<th>Age (yrs)</th>
<th>SAMPLE</th>
<th>POPULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>24</td>
<td>10</td>
</tr>
<tr>
<td>Girls</td>
<td>24</td>
<td>10</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>22</td>
<td>10</td>
</tr>
<tr>
<td>Girls</td>
<td>22</td>
<td>10</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>22</td>
<td>10</td>
</tr>
<tr>
<td>Girls</td>
<td>22</td>
<td>10</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>Girls</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>20</td>
<td>8</td>
</tr>
<tr>
<td>Girls</td>
<td>20</td>
<td>8</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>20</td>
<td>8</td>
</tr>
<tr>
<td>Girls</td>
<td>20</td>
<td>8</td>
</tr>
<tr>
<td>Totals</td>
<td>256</td>
<td>112</td>
</tr>
</tbody>
</table>

An important variable which was not controlled in the sampling is intelligence; this factor has, of course, been correlated with better performance on Piaget's tests of moral judgement and its complete ignoring would be a serious omission. Information on each child's intelligence was collected after the interviews had been completed and its
effects are discussed in Chapter 6.

4. The Interview

So far we have indicated the nature of the test materials and the composition of the sample for the present study. The technical problem is to make sure that the subjects understand each pair of stories and have the chance to appreciate the difference in content. No matter how carefully a statement is written down, different accentuation may alter the whole emphasis. It was therefore decided against having the children read the stories themselves; instead, the stories were read out in pairs by the author who was, with practice, able to repeat the desired emphases the same each time. Apart from using tape-recorded material, which might easily have detracted from any rapport which might be established, this was the nearest to identical reproduction which could be achieved.

In fact, several factors contributed to a good rapport in the interview situation. First, the interviews were carried out in rooms with which the children were familiar; the actual situations varied from classrooms where available to changing rooms, teacher's rooms and even school foyers. All but the last afforded a degree of privacy and quiet essential to any interview. Second, the interviews were
carried out in lesson time; the children had no opportunity to refuse although it seems unlikely that many would have done so had they been given the choice. Several of the younger children presented communication problems but only one subject - an eleven year old girl - was what one could call uncooperative. Generally the interview was perhaps seen as a not unwelcome break in the school day.

A final factor which helped establish a good rapport was the novelty of the situation. A genuine interest was shown in each child's opinions and the conversation which developed was more than the normal teacher-child relationship might allow. In fact, the interest shown in the study was impressive, especially in the junior schools where one would be surrounded by a gang of children wanting to know the purpose of the study. Naturally, those children who were seen later on in any school had had the chance to hear about the study from their friends who had been interviewed earlier; however, it is unlikely that having previous knowledge of the study influenced the children's performance at all since they mostly knew the investigator as 'that man who asks you questions' without knowledge of the nature of the questions.

As the number of the interviews completed increased (to 368 in all) it was found that the same introductions to the
stories and the same emphases within the stories were being used; it may be helpful if a verbatim report of the introductory 'patter' is given. Each child was seen individually and was sent for by name and so the investigator knew who to expect. As the interview proceeded the investigator filled in the schedule outline in Figure 5. The child was able to

Figure 5  Part of the Children's Interview Schedule

(Tests II-VI were reported on the schedule in identical fashion to Test I).

<table>
<thead>
<tr>
<th>School</th>
<th>Date</th>
<th>Interview No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Address</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>Date of Birth</td>
<td>Form</td>
</tr>
<tr>
<td>Father's Job</td>
<td>Mother's Job</td>
<td></td>
</tr>
</tbody>
</table>

Test I

Repeat O.K.
Do you think one child is naughtier than the other?

(i) If no : Why not? What did each child do?
(ii) If yes : Which one?
  Why is he worse?
  What about the other child?

Test II

Repeat O.K.
Do you think ...

see what was written down and was also able to see each story (which was read from a printed card) although they were upside-down to him, of course. The interview would proceed as follows:

You're John Smith, aren't you? Sit down there please John. Have you heard what I am doing from your friends? Well, I'm going to tell you a few stories and then ask you some questions about them. O.K.?
Right. First of all, you're nine years old aren't you? And when is your birthday? Do you know what your Dad does at work? And does your Mum go out to work or does she stay at home all day?

Now, I'll tell you these stories two at a time. Then I'll ask you to tell me what happened in each story, and then I'll ask you some questions about them. O.K.? Here's the first one.

Some difficulties may be brought in at this point. It was already known from school records whether the child's father was a manual or a non-manual worker; the question included here was a check on this information and was also a lead-in to the question of maternal occupation about which nothing was known. It may be argued that personal information such as age, occupation, etc. is best left till later on in the interview; while this may be true for adults there was no difficulty in obtaining these details from the children and it was felt to be no disadvantage to have these questions right at the beginning. 9

The next step in the children's interviews was to read out the first pair of stories; then the child was asked to repeat what had happened in each story. The aim here was to make sure that the child had understood each story; he was therefore helped by prompting where necessary and assisted through the story repeat. When it was thought that the child had in fact understood each situation the interview proceeded
as follows:

Was one of those children worse than the other? Was one naughtier than the other? Which one? Why is that? What makes him worse? And what about the other child? Why isn't he as bad?

Normally the child would answer 'first one' or 'second one'; rarely was there no answer at all or one of 'no difference'. Should one of these unproductive answers arise the child would be asked to repeat the two stories and again asked if one child was worse than the other. In less than half-a-dozen cases was an answer distinguishing the relative naughtiness of the children in the stories not obtained. If no response was met at first the child would be asked;

If you were the children's mother (or father) and you found out what each child had done, would you be angry? Which child would you be angriest with? Why? Why wouldn't you be as angry with the other child?

Or:

Which child would you punish the most? Why? Why wouldn't you punish the other child as much?

Following the distinction between the children, a tick was marked on the schedule opposite Test I and a figure 1 or 2 was written down depending which child was thought to be worse. In fact, this tick indicated that the child had repeated the stories correctly but it probably acted as a psychological reinforcement for the child to justify his choice; he thought that the tick indicated that he had made
a correct choice and so was willing to support his view.

The subjects were asked to explain why the child in the other story was less naughty in order to check that they had a relevant reason for this part of their choice. There is, in fact, no absolute answer to the question 'Which child is worse?'; there are two possible responses, one of which derives from a morality of constraint and objective responsibility and the other from a morality of co-operation and subjective responsibility. Piaget claims that the morality of constraint is more typical of younger children, while the older children judge according to a morality of cooperation. The answers pertaining to each type of morality are termed immature and mature respectively in the discussion below, although it is apparent that Piaget's second stage of moral development is not the final stage of moral maturity (see, for example, the work of Kohlberg outlined above in Chapter 4).

Now, it is likely by the laws of probability that a child can guess the answers to the questions posed and come up with a seemingly mature answer in half the cases. For this reason the subject was asked to explain why the child he chose was worse than the other and why the other was not as bad. There are three possible categories of reply:

(a) No answer - the child cannot explain why he chose as he did.
(b) A 'correct' answer - the immature child judges by outcome
(e.g. the boy who broke four records is worse than the boy who broke one record because he broke more), while the mature child judges by intent (the boy who had been told not to touch the records was worse than the boy who was trying to surprise his sister).

(c) An irrelevant answer - e.g. the boy who breaks four records is worse because you shouldn't clean people's records; the boy who told the lie about the cat is worse because you shouldn't tell lies about cats.

In some cases an irrelevant answer to the first probe regarding the worse child may be obviated by a scorable answer to the second probe about the less naughty child. In order to eliminate as many irrelevant responses as possible the paired stories were made very similar; ideally, the only variables were the items on which the judgements were made (i.e. the intentions of the children and the results of the misbehaviour).

Thus, both stories in Test I deal with breaking records, on Test II with breaking plates; Test III deals with stealing money, Test IV with stealing goods; Test VI considers the breakage of a china doll. Only Test V presents a difficulty, since one lie is about a dog and the other about an elephant. A possible irrelevant reason for considering the second lie to be worse might be that 'it is wrong to tell lies about
elephants' or 'he told the lie to a lot of people and not just to his mother (i.e. one person').

Piaget makes no mention of irrelevant answers although one presumes that he had some. In *The Moral Judgement of the Child* Piaget's stories about clumsiness and stealing are comparable in content and would therefore tend to eliminate irrelevancies (Piaget, 1932, pp. 118-19). However, the stories about lies are not as standardized (Piaget, 1932, pp. 145-46) and the possibility of irrelevant answers must increase.

5. **Scoring**

After the interview each child's answers were scored on the interview schedule. Each interview lasted about fifteen to twenty minutes and about fourteen interviews were completed per school day. The scoring system used ranged from 1 to 7 points; since a score of 1 point meant that the subject could make no distinction between the stories, and since these cases were very few, the minimum score per test was 2 points in practice and with six tests to score the total could range from 12 to 42 points. As explained above, there are three possible categories of answer; they were scored as shown in Figure 6.

To achieve extreme scores the child had to give both
the appropriate answer and the appropriate reason for the answer. For example, a score of 2 points was awarded only if the child said that an act was worse because it had the most serious consequences. The following examples, taken from actual answers given in the study, should help clarify the scoring system.

<table>
<thead>
<tr>
<th>Score</th>
<th>Typical Reply</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>both children were equally naughty; they were both the same.</td>
</tr>
<tr>
<td>2</td>
<td>Test I - John is worse because he broke four plates and David only broke one.</td>
</tr>
<tr>
<td>3</td>
<td>Test III - Jennifer is worse because if her friend's parents found out then the friend might have been accused of stealing. (This answer is based in the seriousness of the result of the act but relies on a much less obvious reason than is normal.)</td>
</tr>
<tr>
<td>4</td>
<td>Test V - Stephen is worse because you shouldn't tell lies about dogs.</td>
</tr>
<tr>
<td>5</td>
<td>no reason given for a particular choice.</td>
</tr>
<tr>
<td>6</td>
<td>Test II - Jennifer is worse because she was messing about; the other girl was trying to help.</td>
</tr>
</tbody>
</table>

### Scoring Schedule for Children's Answers

<table>
<thead>
<tr>
<th>Mature Answer</th>
<th>Immature Answer</th>
<th>No Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correct Reason</td>
<td>No Reason</td>
<td>Incorrect Reason</td>
</tr>
<tr>
<td>7</td>
<td>6</td>
<td>5</td>
</tr>
</tbody>
</table>
In this manner scores were obtained for each of the 368 subjects in the sample. It was expected that a positive correlation of age and score would be found; the extent to which this was realized is discussed in Chapter 6.

6. **Summary**

The obscurities and omissions of Piaget's study of moral judgements were discussed in detail and it was acknowledged that replication work would be valuable in providing statistics to check Piaget's proposed developmental trends and to ascertain the effects of certain variables on the child's rate of development.

Limitations of time precluded the investigation of all but one of Piaget's eleven dimensions (objective responsibility). The development of this dimension was considered in relation to three areas of moral conduct - clumsiness, stealing and lies - and two tests, fashioned after those of Piaget, were devised for each area.

Although it should be possible to see the trends suggested by Piaget in any large sample across the relevant age range, it was decided to stratify the present sample in order to afford comparability with the Sheffield and U.K. populations. The sample of 368 children aged 7-12 years represented 1% of the Sheffield schoolchildren in this age range. Equal numbers of boys and girls were included and a social class division (70%
manual - 30% non-manual) was made.

A far more standardised form of questioning was adopted for the present study than that used by Piaget; however, this approach did allow a sensitive probing of the reasoning behind children's responses. A scoring system was devised which was based both in the child's judgements of particular actions as better or worse and in his reasons for this choice.
CHAPTER 6

MORAL DEVELOPMENT - TRENDS AND INFLUENCES

This chapter has two broad aims. First, the age trends obtained from the present tests of moral development in children are compared with those suggested by Piaget in *The Moral Judgement of the Child* (1932) to see the extent to which Piaget's ideas may be supported. Second, a much more detailed analysis of the present data is undertaken in order to check on a variety of factors (notably sex, intelligence, social class and the nature of specific test items) which might be expected to influence the child's performance in tests of moral judgement. The various graphs needed for the following discussion are contained in the wallet on the inside back cover of the thesis; these graphs are drawn on individual sheets of tracing paper to allow superimposition and comparison of trends from time to time.

1. **General Age Trends In Moral Judgement**

   In his discussion of moral development Piaget isolated
eleven separate moral dimensions (see Chapters 2 and 3). The present investigation considered one of these dimensions—objective responsibility. In this area, Piaget tested subjects' responses to story situations in which children stole, told lies or caused damage to another's property. The nature of Piaget's stories and those used in the present study have already been discussed (see Chapters 2 and 5).

In relation to this moral dimension Piaget proposed two forms of judgement, which he termed objective responsibility and subjective responsibility. The first was typified by reference to the consequences of an action as the only criterion for judgement as good or bad, better or worse, etc; the second form was typified by a consideration of motives as the chief determinant of blame. Piaget suggested that both forms of judgement were present in children up to about ten years of age (perhaps even in an individual child from one time to another) while the subjective form of judgement dominated after this time; the average age of children showing objective judgements was seven years while that of children showing subjective judgements was nine years (Piaget, 1932, pp. 119-20).

Unfortunately, this very brief indication of age
trends for each form of judgment is all that Piaget
gives; he provides no breakdown of his data in table or
graph form. Comparisons with Piaget's trends are there-
fore more difficult to make but even on a very broad
level of analysis certain differences may be seen
between the present data and that of Piaget.

With the scoring system devised for the present
study, a score of 2, 3 or 4 points was given to responses
which showed evidence of objective responsibility; such
responses were termed immature. A score of 5, 6 or 7 points
was given to responses which showed evidence of subjective
responsibility; such responses were termed mature. Full
results indicating frequency of particular scores at each
age level are given in Appendix A.

Consider Table VIII which shows the number and per-
centage frequency of immature responses to all tests of
moral judgement, and also look at Graph 1a which is derived
from these data. Generally, it can be seen that the
percentage frequency of immature answers declines with
increasing age. On a broad level this trend is predicted by Piaget but two points are worth noting.

First, Piaget states that 'we did not come across a single case of objective responsibility after the age of 10' (1932, p. 120). In the present study elements of objective responsibility were found in 24% of the moral judgements of children aged 10 years, and in 12% of children aged 11 and 12 years.

Second, the tendency for immature responses to decline with age is not perfect. Equal numbers (58%) of children aged 7 and 8 years showed evidence of immature moral judgements; similarly equal numbers (12%) of children aged 11 and 12 years showed this evidence. Piaget suggests a constant decline in immature answers with age.

A possible explanation of the greater frequency of immature answers at the higher age levels compared with Piaget's data could lie in the different natures of the test situations used in each study; this point is discussed in more detail later on. However, relative difficulty seems inadequate as a full explanation and in fact a better account is given by another approach. The frequency of immature answers from the younger children was reduced by the consistently mature responses of a small group of 7 and 8 year olds; the frequency of immature answers from
the older children was similarly increased by the consistently immature responses of a small group of 11 and 12 year old children.\textsuperscript{2}

The effect which the responses of these children had can be seen from Table IX and Graph 1b which ignore the data for the groups of exceptions. The frequencies of immature responses become more extreme, rising to 67\% and 63\% for children aged 7 and 8 years respectively and falling to 4\% for children aged 11 and 12 years. Even this correction does not allow the complete disappearance of immature modes of thought in older children, however, and the residual 4\% of immature responses is scattered through the replies of the remaining children and across the six separate tests of moral judgement employed (see Appendix A).

Piaget makes no mention of exceptional performances and it is possible that there were none, although the fairly high frequency of exceptional scores in the present
data suggests that this is unlikely. Even when allowance is made for those few children whose responses were consistently exceptional for their age then occasional anomalous scores were still encountered.

The frequency of immature responses is less extreme at the lower end of the age range studied than at the upper end. This indicates the mixture of mature and immature responses predicted by Piaget. It is only after about 8½ years of age that more mature judgements begin to predominate.

2. Age Trends For Three Areas Of Moral Judgement

The trends reported above considered the child's performance aggregated over six tests of moral judgement. The present study was designed to provide a balance among three aspects of morality - clumsiness, lying and stealing - in order to test the hypothesis that children develop at different rates with regard to each. Table X and Graphs 2a, b and c present the data for each separate area. The trends displayed in each area are fairly similar. Appendix B reports the results of a test of the significance of the differences among the three areas and, in fact, only one significant difference was apparent - between stealing and lying for children aged 7 years.
This would suggest a high comparability among the areas of moral judgement tested and would refute the hypothesis that children mature at significantly different rates in the separate areas.

TABLE X  
Frequency of Immature Responses by Age - Area Scores

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>C  S  L</td>
</tr>
<tr>
<td>7</td>
<td>77 88 70</td>
<td>57 65 52</td>
</tr>
<tr>
<td>8</td>
<td>78 76 70</td>
<td>61 59 55</td>
</tr>
<tr>
<td>9</td>
<td>57 47 63</td>
<td>45 37 49</td>
</tr>
<tr>
<td>10</td>
<td>27 25 34</td>
<td>22 21 28</td>
</tr>
<tr>
<td>11</td>
<td>10 12 20</td>
<td>9 11 18</td>
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<td>12</td>
<td>10 14 18</td>
<td>9 12 16</td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td>C  S  L</td>
</tr>
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<td>7</td>
<td>77 88 70</td>
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<td>27 25 34</td>
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<tr>
<td>11</td>
<td>10 12 20</td>
<td>9 11 18</td>
</tr>
<tr>
<td>12</td>
<td>10 14 18</td>
<td>9 12 16</td>
</tr>
</tbody>
</table>

C: Clumsiness  S: Stealing  L: Lies

Once again the effects of the two groups of exceptional children can be seen. This is most clearly demonstrated on Graph 2a where the expected downward trend of immature answers with age is modified at both ends of the age range; the same tendency may be seen in the younger children on Graph 2c and in the elder children on Graph 2b. Individual comparison of Graphs 2a, b and c with Graph 1c (derived from Table XI) indicates the precise effect of the exceptional children for different areas of moral judgement; generally this
effect is to push the frequency of immature responses nearer the extreme values, although only in the area of clumsiness do immature responses disappear altogether in children aged 11 years and over.

**TABLE XI**  
Frequency of Immature Responses by Age - Area Scores (corrected)

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>C</th>
<th>S</th>
<th>L</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>0</td>
<td>3</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>0</td>
<td>3</td>
<td>9</td>
<td></td>
<td></td>
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<tr>
<td>10</td>
<td>27</td>
<td>25</td>
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<td>22 21 28</td>
</tr>
<tr>
<td>9</td>
<td>57</td>
<td>47</td>
<td>63</td>
<td></td>
<td>45 37 49</td>
</tr>
<tr>
<td>8</td>
<td>78</td>
<td>76</td>
<td>70</td>
<td></td>
<td>66 64 59</td>
</tr>
<tr>
<td>7</td>
<td>76</td>
<td>86</td>
<td>68</td>
<td></td>
<td>66 75 60</td>
</tr>
</tbody>
</table>

C: Clumsiness  S: Stealing  L: Lies

The general tendency of the data presented in Graphs 2a, b and c and 1c is for the child's attitudes to stealing and clumsiness to mature more rapidly than his attitudes to lies, although these trends do not assume any statistical significance.

3. **Age Trends For Individual Tests**

The discussion of the age trends for separate areas of moral judgement above showed that there were no significant differences in the child's rate of development with regard
to clumsiness, stealing or lying. This in turn argues in favour of a generalized level of maturity, at least in respect of the dimension of objective responsibility; also it argues against the specificity of moral judgements proposed by such workers as Durkin (e.g. 1959c) and Boehm (1963a) - children's moral judgements in the present study were not influenced by the general area of moral behaviour in question.

However, there is a further, more detailed, level of analysis which can be pursued bearing in mind the problem of the specificity of moral judgements. This involves a consideration of the age trends in maturity of response to individual test items, of which there were six in the present study. Table XII and Graphs 3a, b and c present the relevant data.

Comparison of Graphs 3a, b and c with Graphs 2a, b and c respectively shows the extent of the variation from the average trends for each area produced by individual tests. The age trends for clumsiness (Graphs 2a and 3a) are almost identical for each test, suggesting a high comparability between them. The trends for stealing show wider variation than those for clumsiness although the differences are fairly constant for each age level.
The age trends for lying show great variation among younger children but very little difference is apparent in older children.

**TABLE XII**  
**Frequency of Immature Responses by Age - Test Scores**

<table>
<thead>
<tr>
<th>Age (yrs)</th>
<th>C: Clumsiness</th>
<th>S: Stealing</th>
<th>L: Lies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I  II III IV V VI</td>
<td>I  II III IV V VI</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>6 4 9 5 8 10</td>
<td>11 7 16 9 16 18</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>5 5 8 4 9 11</td>
<td>9 9 14 7 16 20</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>14 13 15 10 16 18</td>
<td>22 20 25 17 27 30</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>28 29 31 16 24 39</td>
<td>44 45 48 26 38 60</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>39 39 42 34 28 42</td>
<td>61 61 66 52 44 66</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>38 39 51 31 28 42</td>
<td>56 58 75 54 42 62</td>
<td></td>
</tr>
</tbody>
</table>

As these trends suggest there are only isolated statistically significant differences between pairs of tests comprising each area (see Appendix C). In fact, there are no significant differences to be found at any age level for clumsiness (Tests I and II); for stealing (Tests III and IV) significant differences were found at ages 7 and 9 years; for lying (Tests V and VI) they were found at ages 7, 8 and 9 years. Test V appears easier to answer than do any of the other tests, especially when younger children are concerned.

Comparisons between tests in different categories of moral
behaviour also reveal isolated significant differences (see Appendix C). One feature of these differences (and of those noted above within the areas of clumsiness, stealing and lying) which is worth noting is that the highest age at which they achieve significance is 9 years. Only the younger children show significantly different rates of development (i.e. experience significantly greater difficulty) in their responses to individual tests. This finding is consistent with Piaget's contention that both forms of judgement (objective and subjective; immature and mature) can be found in children under 10 years of age (Piaget, 1932, p. 119). This does not deny the fact that, contrary to Piaget's suggestion (1932, p. 120), this mixture of levels of judgement was apparent in the present sample for children aged 10 years and over but the differences in this age group were of a much lower order, never achieving statistical significance.

It seems that younger children have a far less organized system of moral judgement and are influenced by the content of particular test items (see Appendix C) and, to less obvious extent, by the area of moral reasoning under investigation (see Appendix B). In contrast, the moral judgements of older children are generally more consistent
and less likely to fluctuation from one situation to another.

The effects of the responses of the exceptional children are again reflected in the age trends for individual tests. This is clearly seen for the younger children's responses to both tests for clumsiness and lying (Graphs 3a and 3c) and for the older children's responses to both tests for stealing (Graph 3b). The precise effect of this influence can be gauged by comparing Graphs 3a, b and c with the corrected data in Graphs 1d i, ii and iii respectively (see also Table XIII). Once more the tendency for the corrected

<table>
<thead>
<tr>
<th>TABLE XIII</th>
<th>Frequency of Immature Responses by Age - Test Scores (corrected)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
</tr>
<tr>
<td></td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>I</td>
</tr>
<tr>
<td>Age (yrs)</td>
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<td>10</td>
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<tr>
<td></td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>7</td>
</tr>
</tbody>
</table>

C: Clumsiness  S: Stealing  L: Lies

frequencies to become more extreme can be picked out.
4. Sex Differences in Moral Judgements

Several studies have suggested that, in moral judgement tests fashioned after those of Piaget, girls perform better than boys at all age levels (e.g. Durkin, 1960; Porteous and Johnson, 1965; Bull, 1969; see Chapter 3). It is worth noting, however, that the many other studies which made use of mixed-sex samples do not report any differences in age trends for maturity of response between boys and girls.

On the broadest level, no sex differences can be seen in the present data. Table XIV and Graph 4 show the age trends for immature responses for boys and girls. There

<table>
<thead>
<tr>
<th>TABLE XIV</th>
<th>Frequency of Immature Responses by Age and Sex - Aggregate Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>Percentage</td>
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<tr>
<td>12</td>
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<td>7</td>
<td>124</td>
</tr>
</tbody>
</table>

are no significant differences between the two trends (see Appendix D). The effect of the two groups of exceptional
children noted earlier can be seen in the trend for the girls but not for that of the boys.\textsuperscript{3}

On a more detailed level of analysis Table XV and Graphs 5a, b and c break down the more general trends into separate areas of moral judgement. The trends are most similar for stealing although, once more, the differences observable between the sexes never assume any statistical significance (see Appendix D).

The most detailed analysis (by individual test) is given in Table XVI and Graphs 6a i and ii, 6b i and ii, and 6c i and ii. Again none of the differences achieve significance and in several cases the trends are almost identical (see Appendix D).
TABLE XVI  Frequency of Immature Responses by Age and Sex - Test Scores

<table>
<thead>
<tr>
<th>Age (yrs)</th>
<th>C: Clumsiness</th>
<th>S: Stealing</th>
<th>L: Lies</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>B 9 G 5</td>
<td>B 7 G 5</td>
<td>B 6 G 2</td>
</tr>
<tr>
<td>9</td>
<td>B 12 G 16</td>
<td>B 17 G 14</td>
<td>B 10 G 6</td>
</tr>
<tr>
<td>8</td>
<td>B 19 G 20</td>
<td>B 21 G 17</td>
<td>B 17 G 17</td>
</tr>
<tr>
<td>7</td>
<td>B 19 G 19</td>
<td>B 28 G 23</td>
<td>B 20 G 19</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
</tr>
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</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>9</td>
</tr>
<tr>
<td>8</td>
</tr>
<tr>
<td>7</td>
</tr>
</tbody>
</table>

C: Clumsiness S: Stealing L: Lies B: Boys G: Girls
Age trends in moral maturity for boys and girls never showed any significant differences. However, there is a definite impression given by the data, especially in its most detailed form, that girls perform worse than boys at the younger age levels but better than boys at the higher age levels; generally, the changeover took place between ages 9 and 10 years. These findings contrast with those of other studies in which a consistent female advantage has been noted (see Chapter 3).

5. Intelligence And Moral Judgements

It has been suggested that the child's performance on Piaget's tests of moral development is heavily dependent on cognitive abilities and is therefore related to intelligence. The relationship between higher intelligence and better performance has been demonstrated in several studies of objective responsibility and other dimensions of Piaget's scheme (see Chapter 3).

Table XVII reports the age trends for immature answers aggregated over the six moral judgement tests for three intelligence groups: A - above average; B - average; C - below average; Appendix E reports the results of $X^2$ tests carried out between the frequencies
### TABLE XVII

**Frequency of Immature Responses by Age and Intelligence - Aggregate Scores**

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>12</td>
<td>12</td>
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<td>23</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>35</td>
</tr>
</tbody>
</table>

A: above average I.Q.  B: average I.Q.  C: below average I.Q.

### TABLE XVIII

**Frequency of Immature Responses by Age and Intelligence - Area Scores**

<table>
<thead>
<tr>
<th>Age (yrs)</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>S</td>
</tr>
<tr>
<td>12</td>
<td>12</td>
<td>15</td>
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<td>8</td>
<td>8</td>
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<tr>
<td>7</td>
<td>7</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age (yrs)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
</tr>
<tr>
<td>12</td>
<td>12</td>
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<td>11</td>
<td>11</td>
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<tr>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
</tr>
</tbody>
</table>

A: above average I.Q.  B: average I.Q.  C: below average I.Q.

C: Clumsiness  S: Stealing  L: Lies
of mature and immature answers in each intelligence group at each age level; these data show differences significant at the 0.001 level for age groups 7 to 10 years, at the 0.01 level for the 11 year olds and at the 0.05 level for the 12 year olds. In other words at each age level there are highly significant variations present in the data which are caused by intelligence differences.

In order to point out the precise effects of varying intelligence it is necessary to examine the computation of $X^2$ more closely. The three columns headed $(f_o - f_e)$ in Appendix E indicate the difference between the observed $(f_o)$ and expected $(f_e)$ frequencies at each age level for each intelligence group plus the direction of this difference. Since the data refer to immature answers, a negative figure, indicating fewer immature answers than would appear by chance, indicates that the performance is better than expected; a positive figure indicates a worse performance than that expected by chance. The size of the figures indicates the strength of the variation from the data expected by chance.

Children of above average intelligence (group A) performed better than expected at all age levels; children of below average intelligence (group C) performed worse than expected at all age levels except for age 7 years,
where they performed slightly better and age 12 years where they just about broke even. Children of average intelligence (group B) performed better than expected at three age levels and worse than expected at the other three.

These trends are reflected in Graph 7 and are consistent with the findings of other studies which have indicated the advantages afforded in Piaget's tests by higher intelligence (see Chapter 3). Generally the line for group C is highest at each age level and that for group A is lowest, indicating their worse and better performances respectively.

On a more detailed level of analysis Table XVIII presents the age trends of the three intelligence groups for the three area of moral conduct investigated in the present study - clumsiness, stealing and lies. Appendix F reports the results of $X^2$ tests evaluating the significance of the frequency differences between the intelligence groups at each age level; these results are neither as consistent nor as significant as those reported for aggregate scores (c.f. Appendix E).

Generally, where significant differences appear, they support the finding that higher intelligence improves performance on Piagetian tests of moral judgement. There is considerable variation between areas of judgement, however. The data reported in Appendix F suggest that varying
intelligence has its greatest effect when test items referring to clumsiness are considered since at four of the six age levels the differences between the intelligence groups were significant, in two cases (ages 8 and 9 years) beyond the 0.01 level. All the results for clumsiness indicate the better performance of group A (above average intelligence) and the worse performance of group C (below average intelligence).

For stealing, results at two age levels (7 and 10 years) were significantly different beyond the 0.01 level while those at two more levels (8 and 9 years) were slightly below significance at the 0.05 level. Again group A perform better than expected while group C perform worse than expected.

For lies, only one result (for 9 year old children) shows any significant difference among the intelligence groups. Therefore, although on aggregate intelligence variations produce significantly different performances at each age level, this variable has its greatest effect in tests relating to clumsiness and only isolated effects in tests relating to lies.

This same pattern is reflected at the most detailed level of analysis when individual tests are considered.
TABLE XIX Frequency of Immature Responses by Age and Intelligence - Test Scores

<table>
<thead>
<tr>
<th>Age (yrs)</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
<td>II</td>
</tr>
<tr>
<td>Above Average Intelligence (A)</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>1</td>
</tr>
<tr>
<td>11</td>
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<td>8</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>6</td>
<td>6</td>
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<tr>
<td>Average Intelligence (B)</td>
<td></td>
<td></td>
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<tr>
<td>12</td>
<td>4</td>
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<td>10</td>
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<td>8</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>7</td>
<td>21</td>
<td>22</td>
</tr>
<tr>
<td>Below Average Intelligence (C)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>9</td>
<td>18</td>
<td>19</td>
</tr>
<tr>
<td>8</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>7</td>
<td>11</td>
<td>11</td>
</tr>
</tbody>
</table>
(see Table XIX and Graphs 9a i and ii, 9b i and ii and 9c i and ii). With both tests for Clumsiness and the first test for Stealing there is a clear-cut tendency for group A to perform better than group B and for group B to perform better than group C; in other words the advantage gained from higher intelligence is once more demonstrated (see Graphs 9a i and ii, and 9b i).

However, a much more confused pattern is presented by the remaining Graphs relating to the second test for stealing and both tests for lying: there is much more fluctuation from one age level to another for all intelligence groups; there are many modifications of the expected downward trend in immature answers with age; the effect of varying intelligence is far less obvious and is often inconsistent with the general patterns noted previously. This confusion is most obvious on Graphs 9b ii and 9c i, and intelligence groups A and C (above and below average respectively) show very similar trends on the tests relating to lies.

The general tendency for higher intelligence to correlate with better performance on Piagetian moral judgement tests must be modified when tests relating to different areas of moral conduct are considered. It is not absolutely clear, however, whether these
fluctuations are due to the peculiarities of the area being considered or to the peculiarities of individual test items. For example, it was suggested that performance on tests V and VI showed the little relationship with intelligence - this implies that these tests were in some way easier than other tests since children of below average intelligence experienced no more difficulty with them than did children of above average intelligence.

Now, it may be that both tests were easier because they relate to lies and because the child finds it easier to respond in mature fashion to stories about lies. Alternatively, it may be sheer coincidence that the two easiest tests relate to lies; there maybe some unknown factors in these two stories which render them easier than the other stories, independent of the area of moral conduct which they depict. In fact, test V is significantly easier than test VI for ages 7, 8 and 9 and the age trend for test VI shows more similarity with those for other tests than does test V (see Graphs 3a, b and c). It appears, therefore, that test V is the 'odd man out', in relation to all the other tests rather than just to test VI - that is, its anomalous position is not limited to the specific area of lying. It may be the child's attitude to test V rather than his attitude to lies which caused the apparent variations in age trends between
areas which were noted above.

The standardization of test materials is very difficult and little attention is given to it. Five of the six tests used in the present study appear to be of equal difficulty while the presence of the sixth, easier test was sufficient to impute all kinds of bias to other factors. At the present time it is by no means certain that the results obtained from a single test across several similar samples would be constant. This is a further aspect of the reliability and comparability of tests which could emerge from the more careful standardization of test materials which, it is suggested here, would be a useful contribution to the study of moral development in children. 4

6. Social Class And Moral Judgements

A final variable which we can examine from the present data is social class. It has been suggested that Piaget's tests of moral judgement rely heavily on intellectual abilities, that middle class children have higher I.Q's than working class children and therefore that middle-class children perform better than do working class children in Piaget's tests (see Chapter 3).

Table XX and Graph 10 present the overall trends for immature responses by social class. It can be seen clearly
that children from middle class homes (i.e. where the
father follows a non-manual occupation - group B) show
fewer immature responses than those from working class
homes (where the father follows a manual occupation -
group A) at all but one age level. The trends for these
two groups show significant differences at only the two
youngest age levels (significant beyond the 0.02 level
of confidence) although the differences for two other
age groups (10 and 11 years) approach significance
(see Appendix G).

**TABLE XX**  
Frequency of Immature Responses by
Age and Social Class - Aggregate Scores

<table>
<thead>
<tr>
<th>Age (yrs)</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>12</td>
<td>27</td>
<td>13</td>
</tr>
<tr>
<td>11</td>
<td>35</td>
<td>7</td>
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<td>10</td>
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<td>118</td>
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<td>177</td>
<td>51</td>
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<tr>
<td>7</td>
<td>177</td>
<td>58</td>
</tr>
</tbody>
</table>

A: manual workers  
B: non-manual workers

These trends are repeated on a more detailed level of
analysis (by area) where middle class children again
return more mature answers at most age levels (see
Table XXI and Graphs 11a, b and c). This is most consistently
demonstrated in the replies to the tests relating to stealing
(Graph 11b) although at only one age level (8 years) do the
differences achieve significance (see Appendix G). For lies
and clumsiness the biggest differences appear between the
classes in the responses of the younger children, never
achieving significance after the age of 9 years.

<table>
<thead>
<tr>
<th>Age (yrs)</th>
<th>C: Clumsiness</th>
<th>S: Stealing</th>
<th>L: Lies</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>6</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>11</td>
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<td>16</td>
<td>60</td>
</tr>
<tr>
<td>7</td>
<td>60</td>
<td>19</td>
<td>63</td>
</tr>
</tbody>
</table>

C: Clumsiness  S: Stealing  L: Lies
A: manual workers  B: non-manual workers

The advantage of middle class children is reflected
in the data for individual tests (see Table XXII and
Graphs 12a i and ii, 12b i and ii and 12c i and ii); again
the differences apparent between the classes rarely achieve
significance and only do so at the youngest age levels
TABLE XXII  Frequency of Immature Responses by Age and Social Class - Test Scores

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Clumsiness</th>
<th></th>
<th>Stealing</th>
<th></th>
<th>Lies</th>
<th></th>
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A: manual workers  
B: non-manual workers
see (Appendix G). The results for test V show the biggest fluctuations from one age group to another and at no age levels do immature answers constitute more than 50% of responses; in these two ways test V further contrasts with the other tests.

Generally these results support previous findings of a middle class advantage in Piaget's tests of moral judgement. The differences between the classes achieved significance at only the two youngest age levels and even here there is no consistent significant difference across all tests. The general lack of significant differences might be explained in part by the fact that most of the fathers classified as middle class followed fairly routine non-manual occupations requiring few formal qualifications (salesmen, shopkeepers, policemen, clerical workers, etc). Had there been a bigger variation between the classes then this might have been reflected in bigger differences in the children's moral responses (c.f. Boehm and Nass 1962 and Boehm 1961).

7. **Summary And Conclusions**

From his investigation of children's judgements of story situations in which people cause damage, steal or
lie, Piaget (1932) isolated two broad types of response. For the first, judgements were based solely on the consequences of each action - the greater the damage, the worse was the offence. For the second, the actors motives and intentions assumed greatest importance for any judgement of relative culpability. Piaget thought that both kinds of judgement (which he termed objective and subjective responsibility respectively) could be found in children up to the age of 10 years, but that after this time subjective responsibility completely dominated the child's moral reasoning.

The present data supported Piaget's contention that the immature form of judgement (objective responsibility) are replaced in older children by the more mature (subjective responsibility); in other words, there is such a thing as moral development at least insofar as the dimension of objective responsibility is concerned.

However, in contrast to Piaget's data objective responsibility could still be discerned in the present responses in children up to 12 years of age. Nor was the trend for a decline in objective responsibility at successively higher ages a perfect one; the frequency
distributions flattened out at the upper and lower ends of the age range.

The residue of objective responsibility in the older children and the consequent levelling of the frequency distribution was explained by the presence of a small group of children (N=16) whose responses to the tests used were consistently immature (i.e. based in objective responsibility). Similarly, a small group of younger children (n=16) was isolated, whose responses showed consistent evidence of subjective responsibility. These two groups of children formed the basis of a more detailed investigation of the environmental factors which might correlate with advanced and retarded development of moral judgements. When these exceptional children were ignored the frequency distribution of immature answers approached extreme values more closely and, indeed, traces of objective responsibility disappeared from the older children's responses to some, but not all, of the tests used.

Within the dimension of objective responsibility Piaget used test situations which related to stealing, lies and damage caused through clumsiness. He implies that at any particular time a common level of maturity
of judgements obtains in the child with respect to all three areas. Two tests were included in the present study in each of the areas of clumsiness, stealing and lies in order to test the hypothesis that the child develops at different rates with regard to each. No consistent differences could be isolated among the three although occasional significance was obtained at specific age levels. A non-significant tendency for children's attitudes to lies to mature more slowly than those to clumsiness and stealing was noted.

Similarly, occasional significant differences were noted in the responses of children aged 7, 8 or 9 years to individual test items. This trend was interpreted as evidence of the less well organized system of moral judgements possessed by younger children and their greater susceptibility to specific situational cues in making judgements. In contrast, the older children appeared to have a much more stable and consistent system varying less from test to test.

No sex differences in rate of maturity of moral judgements could be discerned in the present data at any level of analysis (aggregate scores, area or test). There was a slight, though non-significant, tendency
for girls to be behind boys up to the age of 9 or 10 years and ahead of boys after this time. This finding contrasts with the consistent advantage noted in girls by other workers.

On a broad level of analysis it was demonstrated that intelligence was a significant variable influencing performance on the present tests. Children of above average intelligence performed best and children of below average intelligence performed worst at all age levels when scores were aggregated across the six tests used. However, closer examination revealed that intelligence was a most effective variable when the tests relating to clumsiness were considered, that it was less effective for tests relating to stealing and that its effects were negligible for tests relating to lies.

It was suggested that this confusion within the area of lies could be due as much to the relative ease with which children answered test V as to any actual differences in their attitude to lies.

Certain social class differences were demonstrated which suggested the advantage that middle class children have in Piagetian tests of moral judgement. This trend was reflected in the aggregated data, in the data for each area and in the data for each test although test V once more appeared as an anomaly.
CHAPTER 7

SOCIAL FACTORS IN MORAL DEVELOPMENT

1. Introduction

We saw in Chapter 3 the way in which the replication studies of Piaget's work on moral development had suggested several modifications of Piaget's ideas; these modifications related especially to the manner in which the child's performance on Piaget's tests of moral judgement was affected by such variables as intelligence, social class, sex, religious teaching and even the content of the test items used. In the present study it was found that better performance on Piagetian moral judgement tests correlated with higher I.Q. and with a middle class family background although no sex differences could be discerned.

A factor which occupies a dominant position in Piaget's theory of moral development is adult constraint; Piaget believed that adult constraint combined with the egocentric thought of the young child to produce moral realism and several morally immature modes of thought and judgement. Piaget saw the impetus for the child's development of the more mature forms of judgement
in the decline of egocentric thought (a biological process largely unaffected by social or educational teaching) and in the increasingly equalitarian nature of adult-child relationships as the child became older.

Despite its crucial importance to Piaget's theory, adult constraint has received little attention in the replication literature. Of the twenty sets of studies noted only seven consider adult constraint at all and only two of these (MacRae, 1954; Johnson, 1962a) investigate this variable empirically (see Table IV, p. ). MacRae (1954) noted a negative correlation between parental strictness and the child's development along one of Piaget's moral dimensions (immanent justice) but not along others (objective responsibility or duty defined as obedience to authority); similarly, Johnson (1962a) correlated variations in parental strictness with different performances along the dimensions of immanent justice and communicable responsibility but not to performance along the dimensions of objective responsibility, retribution v. restitution or belief in the efficacy of severe punishment.

There is a need for more information relating to the effects which varying home background has on the child's moral development. The two studies noted above considered only parental strictness although there are several other aspects of the parent-child relationship which have been investigated
in relation to other areas of child development but which have implications for the development of moral judgements, for the development of guilt feelings and for the individual's ability to control his own behaviour.¹

There are obviously several aspects or dimensions of parental belief which might affect the child and some of these may be derived directly from Piaget's discussion of the parent-child relationship as a factor influencing moral development. Piaget thought that a relationship of equality and co-operation between the child and the adult was more beneficial to the child's moral development than one of heteronomy and constraint. The problem is which dimensions of parental beliefs are implied by these two ideal type adult-child relationship and how might these dimensions best be estimated?

Piaget suggests a partial solution to the first question - a relationship of equality and sharing should contribute to the child's quicker moral development; a relationship of strict parental control and ignoring any of the child's suggestions should lead to a retarded moral development. These simple statements imply several dimensions of parental attitudes and beliefs.

Constraint implies the denial of autonomous thought; the child is not expected to think for himself but is
encouraged to submit to adult edicts. The Victorian maxim that children should be seen and not heard is a good example of this attitude. Parental control of the child's activities and restriction of the child's thought implies intrusiveness - the parent will want to know what the child does and what he thinks. In turn, this implies strictness and, moreover, the belief that a strict upbringing is at the very least no detriment if not a positive advantage for the child in the long run.

For the most part, co-operation implies the opposites of the parental attitudes mentioned above. It implies a democratic attitude in treating children as equal in importance to adults and may even go so far as to assign children equal weight in a 'voting' procedure to decide important family issues. Co-operation implies the fostering of independent thought and action in the child which itself suggests only limited parental control and strictness.

There are at least two further groupings of parental attitudes which are not encompassed by the discussions above but which might have equally important affects on the child. The first is an atmosphere of babying or overprotection in which the child's every wish is catered for and he is not expected to undertake even minor responsibilities (household
chores, say) in the family unit. This type of atmosphere contrasts with both relationships of co-operation and of constraint since the child is neither an equal nor is he a subordinate but in some respects he is a superior to the adult.

A second contrast to the co-operation-constraint continuum is a relationship of unconcern where the child is ignored socially except insofar as his physical needs for food and shelter are met. Such a socially sterile atmosphere might include ignoring the child's questions or reducing answers to the briefest statements. This treatment might have two broad effects; first, if the child is restricted to the house, his overall development will be severely retarded, as in the few cases of isolated children noted by Davis (1964, pp. 204 ff.) for example; secondly, if the child is not restricted in this extreme manner, he is likely to seek social interaction outside the home among his peers. In either case the effects of parental neglect on the child's emotional and personality development are obviously harmful (see Bowlby, et al, 1956). The child's confinement to the house is an extreme form of the relationship of constraint noted by Piaget. Total lack of concern contrasts both with co-operation and constraint implying the
parent's minimum interaction with the child and denying all control.

The dimensions of parental attitudes which seem important for the child's moral development might be included under the five main headings of democracy, autonomy, overprotection, strictness and ignoring the child. From Piaget's ideas, it would be expected that variations in parental attitudes along these dimensions would affect the child's moral development in the following manner: democratic parents, those who encourage the child's autonomy, those who do not attempt to do everything for the child nor control and protect him in everything he does, and those who therefore have no need to rely on strict measures to ensure the child's conformity, are likely to have children who are morally advanced; in contrast, strict parents, those who attempt to rule the child's life completely, who deny the child autonomy of thought and action, who overprotect him from the rough and tumble of everyday life, who do not listen to the child's suggestions are likely to have children who are morally retarded.

2. The P.A.R.I. - Construction and Validity

Schaeffer and Bell (1958) report the development of
an attitude scale designed to test parental attitudes along a number of dimensions. Several dimensions of the Parental Attitude Research Instrument (PARI) reflect the same concerns discussed above, others do not; since each dimension was validated separately it is possible to isolate the relevant items and still be left with a useful scale.

In fact fourteen dimensions were thought relevant to the present study and these were grouped under six major headings as is shown in Figure 7. The PARI seemed suitable precisely because it was designed to test attitudes in areas almost identical to those suggested and implied in Piaget's
discussion of parent-child relationships.²

The PARI items were not grouped on the scale in the manner listed in Figure 7; they were arranged in random fashion and the original order was kept when items were selected for the present scale. The final form of the PARI for the present study comprised forty-two items, three items for each of the fourteen dimensions. The left hand column in Figure 7 indicates the placing of individual items on the adopted form of the PARI which is given in full in Figure 8.

The PARI dimension Encouraging Verbalization (items 1, 15 and 29) suggests that the child's ideas and opinions should be considered in family decisions. The dimensions 'Equalitarianism' (items 9, 23 and 37) is based on the assumption that children have equal rights with adults and that parents have no special weight in family decision making. The dimension 'Comradeship and Sharing' (items 13, 27 and 41) implies that a happy family is one in which parents and children interact as friends. Taken together it was expected that these dimensions would reflect parental attitudes to co-operation with their children, and the general area covered was termed democracy for the purposes of this study. Piaget implies that democratic, co-operative
Figure 8  The Parent Attitude Research Instrument

CHILD DEVELOPMENT RESEARCH PROJECT

CONFIDENTIAL

Please read each of the statements below and then rate them as follows:

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<td>very much</td>
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Indicate your opinion by drawing a circle round A_v if you "agree very much" with what the statement says, round A_w if you "agree on the whole", round A_l if you "agree a little"; circle D_v if you "disagree very much", D_w if you "disagree on the whole" and D_l if you "disagree a little".

There are no right or wrong answers so answer according to your own opinion. It is very important to the study that all the questions be answered. Many of the statements will seem alike but all are necessary to show slight differences of opinion.

* 1. Children should be encouraged to tell their parents about it whenever they feel family rules are unreasonable.

* 2. Good parents should shelter their children from life's little difficulties

* 3. It is frequently necessary to drive the mischief out of a child before he will behave.

* 4. All new parents are afraid of their awkwardness in handling and holding the baby.

5. Strict discipline develops a fine strong character.

6. A parent should never be made to look wrong in a child's eyes.
7. The child should be taught to revere his parents above all other grown-ups.

8. A child should be taught to avoid fighting no matter what happens.

9. Parents must earn the respect of their children by the way they act.

10. Parents who start a child talking about his worries don't realise that sometimes it's just better to leave well enough alone.

11. It is very important that young boys and girls not be allowed to see each other completely undressed.

12. Parents should make it their business to know everything their children are thinking.

13. Laughing at children's jokes and telling children jokes makes things go more smoothly.

14. The sooner a child learns to walk the better it is.

15. A child has a right to his own point of view and ought to be allowed to express it.

16. A child should be protected from jobs which might be too hard or tiring for him.

17. Some children are just so bad that they must be taught to fear adults for their own good.

18. Parents never stop blaming themselves if their babies are injured in accidents.

19. Children who are held to firm rules grow up to be the best adults.

20. Children should never learn things outside the home which make them doubt their parents' ideas.
Figure 8. (Continued)

21. A child soon learns that there is no greater wisdom than that of his parents.

22. There is no good excuse for a child hitting another child.

23. Children are too often asked to do all the compromising and adjustment, and that is not fair.

24. Children pester you with their little upsets if you aren't careful from the start.

25. A young child should be protected from hearing about sex.

26. Alert parents should try to learn all their child's thoughts.

27. Children would be happier and better behaved if parents would show an interest in their affairs.

28. Parents should not try to teach their children to read and write before they start school.

29. A child's ideas should be seriously considered in making family decisions.

30. Parents should know better than to allow their children to be exposed to difficult situations.

31. Children need some of the natural meanness taking out of them.

32. You must always keep tight hold of baby during his bath for in a careless moment he might slip.

33. A child will be grateful later on for strict training.

34. The child should not question the thinking of his parents.
35. Parents deserve the highest esteem and regard of their children.

*36. Children should not be encouraged to box or wrestle because it often leads to trouble or injury.

*37. Parents should adjust to the children sometimes rather than always expecting the children to adjust to the parents.

38. If you let children talk about their troubles they end up complaining even more.

39. Sex is one of the greatest problems to be contended with in children.

40. Parents have a right to know everything going on in their child's life because their child is part of them.

*41. If parents would have fun with their children the children would be more apt to take their advice.

*42. Parents should make an effort to get their child toilet trained at the earliest possible moment.

* those items marked with an asterisk failed to distinguish groups of high and low scorers. See discussion in the text (Chapter 7, section 6).

Note The PARI was duplicated on University headed paper.
Home atmosphere will accelerate the child's moral development.

The PARI dimension 'Excluding Outside Influences' (items 6, 20 and 34) revolves around the extent to which parents encourage independent thought in their children or expect them to accept their parents' ideas as always being correct. This dimension is closely linked with that of 'Deification' (items 7, 21, and 35) which attempts to measure the extent to which parents believe that, through the mere fact of parenthood, they deserve the highest opinions of their children.

The dimension 'Intrusiveness' (items 12, 26 and 40) approaches the problem of how much freedom of thought and action should be allowed the child. Taken together it was expected that these three dimensions ('Excluding Outside Influences', 'Deification' and 'Intrusiveness') would reflect parental attitudes within the general area of autonomy - the extent to which the child should be controlled by the opinions of his parents or should be allowed freedom for independent functioning. Piaget implies that the child who is constrained in a heteronomous relationship with adults will be morally retarded.

The PARI dimension 'Fostering Dependence' (items 2, 16 and 30) was designed to measure one aspect of overprotectiveness
or overpossessiveness; the dimension 'Suppression of Aggression' (items 8, 22 and 36) measures another aspect of this same dimension. These two may also reflect parental control of the child and a denial of autonomy. The dimension 'Fear of Harming the Baby' (items 4, 18 and 32) was included since it was expected that they would give a further indication of overprotectiveness. The overprotected, spoilt child would tend to mature more slowly in many areas, including his moral development.

The PARI dimensions 'Breaking the Will' (items 3, 17 and 31) and 'Strictness' (items 5, 19 and 33) measure the extent to which parents believe that discipline and physical punishment are both necessary and beneficial in child rearing. It was expected that the dimension 'Suppression of Sex' (items 11, 25 and 39) would form a part of the more general dimension of strictness. The strict parent is presumably less democratic and less likely to allow the child autonomy; a strict home background might therefore be expected to correlate with retarded moral development in the child.

The dimension 'Avoidance of Communication' (items 10, 24 and 38) attempts to estimate the extent to which the child is encouraged to discuss his problems with the parent and express his own opinions to parents. This is important
since the child who is ignored or answered inadequately may cease asking questions of his parents altogether. Parents who refuse this type of interaction with their children may be either ignoring (in which case they do not care what their children say) or they may be unduly strict (in which case they care very much that their children should hold the right - i.e. the parental opinions). In either case the discouragement of communication and verbalization is likely to result in retarded moral development.

The dimension 'Acceleration of Development' (items 14, 28 and 42) was designed to estimate the extent to which parents thought that their child's general development should be helped as much as possible. It was expected that parents who thought that encouragement of the child's performance in the areas approached was desirable would have children whose moral development was advanced.

The final page of the PARI contained requests for personal details 'for research purposes' (see Figure 9). In this way it was proposed that correlations be sought between the child's performance on Piagetian tests and such variables as parental age, education and social class, as well as family size.
This form was filled in by .... (Write H for husband or W for wife)

My age is .... years.

I was married in 19.. and have .... children :-

(Please list each child's age and sex. For example if you have a 10 year old son and a 5 year old daughter you should put B.10, G.5).

The name of the last school I attended was ......................... and I left when I was .... years old.

Since leaving school I have attended the following: (please tick)

___ A University degree course.

___ A technical college full-time course.

___ Night school / day release as part of my work.

___ Night school for recreation purposes such as ......................

___ A correspondence course for ......................

___ Other form of further education (please say which)

___ ............................................................

___ No education received since leaving school

My present occupation is ..............................................

and the last job my father held was as a ......................

I would like to make the following remarks:
3. The PARI - Administration And Scoring

In Chapter 6 we noted the presence of two small groups of exceptional children within the main sample. One was a group of sixteen 7 and 8 year old children whose responses were consistently mature by Piaget's standards; the other was a group of sixteen 11 and 12 year olds whose responses were consistently immature by Piaget's standards. These thirty-two children form the base on which the parental sample used for the present study was built. These exceptional children were matched with sixteen 7 and 8 year old and sixteen 11 and 12 year old 'normal' children (i.e. those showing evidence of objective and subjective responsibility respectively).

Parents of each of the sixty-four children thus involved were sent copies of the PARI - two copies were sent to each family, one for the husband and one for the wife, and so 128 parents were involved. An introductory letter was sent with each pair of PARI forms explaining the purpose of the study and explaining how the attitude scale should be completed (see Figure 10). A stamped addressed envelope was enclosed for returning the forms.

Six weeks after the initial request a follow up letter was distributed through the schools via the individual
Dear Mr. & Mrs.

In co-operation with the education authorities I am studying what parents think about how children should be brought up. A lot is written on this subject in newspaper and magazine articles. Frequently these articles do not agree, so I thought it would be a good idea to find out what parents themselves think. You can help by passing on your own ideas.

So as not to use up too much of your time I have prepared a list of ideas which other parents have contributed. All you do is circle one of the six letters by each statement, as explained on the form. It should only take you about fifteen minutes to complete.

As you will notice there are two forms enclosed. One is for the husband and one for the wife. They are identical so choose which one you want but please indicate, in the space provided at the end, which form has been filled in by which parent. I would like you to fill in the forms without asking each other's opinions. It may be interesting to compare notes later on but please do not alter any of your replies. There are no right and wrong answers and it does not matter if your opinions do not agree.

It would also be helpful if you could each complete the rest of the questions on the last page (age, education, etc.) for research purposes. All information will be treated as completely confidential - you will notice that there is no space for your name and address, so please do not include them.

If you have any ideas which you feel should be included, jot them down at the end. I would appreciate having them. Others who have given their ideas say it is best to work quickly. Give your first reaction. If you read and reread the statements it tends to be confusing.

Thank you for your co-operation. I enclose a stamped addressed envelope for the return of your forms.

Yours sincerely,

* This letter was duplicated on University headed paper.
children concerned (see Figure 11). This was the first indication to the parents that the project had anything to do with the schools and it was thought that official backing in this manner would encourage the co-operation of the parents.

After a further six weeks, personal visits were begun in an attempt to collect the remaining forms. Altogether 85 PARI forms were returned from 128 distributed - a response rate of 66%. Each PARI form sent out was numbered in code so that respondents could be identified without their being aware of it. This step was taken to give greater confidence in the claim for confidentiality while meeting the need to identify respondents as having morally normal, precocious or retarded children. Some parents did in fact add their names to the forms. Naturally, nowhere is there any direct reference to individual cases in any way which might permit their identifications.

Opposite each statement on the PARI there were six categories of reply: $A_v$ - agree very much; $A_w$ - agree on the whole; $A_L$ - agree a little; $D_v$ - disagree very much; $D_w$ - disagree on the whole; $D_L$ - disagree a little. These response categories were scored on a seven point scale which in most cases took the following form:
Dear Mr. & Mrs.

I wrote to you recently to ask for your co-operation in a research project on which I am engaged. I sent you two questionnaires to complete regarding the ways you thought parents should bring up their children. I have not yet received a reply from you.

Perhaps you have lost the forms I sent or forgotten about them. Perhaps you thought it was too late to send them back or you may not even have received them at all. Whatever the case I would still like to have your opinions and would be grateful if you could complete the slip below and return it to school as soon as possible.

Thank you for your co-operation.

Yours sincerely,

Please tick where appropriate:

We shall complete and return the forms.

We have lost our forms; if you send 2 more we will fill them in.

We have not yet received your forms but are willing to help.

We are unable to help you because

Name
Address

* This letter was duplicated on University headed paper.
In only fifteen cases (out of 3,570 individual responses) was the 'no response' score of 4 points necessary. The scoring was reversed on the dimensions Excluding Outside Influences (items 6, 20 and 34), Deification (items 7, 21 and 35) and Intrusiveness (items 12, 26 and 40); these dimensions form the general area of autonomy and by this reversal a higher score could be interpreted as evidence of more encouragement of autonomy. Similarly, the scoring was reversed for items 10, 24 and 38 comprising the dimension of Avoidance of Communication in order that a high score could be interpreted as evidence of the parents greater willingness to communicate with the child. Finally, the phrasing of item 28 meant that the scoring had to be reversed so that disagreement (i.e. encouragement of early literacy) was scored high.

4. Statistical Limitations Of The Study

Parental attitudes within any family unit are not independent; each parent is likely to influence, and to be influenced by, the opinions of the partner. Furthermore, the effect on the child of the interaction of parental
attitudes is likely to be at least as important as the effect of either parent alone.

For this reason it was decided to look at the combination of paternal and maternal attitudes rather than at each separately. This meant that the final sample had to be restricted to families where both parents responded and involved the deletion of eleven subjects. The distribution of the remaining 74 respondents is shown in Table XXIII. 3

Responses within each family unit were allocated to one of three categories: HH, where both parents scored high

<table>
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<td>18</td>
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<td></td>
<td>37</td>
<td>74</td>
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(7, 6 or 5 points); LL, where both parents scored low (1, 2 or 3 points); or M (mixed) where one parent scored high and the other scored low. Each of the fourteen PARI dimensions is considered separately, although they are grouped into
six broader areas. Within each dimension parental attitudes are considered for individual PARI items; there were three items for each dimension and so the raw data for each family unit comprised 42 comparisons of paternal and maternal attitudes. The proportions of responses along each dimension appearing in the categories HH, LL and M are compared between the exception and control groups of parents at each age level, and the implications of these distributions are noted.

Testing for statistical significance raises two kinds of problems for the present sample; both stem from the small number of respondents involved. In the first place, since the refusal rate was very high in some groups, and since so little is known about the non-respondents, generalization from the present data to the larger population is invalid; in the second place, the application of \(X^2\) to the present data revealed no significant differences; however this does not necessarily mean that differences do not exist; the small sample size might restrict the appearance of differences. Had significant differences been apparent in the present data it is likely that they would have been found in a larger sample as well; but the fact that no significant differences appeared form the present sample does not mean that none would appear in a larger sample.
Therefore, the distributions of high, low and mixed scores within individual family units is taken as a very broad indication of the possible effects on the child's moral development of parental attitudes along various dimensions. The results presented below must be regarded as hypotheses derived from a pilot study of the relationships between parental attitudes and moral development in the child; they indicate several important correlations, but these need validation on a larger sample before any implication of causal relationships which they suggest can be trusted.

5. Parental Attitudes And The Child's Moral Development

(a) Strictness

The three PARI dimensions which deal with parental strictness approach the subject at different levels. The dimension Breaking the Will (items 3, 17 and 31 on the attitude scale) stresses parental domination of the child; the dimension Strictness (items 5, 19 and 33) considers the extent to which parents believe that a strict upbringing is good for the child; the dimension Suppression of Sex (items 11, 25 and 39) was interpreted as a special example of the more general area of parental strictness.
The distribution of responses along the dimension of Breaking the Will is shown in Table XXIV; the data for the

**TABLE XXIV**

**Parental Attitudes**

*by Group - Breaking the Will*

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<thead>
<tr>
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<th>C&lt;sub&gt;7&lt;/sub&gt;</th>
<th>E&lt;sub&gt;7&lt;/sub&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>HH</td>
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<td>M</td>
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<td>LL</td>
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<td>LL</td>
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</table>

parents of younger children are shown in part A and those for parents of older children are shown in part B.

The trends in Table XXIV, A suggest two things. First of all, morally normal younger children (group C<sub>7</sub>) are equally likely to come from homes where parental attitudes are strict, permissive or mixed; in contrast, morally mature younger children (group E<sub>7</sub>) are more likely to come from homes where parental attitudes are permissive. Secondly, these trends suggest: that where parental attitudes are permissive (category LL) the child's moral development is likely to be accelerated; that where parental attitudes are strict the child's moral development is far less likely to be accelerated; and that where parental attitudes are mixed
the chances are about even that the child's moral development will be accelerated.

The same kind of assessment can be made of the trends in the data for parents of older children given in Table XXIV B. Morally normal older children have about equal chances of coming from homes where parental attitudes along the dimension Breaking the Will are strict, permissive or mixed; morally immature older children are more likely to come from homes in which both parents hold strict attitudes. Parents holding permissive attitudes along this dimension are equally likely to have an immature or a normal child but parent who hold strict attitudes are more likely to have a morally immature child.

Overall, these data suggest that more strict attitudes along the PARI dimension Breaking the Will correlate with slower moral development and that more permissive attitudes correlate with faster moral development.

Table XXV presents the same breakdown of data for the dimension of Strictness. The data for the younger groups

<table>
<thead>
<tr>
<th>TABLE XXV</th>
<th>Parental Attitudes by Group - Strictness</th>
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<tr>
<td></td>
<td>C7</td>
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<tr>
<td>HH</td>
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<td>M</td>
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<tr>
<td>LL</td>
<td>8</td>
</tr>
</tbody>
</table>

A

B
suggest that morally mature younger children (group $E_7$) are more likely to come from a home where parental attitudes are strict; morally normal children are more likely to come from a home where parental attitudes are mixed or where the parents are strict. It seems that strict parents are more likely to have morally mature children and that permissive parents are more likely to have normal children (Table XXV, A).

These trends do not support the hypothesis put forward for this dimension; it was expected that the correlation would be in the opposite direction. Moreover, this contradictory trend for the dimension of Strictness is supported by the data for the parents of older children (Table XXV, B). Both normal and immature children are more likely to have strict parents (this is particularly true of normal children); but strict parents are more likely to have a morally normal child and permissive parents are far more likely to have a morally immature child.

The findings for the dimension of Strictness contradict the original hypothesis and also contrast with the trends observable in parental attitudes to Breaking the Will and Suppression of Sex. The data for the final dimension is given in Table XXVI.

Parents of morally normal and mature younger children are both more likely to be permissive than strict along
this dimension; however, all fourteen permissive responses from parents in group $E_7$ were at the most extreme level ($D_v \ D_v \text{ or } D_v \ D_w$) while only eight of the eighteen from group $C_7$ were at this level. Parents of morally normal younger children make permissive responses no less frequently than do parents of mature children but they are not as extreme in their opinion. Strict parents are equally likely to have a morally mature or a morally normal child; however, permissive parents are more likely to have a mature child than they are to have a normal child.

TABLE XXVI

Parental Attitudes

by Group - Suppression of Sex

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<tr>
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<th>$C_7$</th>
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<th>$C_{12}$</th>
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<tbody>
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<td>HH</td>
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<tr>
<td>LL</td>
<td>18</td>
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<td>LL</td>
<td>16</td>
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</table>

The trends are less clear for parents of older children (Table XXVI, B). Parents are generally more permissive than Strict; parental strictness correlated about equally with normal and retarded moral development; permissiveness correlated more with moral immaturity than with normal
development. Moreover the level of parental permissiveness along this dimension was much more extreme for parents of immature children - thirteen of the seventeen responses in category LL for group E₁₂ showed the combinations $D_v D_v$ or $D_v D_w$; the corresponding figures for group C₇ are 5 in 16. In other words, not only are parents of morally immature older children more likely to be permissive in their attitudes toward sex, they are likely to be so in a far more extreme manner.

Attitudes to sex were more permissive than strict; extreme permissiveness correlated with faster development in younger children but with retarded development in older children.

Overall, the data for the three dimensions dealing with aspects of parental strictness suggest three things: parental belief that domination of the child is necessary, that he should be taught that the parent is the boss, correlates with slower moral development; parental belief in the efficacy of a strict upbringing correlates with quicker moral development; and an extremely permissiveness attitude towards sex correlates with moral maturity in younger children but with moral backwardness in older children.
(b) **Autonomy**

Two of the three PARI dimensions which relate to the autonomy allowed the child, refer to the opinions which the child should have of his parents: the dimension Excluding Outside Influences (items 6, 20 and 34) suggests that the child should be encouraged to subordinate his own powers of thought and judgement to those of his parents, that he should not question parental reasoning; the dimension Deification (items 7, 21 and 35) alters the emphasis of childish reverence and awe from parental opinions to parents themselves, suggesting that they need nothing more than the fact of parenthood to justify the child's respect. The final dimension in the general area of autonomy is Intrusiveness (items 12, 26 and 40) which emphasizes the parent's right to pry into his child's life.

The phrasing of the PARI items relating to autonomy meant that agreement with the statements indicated a denial of the child's autonomy; such responses were scored low, and a high score for these items indicates disagreement with the PARI statements and implies the encouragement of the child's autonomy. Table XXVII shows the distribution of combined scores within each family unit for the dimension Excluding Outside Influences.
Part A of Table XXVII shows the data for parents of younger children. While morally normal children appear slightly more likely to come from families where both

**TABLE XXVII**

Parental Attitudes
by Group - Excluding Outside Influences

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<td>LL</td>
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</table>

parents encourage autonomy, (group C7, category HH) this trend is much more noticeable for mature children. Parents who appeared willing to exclude outside influences from influencing their children (category LL) were much more likely to have a normal than a mature child; parents who rejected these ideas were more likely to have a mature child.

These trends support the original hypotheses for autonomy although they do not find support at the higher age level (see Table XXVII, B). Parents of older children tend to be less willing to isolate the child from opinions other than their own but this is most marked for parents of immature children. Parents showing encouragement of autonomy along this dimension appear more likely to have
morally immature children.

Table XXVIII presents the distribution of responses along the dimension of Deification. The broad patterns are the same as those noted for the previous dimension,

TABLE XXVIII

Parental Attitudes
by Group - Deification

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<th>E12</th>
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</table>

although parents generally show less encouragement of autonomy in their attitudes to Deification (compare the frequencies in categories HH and LL for each group in Tables XXVII and XXVIII).

For the younger children, those in group E7 were more likely to come from homes encouraging autonomy along this dimension; this trend was reversed for children in group C7. In other words, morally mature younger children appeared more likely to have parents who encouraged their autonomy (discouraged deification)
than who discouraged it; parents of normal children appeared more discouraging of autonomy.

From these findings it follows that parents who encourage the child's autonomy along this dimension are more likely to have a morally mature than a normal child; parents who discourage autonomy are more likely to have a normal child than a mature one.

Again these trends support the original hypotheses, but again they find no support at the older age level (see Table XXVIII, B). Parents of both groups of older children appeared more likely to discourage than encourage the child's autonomy. However, while those parents who discouraged autonomy appeared equally likely to have a normal or an immature child, those who encouraged autonomy seemed more likely to have an immature child. These findings support the trends noted in parents of older children along the dimension Excluding Outside Influences.

Table XXIX presents the data for the final dimension in the area of autonomy - Intrusiveness. The trends observable here are in the opposite direction to that noted for the previous dimensions at both age levels.

At the younger level, morally mature children are equally likely to come from homes showing autonomous,
intrusive or mixed attitudes while normal children are far more likely to come from homes where parents value the child's privacy.

Parents encouraging the child's autonomy appeared more likely to have normal than mature children; those stressing intrusiveness and a denial of the child's autonomy appeared slightly more likely to have a mature child (Table XXIX, A).

**TABLE XXIX**

**Parental Attitudes by Group - Intrusiveness**

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<tbody>
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<td>M</td>
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<td>M</td>
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<td>LL</td>
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At the higher age level (Table XXIX, B), children in both groups were more likely to come from homes encouraging autonomy (discouraging intrusiveness); this tendency was more marked for normal children (group C12). Parents encouraging autonomy seemed equally likely to have a normal or an immature child; but parents discouraging autonomy
were more likely to have an immature child.

Overall, parental attitudes along the three PARI dimensions in the general area of autonomy suggest that they might operate on the child in different ways at different age levels. Parental encouragement of autonomy along the dimensions Excluding Outside Influences and Deification correlated with faster moral development in younger children; it also correlated with slower moral development in older children. In contrast, parental encouragement of autonomy along the dimension Intrusiveness correlated with slower moral development in younger children while discouragement of autonomy correlated with slower development in older children.

(c) Overprotection

The PARI dimensions in the general area of overprotection related to parental anxiety for their child's safety and exertions in the rough and tumble of everyday life. The dimension Fostering Dependence (items 2, 16 and 30) implies that a good parent will make sure that his child is not exposed to any situation which might be too difficult for him to handle; the dimension Suppression of Aggression (items 8, 22 and 36) implies a high level of parental concern that the child should not get involved in
fights; the dimension Fear of Harming the Baby (items 4, 18 and 32) implies a high level of parental anxiety during the normal handling of the young child.

Table XXX presents the data for responses along the dimension Fostering Dependence. A striking feature of these distributions is the high frequency of mixed responses in groups C7, E7 and C12.

**TABLE XXX**

<table>
<thead>
<tr>
<th>Parental Attitudes by Group - Fostering Dependence</th>
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<tbody>
<tr>
<td>C7</td>
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<th>C12</th>
<th>E12</th>
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<tr>
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<tr>
<td>M</td>
<td>13</td>
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<tr>
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Morally mature younger children were far more likely to come from homes in which parental attitudes were mixed; they were also more likely to come from homes in which parental attitudes were overprotective than from those where attitudes were not. Normal younger children were equally likely to come from homes where parental attitudes were mixed or underprotective and were much less likely to come from overprotective homes.
Overprotective parents were equally likely to have morally mature or normal children; underprotective parents were much less likely to have a morally mature child (Table XXX, A).

For the older age group (Table XXX, B), morally immature children were more likely to come from homes emphasizing underprotection than from those emphasizing overprotection. Normal children were most likely to come from homes in which parental attitudes were mixed; they were more likely to come from overprotective than from underprotective homes.

Overprotective parents were more likely to have a normal child; underprotective parents were more likely to have a morally immature child.

The results for the parents of older and younger children are consistent in suggesting that overprotection correlates with faster moral development and that underprotection correlates with slower moral development for the dimension of Fostering Dependence.

The data for the PARI dimension Suppression of Aggression are presented, in Table XXXI. All groups are heavily weighted away from overprotection of the child along this dimension; attention will therefore be focused...
primarily on the proportions of responses in category LL for all groups.

**TABLE XXXI**  
**Parental Attitudes**  
**by Group - Suppression of Aggression**

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<th>C7</th>
<th>E7</th>
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<tbody>
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<td>HH</td>
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<tr>
<td>M</td>
<td>11</td>
<td>5</td>
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<tr>
<td>LL</td>
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<td>16</td>
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</table>

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<th>E12</th>
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<tbody>
<tr>
<td>HH</td>
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<tr>
<td>M</td>
<td>5</td>
<td>2</td>
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<tr>
<td>LL</td>
<td>24</td>
<td>21</td>
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</tbody>
</table>

Parents who scored low along this dimension (indicating an unwillingness to overprotect the child or encourage him to avoid fighting) were more likely to have a morally mature younger child but were equally likely to have a morally normal or immature older child. Parents who scored high on this dimension were equally likely to have a morally normal or mature younger child but were much more likely to have a morally immature older child.

The trends for parents of children in both age groups along the dimension Suppression of Aggression are consistent in suggesting that an overprotective attitude correlates with slower moral development while an opposite attitude correlates with faster moral development. These trends are
in the opposite direction to those noted for the dimension of Fostering Dependence.

The data for the final dimension in the general area of overprotection, Fear of Harming the Baby, given in Table XXXII.

**TABLE XXXII**

<table>
<thead>
<tr>
<th>Parental Attitudes by Group - Fear of Harming the Baby</th>
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<td><strong>C_7</strong></td>
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<td>HH</td>
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<tr>
<td>M</td>
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<tr>
<td>LL</td>
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<tr>
<td><strong>C_12</strong></td>
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<tr>
<td>HH</td>
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<td>M</td>
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<td>LL</td>
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</tbody>
</table>

In contrast to the previous dimension these data are weighted heavily towards overprotection in each group.

Parents who display an overprotective attitude appeared slightly more likely to have a morally mature younger child than a normal one; they were equally likely to have a normal or an immature older child.

Parents who display little concern along this dimension appeared more likely to have a morally mature younger child and also more likely to have an immature older child.

These trends are not at all clear: faster moral development in younger children correlates both with high and low scores along this dimension; slower moral development
in older children correlates with low scores only.

In fact, more clearly defined trends can be picked out if we consider the extremeness of parental attitudes at each age level: for the younger age group, parents in group C7 were much more extreme in their overprotectiveness than parents in group E7 (occurrence of $A_v A_v$ or $A_v A_w$ was 13 out of 16 high-score responses for group C7 and only 12 out of 24 responses for group E7); for the older age group this trend is reversed - parents in group E12 are more extreme in their overprotectiveness (12 responses in 21) than are parents in group C12 (11 responses in 24). In other words, more extreme overprotection along this dimension correlates with slower moral development.

Overall, the data for parental attitudes in the general area of overprotection suggest no consistent relationship with moral development in the child. A lower score along the dimension Fostering Dependence correlated with slower moral development at both age levels while a higher score correlated with faster moral development; in contrast a higher score along the dimension Suppression of Aggression correlates with slower moral development and a lower score correlates
with faster development; finally, more extreme anxiety along the dimension Fear of Harming the Baby correlates with slower moral development.

(d) **Democracy**

The PARI dimensions in the general area of democracy approach the problem of the extent to which parents think that children should be treated as equals. The dimension Encouraging Verbalization (items 1, 15 and 29) suggest that the child's opinion about family rules is a valid one and should be recognized in making family decisions; the dimension Equalitarianism (items 9, 23 and 37) implies that it is wrong for the adult always to dominate the situation and that adjustments by parents are as important as those expected of children; the dimension Comradeship and Sharing (items 13, 27 and 41) proposes that a friendly relationship between parent and child is preferable to one of heteronomy.

The data for the dimension Encouraging Verbalization are presented in Table XXXIII. There is a very noticeable weighting of all groups towards a democratic attitude along this dimension; this is slightly more marked for parents of younger children (Table XXXIII, A). This strong bias in the
data towards democratic attitudes makes the important trends more difficult to see and it is an advantage to consider the extremeness of parental attitudes as well as their general distribution.

It appears from Table XXXIII, A that a democratic attitude correlates more strongly with normal development than with quicker development in younger children. However, responses from parents in group E7 were extreme (A_v A_v or A_v A_w) more often than those from parents in group C7 (12 times in 18 for group E7; 15 times in 32 for group C7).

Similarly, among the parents of older children, the frequency of extreme responses was greater for parents in group C12 (16 times in 23) than for parents in group E12 (11 times in 24). This tendency modifies the general trend observable in Table XXXIII, B for democratic parents.
to be more likely to have a morally immature child than a normal one.

Consideration of extreme responses reinforces the general trends observable along the dimension Equalitarianism (Table XXXIV). The distributions in all groups are weighted slightly less towards democratic attitudes than for the previous dimension.

TABLE XXXIV

Parental Attitudes
by Group - Equalitarianism

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<th>C₁₂</th>
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<tr>
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</table>

Democratic parents of younger children are equally likely to have a morally mature or normal child; non-democratic parents are more likely to have a normal child. In fact, parents in group C₇ showed extreme democratic responses much more often (16 times in 27) than parents in group E₇ (6 times in 17); they also showed extreme non-democratic responses in 2 of the 3 contributions to category LL.
For the older groups, the data in Table XXXIV, B suggest that democratic attitudes are more typical of parents of normal children, than of parents of immature children, and that non-democratic attitudes are more typical of parents of immature children than those of normal children. This trend is supported by the distribution of extreme scores where parents of normal children are more democratic (12 times in 21) those of immature children (8 times in 16).

The data for the final dimension in the general area of democracy, Comradeship and Sharing, are presented in Table XXXV. These distributions suggest the strongest bias towards democratic attitudes seen so far, and again consideration of extreme responses is a useful supplement to the general indication of democracy.

### TABLE XXXV

**Parental Attitudes by Group - Comradeship and Sharing**

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<thead>
<tr>
<th></th>
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<th>C12</th>
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<td>LL</td>
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</table>

There is no real difference between the distributions
of responses for parents of younger children in Table XXV, A; only one parent (from a total of 36 in groups C_7 and E_7) showed a non-democratic response to one of the three items comprising this dimension. However, the distribution of extreme scores reveals that parents in group E_7 are more extreme (16 times in 21) than are parents in group C_7 (21 times in 32).

Similarly, the distributions of high and low democratic attitudes for parents of older children suggest no differences between the groups (Table XXXV, B); but parents in group C_12 have more extreme responses (21 times in 27) than parents in group E_12 (17 times in 24).

Overall, the three PARI dimensions in the area of democracy suggest that the fact of democratic attitudes in itself generally admits little correlation with the child's moral development. However, the strength of parental attitudes does appear important and a more extreme democratic atmosphere within the home correlated with quicker moral development at both age levels. One exception to this trend was noted in the attitudes of parents of younger children along the dimension Equalitarianism, where extreme democratic attitudes correlated with slower moral development.

(e) Verbalization

The items comprising the PARI dimension of Avoidance of
Communication (items 10, 24 and 38) imply that it is best if children are discouraged from complaining to parents about his troubles. Agreement with these statements was scored low and a higher score indicates the encouragement of verbalization. The data for this dimension are presented in Table XXXVI. Both younger groups show a bias towards encouragement of verbalization; the older groups show a much more even distribution across the high, low and mixed categories.

**TABLE XXXVI**

Parental Attitudes by Group - Avoidance of Communication

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<thead>
<tr>
<th>C7</th>
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</tr>
<tr>
<td>LL</td>
<td>10</td>
</tr>
</tbody>
</table>

Parents of younger children who scored high along this dimension were more likely to have a mature than a normal child; parents who scored low were more likely to have a normal child.

The distributions for parents of both groups of older children are identical; there appears to be no correlation
between parental encouragement of verbalization and the child's moral development. Consideration of extreme scores in each of the older groups reveals, in fact, that parents of morally immature children appear to be more encouraging of verbalization ($A_v A_v$ or $A_v A_w$ occurs 7 times in 10 responses) than parents of normal children (6 times in 11). This finding is inconsistent with the trend for younger children and argues against the original hypothesis.

Greater parental encouragement of verbalization correlated with quicker moral development in younger children but with slower development in older children.

(f) **Acceleration**

The PARI dimension Acceleration of Development (items 14, 28 and 42) suggests that the parent should attempt to improve his child's performance in several areas. The data for this dimension are presented in Table XXXVII. The distributions for all groups show a strong bias in favour

### TABLE XXXVII  
Parental Attitudes

<table>
<thead>
<tr>
<th>Group</th>
<th>$C_7$</th>
<th>$E_7$</th>
<th>$C_{12}$</th>
<th>$E_{12}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>HH</td>
<td>18</td>
<td>11</td>
<td>17</td>
<td>16</td>
</tr>
<tr>
<td>M</td>
<td>9</td>
<td>7</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>LL</td>
<td>6</td>
<td>3</td>
<td>9</td>
<td>6</td>
</tr>
</tbody>
</table>

A B
of the encouragement of the child's development.

The data for the younger groups suggests that parents encouraging the acceleration of their child's development are equally likely to have morally normal or mature children; parental discouragement of acceleration was rare but correlated more strongly with slower moral development.

Examination of the frequency of extreme responses for the younger groups reveals that parents of normal children were more often extreme in their responses (15 times in 18) than were parents of morally mature children (6 times in 11).

For the older groups, parents encouraging acceleration were equally likely to have normal or immature children; those discouraging acceleration were more likely to have normal children. Additionally, parents of morally immature children were more often extreme in their encouragement of acceleration (14 times in 16) than were parents of normal children (13 times in 17).

Overall, these data suggest that extreme encouragement of acceleration correlates with slower moral development.

6. The PARI - A Word Of Caution

The data discussed in detail above suggest several important correlations between parental attitudes along selected dimensions and the child's rate of moral development.
These implications need testing with a larger sample before they can be accepted with confidence.

Despite the appearance of these trends there were several features of the data obtained which were disturbing and suggested the possibility that the Parent Attitude Research Instrument might be insufficiently sensitive in some areas to allow an accurate distinction of direction and intensity of belief.

First of all, the distribution of scores along all the dimensions in the general area of democracy (items 1, 9, 13, 15, 23, 27, 29, 37 and 41) were heavily biased towards democratic attitudes; it was necessary to consider the frequency of extreme scores in order to distinguish between parents of normal and exceptional children.

Secondly, individual PARI dimensions which appeared to relate to the same general area of parental opinion occasionally suggested opposing relationships with the child's moral development. Three dimensions stand out prominently in this respect; that of Strictness within the general area of Strictness; that of Fear of Harming the Baby within the general area of overprotection; and that of Intrusiveness in the general area of autonomy.

Thirdly, interpreting the dimension Acceleration is more
difficult than that of the others since this dimension above all, approaches a 'social approval' scale. It is more difficult to know what a high score along this dimension really measures. Is it really parental belief in and practice of acceleratory techniques which is measured? Or is it parental approval of such techniques, perhaps divorced from practical concerns, which is approached.

Of course, the problem of discrepancy between what parents actually believe, what attitudes they will admit to in public and what they will in fact do in practise is very difficult to resolve; a useful and valid attitude scale will reduce the discrepancy. It is possible that the PARI is not a very good attitude scale for use on a British sample - it was validated on samples of American mothers. No warning is given that the PARI should be restricted to a sample of mothers, although several dimensions omitted from the original for use in the present study did relate specifically to women.

There are four points to be borne in mind in the assessment of the value for future research of the preceding discussions of parental attitudes and the child's moral development; two relate to the PARI itself and two to the sample involved. First, is the PARI a more valid
test of American than British attitudes? Second is the PARI a valid test of attitudes at all? Third, might the absence of significant differences in the data for separate groups in the present study be attributed to the small sample size alone? Finally, might the trends noted tentatively (due to the small sample size) reflect actual and important differences in parental attitudes which do, in fact, correlate with and even contribute towards different rates of moral development in the child?

The first point is difficult to assess. A useful attitude scale should distinguish groups of high and low scores in a sample; apparently the PARI dimensions did so with the samples used in validation work. Several PARI dimensions allowed such a distinction with the present sample as well although others, notably those relating to democracy, did not.

The second point is also difficult to assess without more experimental work. It was suggested earlier that dimensions apparently approaching the same general area might evoke attitudes different in intensity and, more important, different in direction (see the data for the areas of strictness and autonomy). The PARI items had been validated within each dimension but the dimensions
had not been validated as forming the general areas under which they were grouped in the present study. The present data suggest the need to give consideration to the inter-relationship of dimensions forming particular attitude clusters.

The third point sets limitations on the usefulness of the present data but, in contrast to the first two, not its validity. It is possible that no more clear cut trends could be seen in the data because too few respondents were involved. This is particularly true where the highest refusal rates were encountered (especially in groups $E_7$ and $E_{12}$), and means that the trends observable must be given the status of implications and hypotheses rather than that of facts.

The final point is obviously very important and justifies the investigation of the relationships between parental attitudes and the child's moral development in more detail. The trends noted in the present data were often sufficiently consistent between dimensions in the same area and between age groups to imply important correlations between certain parental attitudes and the child's quicker or slower moral development.

There is a need for further study of these correlations in respect of the theories of moral development
of both Piaget and Kohlberg; both emphasize the cognitive aspects of moral judgement and there has been a distinct reluctance for psychologists to attempt explanations of development in this area which take account of the parent-child relationship. This type of explanation has been attempted successfully in relation to the other aspects of conscience, particularly the appearance of guilt feelings and the child's willingness to confess after transgressions; it is a serious omission in the study of the cognitive aspect of conscience.

7. Other Aspects Of The Family

The discussion so far has dealt at length with the correlations noted in the present data between the child's rate of moral development and parental attitudes along various dimensions. Information relating to other aspects of the child's family was requested on the final sheet of the PARI (see Figure 9 above) and the major suggestions of these data are discussed briefly now. Again these trends are only suggestive that their further consideration with a larger sample would be useful. The distributions refer to data collected from all 85 respondents since the effect of the interaction of husband and wife is not
important in the areas discussed.

(a) Social class

We already noted in the results of the tests of moral judgement given to children that middle class children had an advantage over working class children, and that this advantage was more marked in the younger age groups (see Chapter 6, section 6). The distribution of exceptional and normal children at both age levels between middle and working class families supports these trends (see Table XXXVIII).

<table>
<thead>
<tr>
<th></th>
<th>C_7</th>
<th>E_7</th>
<th>C_12</th>
<th>E_12</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>9</td>
<td>6</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>B</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

* A manual workers    B non-manual workers

Middle class parents have an equal numerical contribution to make in groups C_7 and E_7 but they are proportionately overrepresented in group E_7 and under-represented in group C_7. In other words a middle class family background seems to correlate with faster moral development in younger children.
The distributions for parents of older children is almost identical although middle class parents are slightly overrepresented in group C\_12, that is they appear slightly more likely to have a normal than an immature child.

(b) Family size

It was expected that increasing family size would correlate with slower moral development mainly because of the expected correlation between larger family size and a working class home. Table XXXIX suggests that the second assumption is correct; working class families were far more likely than middle class families to have

**TABLE XXXIX**  Distribution of Families by Social Class and Family Size

<table>
<thead>
<tr>
<th>No. of children</th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>2 &amp; 3</td>
<td>19</td>
<td>9</td>
</tr>
<tr>
<td>4+</td>
<td>13</td>
<td>2</td>
</tr>
</tbody>
</table>

* A manual workers  B non-manual workers

more than four children.

Table XL suggests that the first assumption is also correct. Parents in group E\_7 were far less likely than parents in group C\_7 to have more than four children; parents in group
C12 were similarly far less likely than parents in group E12 to have more than four children. In other words, increasing family size (especially when four or more children per family are involved) appears to correlate with slower moral development in children at both age levels considered.

TABLE XL

<table>
<thead>
<tr>
<th>No. of children</th>
<th>C7</th>
<th>E7</th>
<th>C12</th>
<th>E12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2 &amp; 3</td>
<td>8</td>
<td>8</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>4+</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>7</td>
</tr>
</tbody>
</table>

(c) Parental education

It was expected that longer parental education would correlate with faster moral development in the child. Again this derived from an expected link between longer education and a non-manual occupation being followed by the father.

Table XLI suggest that the second assumption is correct. Middle class fathers were more likely to stay on at school until age 16 or 17 years, than were working class fathers. The tendency was even more marked for the mothers, with middle class mothers claiming some form of full time education up to age 18 years far more often than working class mothers.
TABLE XLI  Distribution of Parents by Social Class* and Length of Education

School-leaving age (years)

<table>
<thead>
<tr>
<th></th>
<th>Husbands</th>
<th></th>
<th>Wives</th>
<th></th>
<th>Both</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>18+</td>
<td>16 &amp; 17</td>
<td>15</td>
<td>18+</td>
<td>16 &amp; 17</td>
<td>15</td>
</tr>
<tr>
<td>A</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>72</td>
</tr>
<tr>
<td>B</td>
<td>0</td>
<td>2</td>
<td>11</td>
<td>2</td>
<td>4</td>
<td>18</td>
</tr>
</tbody>
</table>

* A manual workers  B non-manual workers

Table XLII suggests some support for the first assumption. Parents of children in group E7 were more likely than those of children in group C7 to have stayed at school beyond their sixteenth birthday; parents in group E12 were slightly less likely than those in group C12 to have stayed on beyond their sixteenth birthday. In other words, longer parental education appears to correlate with faster moral development.

TABLE XLII  Distribution of Parents by Length of Education and Group

<table>
<thead>
<tr>
<th></th>
<th>C7</th>
<th>E7</th>
<th>C12</th>
<th>E12</th>
</tr>
</thead>
<tbody>
<tr>
<td>School-leaving age (years)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18+</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>16 &amp; 17</td>
<td>2</td>
<td>5</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>15</td>
<td>21</td>
<td>11</td>
<td>19</td>
<td>19</td>
</tr>
</tbody>
</table>

d. Summary

It is suggested that several features of the child's
family background correlate with each other. Correlations were noticed: between a middle class background and quicker moral development; among a middle class background, smaller family size and quicker moral development; and among a middle class background, longer parental education and quicker moral development. In themselves, these trends are not conclusive since they are based on data collected from a small sample of parents; but they do suggest that further investigation of these relationships would be useful.

8. **Summary and Conclusions**

A modified version of the Parental Attitude Research Instrument (Schaeffer and Bell, 1956) was sent to both parents of 64 children. These children were split into four groups: sixteen morally mature 7 and 8 year olds, sixteen 'normal' 7 and 8 year olds, sixteen morally immature 11 and 12 year olds and sixteen 'normal' 11 and 12 year olds.

From the 128 PARI forms distributed, 85 were completed and returned. The major part of the data analysis centres on the 37 families where both husband and wife returned their forms. For each of the 42 PARI items, the responses of the parents from these families were assigned to one of three categories: high, where both parents scored high; low, where both scored low; or
mixed, where one parent scored high and the other scored low. The distributions of high and low scores along each of the PARI dimensions was compared between groups of parents of exceptional and control children at both age levels.

The success of the attempt made in this chapter to link the child's rate of moral development with certain parental attitudes may be judged from Table XLIII which reports the correlations noted between these two variables. At each age level 28 comparisons were made - between the child's moral maturity and both high and low scores along each of 14 dimensions of parental attitudes. For the younger children correlations were suggested in 21 of the 28 comparisons: 14 of these correlations were in the expected direction, 7 reversed the predicted trend; 7 comparisons allowed no correlation between parental attitudes and the child's moral development. For the older children, 18 correlations were suggested, but 11 of these were opposite to the predicted direction; 10 comparisons allowed no correlation with the child's rate of moral development.

On the basis of these results it was proposed that parental attitudes are a more effective influence on the child's development when he is young. The younger child, with his less well organized and more unstable systems of thought and moral judgement, appeared more sensitive and susceptible to variations in parental attitude than did the older child.

Within the broader areas of parental attitudes some particular dimensions appeared to be most effective at different age levels.
TABLE XLIII  Correlations between Parental Attitudes and the Child's Moral Development at Two Age Levels

Key: ( ) expected correlation reversed; S - correlated with slower moral development. F - correlated with faster moral development. N - no correlation noted.

<table>
<thead>
<tr>
<th>Young</th>
<th>High Dimension</th>
<th>Low Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>Breaking the Will</td>
<td>F</td>
</tr>
<tr>
<td>F</td>
<td>(Strictness)</td>
<td>S</td>
</tr>
<tr>
<td>N</td>
<td>Suppression of Sex</td>
<td>F</td>
</tr>
<tr>
<td>F</td>
<td>Excluding Outside Influences</td>
<td>S</td>
</tr>
<tr>
<td>F</td>
<td>Deification</td>
<td>S</td>
</tr>
<tr>
<td>S</td>
<td>(Intrusiveness)</td>
<td>F</td>
</tr>
<tr>
<td>N</td>
<td>(Fostering Dependence)</td>
<td>S</td>
</tr>
<tr>
<td>N</td>
<td>Suppression of Aggression</td>
<td>F</td>
</tr>
<tr>
<td>S</td>
<td>Fear of Harming the Baby</td>
<td>F</td>
</tr>
<tr>
<td>F</td>
<td>Encouraging Verbalization</td>
<td>N</td>
</tr>
<tr>
<td>S</td>
<td>(Equalitarianism)</td>
<td>N</td>
</tr>
<tr>
<td>F</td>
<td>Comradeship and Sharing</td>
<td>N</td>
</tr>
<tr>
<td>F</td>
<td>Avoidance of Communication</td>
<td>S</td>
</tr>
<tr>
<td>S</td>
<td>(Acceleration)</td>
<td>N</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Old</th>
<th>High Dimension</th>
<th>Low Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>Breaking the Will</td>
<td>N</td>
</tr>
<tr>
<td>F</td>
<td>(Strictness)</td>
<td>S</td>
</tr>
<tr>
<td>N</td>
<td>(Suppression of Sex)</td>
<td>S</td>
</tr>
<tr>
<td>S</td>
<td>(Excluding Outside Influences)</td>
<td>N</td>
</tr>
<tr>
<td>S</td>
<td>(Deification)</td>
<td>N</td>
</tr>
<tr>
<td>N</td>
<td>Intrusiveness</td>
<td>S</td>
</tr>
<tr>
<td>F</td>
<td>(Fostering Dependence)</td>
<td>S</td>
</tr>
<tr>
<td>S</td>
<td>Suppression of Aggression</td>
<td>N</td>
</tr>
<tr>
<td>S</td>
<td>Fear of Harming the Baby</td>
<td>S</td>
</tr>
<tr>
<td>F</td>
<td>Encouraging Verbalization</td>
<td>N</td>
</tr>
<tr>
<td>F</td>
<td>Equalitarianism</td>
<td>N</td>
</tr>
<tr>
<td>F</td>
<td>Comradeship and Sharing</td>
<td>N</td>
</tr>
<tr>
<td>S</td>
<td>(Avoidance of Communication)</td>
<td>N</td>
</tr>
<tr>
<td>S</td>
<td>(Acceleration)</td>
<td>F</td>
</tr>
</tbody>
</table>
Thus within the area Autonomy, the dimensions Excluding Outside Influences, and Deification had most influence on the rate of development of younger children while that of Intrusiveness seemed an important influence on older children. Also, within the broader area of Democracy, the dimension Equalitarianism showed a stronger relationship to moral development in older children.

On a broader level, correlations were noted among a middle class background and smaller family size, longer parental education and quicker moral development.

Overall, these results suggest that further research might usefully consider certain aspects of parental opinion (especially in relation to the child's autonomy, democracy in the home, strictness and babying) as an important group of social factors influencing the rate of moral development in the child. This approach to causality in moral development has been wrongly neglected in favour of psychological explanations of the process.
CHAPTER 8

REAPPRAISAL

It is difficult to assess three years' work in a manner which is detailed enough to indicate the development of ideas and yet brief enough to avoid needless repetition of what has gone before. The purpose of this final chapter is to attempt a summary of the scope of the present thesis and to indicate some lines of inquiry which might be usefully pursued in the future. The original aim of the present study was a straightforward testing of Piaget's theory of moral development; the simplicity of this aim was soon confounded in three main ways.

In the first place, moral development is not a unitary phenomenon; Piaget's own investigations resulted in the isolation of eleven separate moral dimensions. Although Piaget regarded all these dimensions as developmental, follow-up work has shown that only six are developmental in the strict sense of the word.

Secondly, Piaget's thesis on moral development can be properly understood only when it is located in his more general theory of intellectual development. Piaget emphasizes the
cognitive aspects of morality (what the child knows about right and wrong, good and bad, better and worse). The ability to make distinctions of the type required by Piaget's tests of moral judgement is largely intellectual; the factors which contribute to cognitive development in Piaget's scheme (especially those involved in the decline of egocentric thought) also contribute to the development of the more mature levels of moral judgement. Piaget's cognitive theory is now a massive structure based on a half-century of work; aspects of the theory are still being extended by Piaget and by other workers throughout the world.

Thirdly, Piaget's theory of moral development is only one among several such theories; since he emphasizes the cognitive aspects of morality he ignores other equally important aspects such as deviant behaviour and the factors which contribute to self-control (e.g. guilt). Additionally, there have been some recent developments even within the cognitive approach to morality which supersede Piaget's work to a great extent and there has, of course, been a formidable amount of research carried out in attempts to test and modify Piaget's original ideas.

A major aim of the present study therefore, became an understanding of Piaget's theory of intellectual development. Because of its diverse and extremely complex nature there are
many different ways in which this theory might be approached; the two selected for this study are Piaget's chronological account of the stages of the child's development and a terminological approach which explains the major items in Piaget's technical vocabulary.

The first approach to Piaget's work is perhaps the most simple of all. Piaget has outlined four main periods of development in the child's life and has assigned rough age levels to each; the sensori-motor period lasts up to about 2 years of age, the pre-operational period from 2 to 7 years of age, the concrete operational period from 7 to 11 years of age, and the formal operation period begins after about 11 years of age and continues throughout the remainder of the individual's life. This neat packaging of the child's development belies the true complexity of Piaget's scheme and it is unfortunately true that many of Piaget's tests of development have been applied without regard for the deeper theoretical implications of his work; they have become little more than interesting 'party games'.

For this reason it was felt that the terminological approach to Piaget's cognitive theory was needed to emphasize what is, in fact, his major contribution to the field - an indication of the processes which contribute to the child's intellectual development. Piaget's technical vocabulary is highly specialized and often unique; many crucial aspects of his theory receive only cursory
acknowledgement during a chronological account of the child's development. In the present study separate consideration was given to the functional invariants of Piaget's scheme (adaptation, accommodation and assimilation), to the general aspects of structure, criteria for stages of development and equilibration theory, and finally, to the several important features of egocentric thought (reversibility, centering, transduction etc).

Inevitably the cognitive and terminological approaches are complementary; it is impossible to adopt one without some discussion or implication of the other. However, their separate detailed consideration obviously allows each to be developed more fully and their slight difference in emphasis allows a much clearer understanding of Piaget's work and theoretical orientations to be gained. These important ideas were discussed in Chapter I.

Piaget's theory of moral development was linked to his more general theory of cognitive development insofar as the appearance of certain intellectual abilities (especially the features of non-egocentric thought) facilitated the child's progress from decisions limited by a morality of constraint to those deriving from a morality of co-operation. In his discussion of moral development Piaget indicated two ideal types of social relationship into which the child could enter. The first was one of heteronomy in which the child was
restricted in his actions and thought by adult commands; the type of judgement deriving from this form of relationship Piaget termed objective; the child was subject to a morality of constraint. In contrast, the second type of social relationship was based in equality and co-operation; this relationship commonly obtains among peers and in the interaction of adults and older children; it is rarely encountered between adults and younger children. Piaget believed that these relationships of equality gave rise to the more mature forms of moral judgement which he termed subjective; the child showed evidence of a morality of co-operation. Piaget applied this constraint/co-operation dichotomy in his discussion of moral development proposing that it was an important influence on the child's development.

In fact, it is possible to isolate eleven moral dimensions from Piaget's work although it seems unlikely that Piaget was aware of their separate existence; his account of them is too confused and he concentrates his efforts towards demonstrating the importance of the nature of the child's social relationships for his moral development in general. A comparison of the stages of development along the moral dimension reveals that the change from less mature to more mature forms of judgement occurs at roughly the same age level for each. In fact, these changes occur at about 8 years of age; this is the same time that
egocentric thought shows its most rapid decline. The correlation between the disappearance of egocentric thought and the appearance of mature forms of moral judgement is the major link between Piaget's theories of cognitive and moral development.

It is now apparent that adult constraint has only a minor contribution to make to the child's development, although Piaget laid great emphasis on this factor. More important (in cognitive or moral development) are the opportunities for the process of accommodation through equilibration; these opportunities are influenced by many factors including the child's age, the 'richness' of his environment, and, of course, the extent to which he is dominated by adult restrictions or is free to interact with his peers. The variety of the factors which affect the child's rate of moral development has become clear through the many replication studies to which Piaget's ideas gave impetus. Piaget's main concern has always been with the sequence of stages of development; he has shown remarkably little interest in factors which might alter the child's rate of development from stage to stage. This was one of the earliest criticisms of Piaget's work and the first modifications to his theory of moral development suggested by the replication studies indicated the effects which intelligence, socio-economic background, nationality, etc. played in influencing the child's test performance.
Perhaps the most important fact to appear from the follow-up work is that not all of Piaget's eleven dimensions are developmental in the strict sense of the word; while the content and sequence of stages for six dimensions has been validated, the results of the studies of the other five have been inconsistent. The six developmental dimensions are objective responsibility, immanent justice, expiation v. restitution, absolutism of value, wrong defined as punished and fixity of rules; the results of the replication studies have been consistent in correlating increasing age with a greater maturity of response along these dimensions. The remaining dimensions (duty defined as obedience to authority, reciprocity in the definition of rights, punishment by authority v. retaliation, individual and collective responsibility and favouritism in the distribution of rewards and punishment) have been studied far less intensively but the results have shown less consistency than those of the developmental dimensions; the most important difference has been a lack of any correlation between maturity of response and age.

The twenty sets of studies which were carried out to test Piaget's ideas on moral development considered a variety of variables other than age which were expected to influence the child's performance. Correlations have been most easily established between performance on the developmental dimensions and such items as intelligence, social class and explicit
training as in religious teaching; attempts to link these variables with performance on the non-developmental dimensions have largely failed. Some of the correlations established are not unexpected — such as that between higher I.Q. and better performance on Piaget's tests — others are less obvious: the actual content of the test situations may affect the child's level of response; while middle class children tend to do better than working class children the latter have an advantage if the test situations are less cognitive in content and more easy for the child to identify with; few differences in performance have been established between the sexes; religious participation is of itself no guarantee of greater moral maturity. As a result of these studies Piaget's original hypotheses have been modified to allow for the affects of particular variables.

A second set of studies has been concerned with the mechanism of moral development rather than with the variables affecting performance on Piaget's tests. On the basis of these experiments it is suggested in the present study that equilibration theory can be extended from the field of cognitive development into the field of moral development as an explanation of change between levels of judgement.

The eleven dimensions of Piaget's scheme of moral development were discussed in Chapter 2; the variables considered in the replication work and the clarification of the mechanism of moral development were discussed in Chapter 3.
Piaget's emphasis on the cognitive aspects of morality means that he ignores other important aspects which have been discussed by other workers. Freud's writings on the super ego and the processes of identification and the conditioned response arguments of the learning theorists are both attempts to explain the guilt aspects of conscience. These discussions indicate the ways in which the child's conscience might influence his behaviour in situations where he is tempted to steal, cheat or lie, say; Piaget's theory allows none of this sort of prediction since it is possible for the individual to act in a deviant manner even if he is fully aware that what he is doing contravenes the social or legal codes.

Even within the cognitive approach to moral development Piaget's work has severe limitations. The tests he used to assess the maturity of judgements are very simple affairs and are not sufficiently sensitive to highlight shades of opinion other than the broad dichotomies which typify his eleven moral dimensions. Kohlberg is a psychologist working within the cognitive approach to moral development whose ideas have largely superseded those of Piaget. Kohlberg's scheme of moral development comprises twenty-five aspects of morality each of which has six levels of maturity; these 150 categories of judgement subsume Piaget's eleven dimensions while allowing a much more sensitive assessment of moral development. The greater flexibility of Kohlberg's scheme derives from his use of test items which pose moral dilemmas far more complicated than
those of Piaget. These important ideas of Kohlberg and also
the contributions of Freud and learning theory to moral
development were discussed in Chapter 4.

The result of the theoretical discussions of the first
four chapters was a much better perspective on Piaget's theory
of moral development. The several modifications of Piaget's
original thesis suggested by replication studies were noted;
approaches other than Piaget's cognitive one were discussed;
and Piaget's theory of moral development was shown to bear some
similarity to his theory of cognitive development. One major
omission of the replication studies was noted: Piaget laid great
emphasis on the nature of the adult-child relationship as a factor
influencing the moral judgements of the child; this factor has
received little empirical attention in the replication work. The
present study goes some way towards filling this gap by suggesting
correlations between parental attitudes in six broad areas and the
rate of moral development in the child.

Generally, responses to the six tests of moral judgement used
in the present study became more mature in older children. No
consistent sex differences could be seen in the present data
although higher intelligence and a middle class home background
did accelerate the child's rate of development. Also, groups of
exceptional children were isolated at either end of the age range
studied. First was a group of 11 and 12 year olds whose responses
were consistently much less mature than those of their peers; second was a group of 7 and 8 year olds whose responses were more mature than both their peers and the other group of exceptions. The parents of these two groups of children formed the basis for the second part of the present empirical work - an investigation of parental attitudes to various aspects of child rearing. Attitudes were assessed along fourteen dimensions grouped in six broader areas by means of the Parental Attitude Research Instrument (Schaeffer and Bell, 1958). The family was taken as the basic unit and various combinations of maternal and paternal attitudes were noted. Comparisons were made at two age levels: first, between parents of morally mature younger children and those of morally normal younger children; and second, between parents of morally immature older children and those of morally normal older children. The several correlations noted between parental attitudes and the child's rate of moral development have important implications but they do need checking out on a larger sample.

First, slower moral development at both age levels correlated with a greater belief in the subservience of the child to the adult but not with a greater belief in the benefits of a strict upbringing for the child; permissive attitudes to sex correlated with faster development in younger children but with slower development in older children.
Second, it appears that certain aspects of the child's autonomy might be more effective at particular age levels than at others. Parental discouragement of the child's isolation from opinions other than those of his parents correlated with faster moral development in younger children; the same correlation was noted for discouragement of the child's tendency towards extreme reverence for his parents. Parental attitudes to the child's right to privacy assumed greatest importance for older children and parental intrusiveness correlated with slower moral development here.

Third, while the fact of democratic attitudes towards the child's involvement in family affairs did not correlate with different rates of moral development, extreme attitudes along this dimension did; more extreme democratic attitudes correlated with quicker moral development at both age levels.

Fourth, parents of the morally more advanced children at both age levels seemed less inclined to worry about their children when they were very young or about their being involved in fights; however, these parents also seemed more likely to protect their children from the rough-and-tumble and difficulties of everyday life.

Finally, parental discouragement of discussion with the child and of attempts to accelerate the child's development correlated with slower moral development in younger children.
The opposite trend appeared in the responses of parents of older children with encouragement of verbalization and acceleration correlating with slower moral development. Certain other aspects of family life showed correlations with different rates of moral development and these could be traced back in part to the effects of a middle class background in promoting moral development; this tendency was first noted in the data for the original sample of children and was reflected in the subsample of exceptional children and their controls. Two factors in particular appeared to correlate with both a middle class background and faster moral development in the child—these were smaller family size and lengthier parental education.

All the trends and correlations noted between parental attitudes and the child's moral judgements are tentative conclusions; they are derived from a small sample and need checking. They do indicate support for several of the implications of Piaget's discussion of the parent-child relationship as an influential factor in moral development and they suggest that more research in this area would be useful.

The indications noted above of the several factors which influence the child's rate of development are further evidence of the inadequacy of Piaget's original thesis as an account and explanation of moral development. It is also further evidence of the complexity of the field of morality and suggests the need
to give separate consideration to the several aspects of moral development. It is likely that Kohlberg's recent work will provide the impetus for a renewed interest in moral development and should supersede that of Piaget since it is far more complex and sophisticated and since it encompasses Piaget's eleven moral dimensions; however, there would still appear to be the need to investigate parental attitudes in relation to Kohlberg's work. Since Kohlberg also adopts a cognitive approach to moral judgements it seems likely that the correlations suggested from the present study between parental attitudes and moral development would have relevance to the refinement of Kohlberg's scheme.

There is an increasing interest in the practical aspects of theories of moral development; the emphasis is more on the uses to which the theories can be put in the field of moral education rather than on their existence as areas of study per se (witness Wilson et al., 1967, for the Farmington Trust and Kohlberg, 1967). The theories discussed in this thesis were not developed to assist in the task of moral education; they were developed in an attempt to gain a better understanding of a particular aspect of human behaviour. This is not to say that their findings have not been applied in attempts to influence this development. Kohlberg's theory in particular has had practical significance because he has discussed the problem of moral education and has suggested ways in which his own scheme could assist this process (Kohlberg, 1967).
The fact that his theory of moral development is now superseded is really of little importance to Piaget's position in the field of developmental psychology. Piaget's study of moral development is only a very small part of his total work and he wrote only one book in this particular area; in view of his industrious and detailed approach to intellectual development it seems likely that he would have extended his original work on moral development had his efforts been applied there. However, it is in the field of intellectual development that Piaget's position is most strong; there is now a formidable body of data amassed by Piaget and others throughout the world to support his thesis on the stages of mental growth through childhood and adolescence and the process of development from stage to stage. It is in this area, and especially in relation to the process of development (equilibration theory, factors contributing to the decline of egocentric thought, etc.) that much work needs to be done. It is in these areas, no doubt, that most research derived from Piaget's ideas will stem in the future.
ENDNOTES
1. More recent comment by Piaget and Inhelder on their general theoretical approach is given in Tanner and Inhelder (1956-60) especially volumes I and IV. Lovell (1968), Beard (1969), Boyle (1969), Phillips (1969) and Richmond (1970) also give fairly concise accounts of Piaget's theoretical orientation.

2. Four types of assimilation are distinguished by Piaget. These types - functional, generalizing, recognitory and reciprocal - refer to slightly different interpretations of the term and are explained later on.

3. Schemas - sometimes referred to as schemata - in Piaget's theory are the individual behavioural units with which the child operates on his environment. They are the frameworks which combine to form the structure of the child's thought; in restricting the child's interaction with his environment, they limit his organization, and hence his understanding of events in the world.

4. See Flavell, 1963, pp. 55-58; and Boyle, 1969, pp. 32-34.

5. In this context 'situation' would be given a very broad interpretation to include new objects or activities with which the child might be faced.

6. Later on (Chapter 4) we shall see that equilibration theory has been used in Kohlberg's explanation of moral development.

7. See Piaget, 1960b, for an expansion of the arguments outlined here.

8. This is the term which Piaget uses in preference to stage which he applies to the component parts of each period.

9. The first stage of the sensori-motor period, in which the child's behaviour is purely reflex in nature, is unique since it has no preceding stage (other than the foetal period) for which it can be regarded as an equilibrium level.

10. The foetus can kick for example, and some babies delivered by Caesarian operation have been found sucking their thumbs.

11. Although Piaget's main concern in the sensori-motor period has been the genesis and slow development of mental representation, he has also described physical behaviour in detail. These observations are reported at greater length elsewhere and the interested reader is referred to Flavell, 1963, p. 122-50,
where consideration is given to imitation, play, the child's conception of objects, space, causality and time, and the development of each through Piaget's six stages in the sensori-motor period is traced. See also Phillips, 1969, pp. 39 ff, and especially Table II, pp. 48-49.

12. Certain sensori-motor activities such as facial and bodily gesturing remain additional forms of communication.

13. These and other related aspects of Piaget's model of the child's intellectual processes are discussed in detail later - see pp. 52 ff.

14. The effects of each of these aspects of the child's thought are given clear explanation in Phillips, 1969, pp. 58-67 and in Richmond, 1970, pp. 14-30, where there is given an outline of several of Piaget's conservation tests. See also below, section 6, pp. 52 ff.

15. He may maintain that there is more water because the second column is taller; alternatively, he may maintain that there is less water because the column is thinner.

16. In fact, the child is asked 'If all the brown beads were removed would there be any beads left?' Answer: 'Yes, the white ones'; and 'If all the wooden beads were removed would there be any left?' Answer: 'No'.

17. Apart from irreversibility, two further related restrictions on the child's thought are operating here. One is the child's centering on the colour dimension which happens in this case to be irrelevant though perceptually difficult to ignore; the other is his use of transductive reasoning, moving from part to part and ignoring part-whole relationships. In fact all three restrictions form parts of the more general disability of egocentric thought and all tend to disappear together, as is explained later on (see pp. 52 ff). All these restrictions are very closely interrelated and changes in one aspect reflect and are reflected by changes in the others.

18. An interesting and important series of studies related to egocentric thought is reported by Flavell et al, 1968. These studies clarify the restrictions imposed by egocentric thought and give an indication of the factors which promote its decline.

19. A somewhat similar argument is applied by Piaget to explain the child's moral development, a point to which we return later on (see Chapters 2 and 3).
20. For example, the four-group and the equilibrium of a set of scales - see Flavell, 1963, pp. 212 ff, and Boyle, 1969, pp. 73 ff.

21. These groupings are at times quite abstract and the interested reader is referred to Flavell, 1963, pp. 172-87 and pp. 190-95, where they are discussed at length. See also Boyle, 1969, pp. 52-88.

22. In baking, for example, the actions set out in a recipe must be followed exactly; changing the order in which ingredients are added would produce a mixture unsuitable for optimum results.

23. It might be interesting to apply Piaget's tests of mental functioning at a much higher age level to see if any pattern of decline is apparent in senility and to compare any such pattern with the development of intellectual structures in childhood.


25. 'Transcribers' here refers to those writers who have attempted to phrase the translations of Piaget's books into more understandable English.


27. For even greater accuracy other considerations such as the time of day, is the water being run by Mummy or Daddy?, has the water run long enough to fill a bath?, etc. must be taken into account.

28. The system will, of course, be internally dynamic.

29. Except perhaps in cases of mental retardation where biological factors set severe limitations on the child's ability to accommodate.

Chapter 2

1. In fact, Piaget makes use of data collected from at least fourteen separate samples in his study of moral development. These samples may be distinguished after only the most careful scrutiny of The Moral Judgement of the Child and this obscurity typifies Piaget's methodological approach. The samples are these: one of twenty boys aged 12-13 years
(1932, p. 13); one of a 'hundred odd subjects' (1932, p. 17); one of at least 9 girls (1932, pp. 69 ff); two samples of indeterminate size used for the investigation of objective responsibility and lies (1932, pp. 116 ff and pp. 136 ff); Piaget's own children (1932, e.g. p. 177); a sample of 65 children aged 6-12 years, plus 'some 30 myself' (1932, p. 207); one of 100 children which could possibly be those included in the second sample above (1932, p. 219); one of about 60 subjects aged 6-14 years (1932, p. 232); one of 40 children aged 5-13 years (1932, p. 244); one of 167 children aged 6-9 years interviewed by Mlle. Rambert (1932, pp. 251, 263 and 268); one of an indeterminate number of children from Neuchatel (1932, p. 251); one of about 150 children aged 6-12 years also interviewed by Mlle. Rambert (1932, p. 276); and finally, a sample of indeterminate size comprising children aged 5-12 years. (1932, p. 277).

2. The better performance by girls in Bull's sample is attributable in part to their higher I.Q. at all age levels.

3. Piaget did not question children under 6 years of age since they had difficulty remembering the paired stories and so could not compare them. See Piaget, 1932, p. 120.

4. It is perhaps presumptuous of Piaget to relate early development to the nature of the parent-child relationship without evidence; one of the aims of the present study is to provide some data relevant to this problem - see Chapter 7.

5. The validity of the variables of peer group participation and adult constraint as factors contributing to the child's faster progress along Piaget's moral dimensions is discussed in Chapter 3.

6. C.f. Kohlberg's moral dilemmas in Chapter 4.

7. This, in essence, is the stimulus-response argument of classical learning theory.

8. These situations figured in Piaget's investigation. See Piaget, 1932, pp. 200-01.

9. See Piaget's data, 1932, p. 297, and Table III.

10. In fact, the importance of peer group co-operation as a factor influencing the child's moral development is doubtful, See Chapter 3.

11. See especially the Nuffield Foundation publication "Beginnings"
(1968) which reports the attempt to combine Piaget's general views on co-operation with his specific experiments on conservation as a new approach to teaching. See also the approach of the Farmington Trust to moral education as in Wilson et al (1967).

Chapter 3


2. For discussions of social class in relation to Piaget's work, see for example, Harrower (1934), Boehm (1957-62), Boehm and Nass (1962), Lerner (1937), MacRae (1954) and Johnson (1962a).

3. See Jacques (1968) for a detailed account of this work.

4. The two tests devised Macauley and Watkins have also been applied more recently by Edwards (1965; Edwards and Pringle, 1964) and Bull (1969).

5. Some of these ideas are elaborated by Kohlberg (e.g. 1963b) but his theory differs in that it has more stages which appear at different age levels. See Chapter 4.

6. The development dimensions are objective responsibility, immanent justice, expiation v. restitution, absolutism of value, wrong defined as punished and fixity of rules - see Table V. The non-developmental dimensions are duty defined as obedience to authority, reciprocity in rights, punishment by authority v. retaliation, individual and collective responsibility and favouritism in the distribution of rewards and punishments - see Table VI.

7. These studies comprise all the validation work deriving from Piaget's theory of moral development except for Lerner (1937) and McCord and McCord (1960) to which access could not be gained.

8. The tendency for rule fixity to decline in older children has also been noted in a minor research project. See Lydiat, 1967.

9. The dimension of absolutism of value has been shown to be developmental although the relevant studies do not appear in Table IV. The supporting data in this case are taken from Kohlberg, 1963a, Table 5, p. 318, and derive from the work of Lerner (1937) and McCord and McCord (1960). Also the work of Flavell et al (1968), has thrown considerable light on
the problem of egocentric thought as a general cognitive defect and, by implication, it has supported the developmental nature of the dimension of absolutism of value in the field of moral development.

10. Although not reported in Tables IV and V, the work of Flavell et al, 1968, has shown higher intelligence to correlate with the quicker decline of egocentric thought (implied in the dimension of absolutism of value). The relationship between intelligence and egocentric thought is circular to some extent, the one influencing the other; it is the less egocentric and more intelligent children who are able to empathize, to consider points of view other than their own, and so take a more decentered view of the situation.

11. The results of two of these three must be treated with caution. Abel's (1941) measure of constraint was not very accurate or objective, and Johnson's (1962a) findings related to the cognitive aspects of morality. See Appendix H and the later sub-section on situational differences for an expansion of these points.

12. This finding may also be related to the cognitive and affective aspects of the dilemmas. See the later sub-section on situational differences.

13. In the discussion of the results of the present study it is suggested that the effects of social class are filtered through a variety of parental attitudes to child rearing before they have any influence on the child. See Chapter 7.

14. Discrete categories of judgement have been provided by both Piaget and Kohlberg.

15. There was no control group in this experiment.

16. The reader is referred to Chapter 1, p. 42, if he is not clear about the concept of conservation.

17. The situations which Crowley used in the pretest and posttest were 'complex' by his standards.

18. The control group was given only the pre- and posttests and any change in response in the control group was used as the standard against which changes in each of the other four groups were compared.

19. Although it is not immediately apparent why the young child should so consistently center on consequences rather than intentions.
20. Crowley (1968) had established a maintained higher level response over an 18-day period, which was longer than Bandura and McDonald had achieved but was relatively limited nonetheless.

21. See Chapter 4 of this thesis.

22. See Chapter 1 and Smedslund, 1961c.

23. See, for example, Wilson et al., 1967, for the Farmington Trust and Kohlberg, 1967.

Chapter 4

1. Wright (1968) argues that the several aspects of the concept of conscience may be considered as independent variables since intercorrelations among them are so rare.

2. Greater comparability is afforded among these different studies by the fact that they all made use of Kohlberg's original dilemmas. This contrasts with the replication work deriving from Piaget's theory where many workers have been content to make up their own test situations.

3. The interested reader is referred to Kohlberg, 1967, Table 2, pp. 172-73, where all 25 aspects and 7 codes are listed.

4. Several of these aspects may be seen to derive directly from Piaget's work, especially the first three. All of Piaget's eleven dimensions find expression in Kohlberg's scheme although there are obviously extra aspects as well. Several of these aspects are vague and are not elaborated by Kohlberg in any of the expositions currently available; he may do this in his book due for publication soon.

5. These aspects are extra to Piaget's scheme and are needed to allow for the more sophisticated arguments which ensue from Kohlberg's more complex dilemmas.

6. The more sophisticated dilemmas used by Kohlberg allowed this level of interpretation which is denied Piaget's more naive situations.

7. This cultural influence on the rate and final stage of moral development was also noted by Piaget (see, for example, Piaget, 1932, p. 340) and by Mead (in Tanner and Inhelder, 1956, p. 92) in connection with Piaget's scheme of cognitive development. According to Piaget's interpretation, the intense unilateral
respect which 'primitive' man has for the group constrains him in similar fashion to Piaget's ideal-type heteronomous adult-child relationship, and with similarly retarding effects. Kohlberg does not explain the cultural differences, although he would presumably reject the constraint/respect-for-authority explanation of Piaget in this respect as he does with regard to Piaget's theory of moral development in general.

8. See, for example, Kohlberg's scoring of the statements made by Adolph Eichmann during his trial (Kohlberg, 1967, Table 4, p. 177).

9. Turiel says that this advice represents a +1 treatment for a subject in Stage 2 (1966, p. 613); presumably it is also a -1 treatment for Stage 4. Subjects although he does not make this clear. Similarly, advice phrased on a Stage 4 level of reasoning could be a +1 treatment for Stage 3 subjects or a +2 treatment for Stage 2 subjects.

10. The criteria of developmental stages as distinct from general change has already been dealt with above (see Chapter 1, pp. 23) and is also discussed in detail in Kohlberg and Kramer, 1969, pp. 98-99.

11. This generalization of Stage 6 reasoning is not inevitable; Kohlberg thinks it likely that most adults function at Stages 3 and 4 only. See, for example, Kohlberg, 1967, p. 173.

12. This does not deny Piaget's opinion that a certain neurological development is necessary before learning can occur. See Boyle 1969, pp. 113-14.

13. The authors did not consider Stages 5 and 6 since their experimental exposure to +2 influences meant a limitation to subjects in Stage 4 who could be given Stage 6 reasoning as their +2 condition; similarly, Stage 1 subjects were ignored since they could not be given a -1 treatment.


15. A notable exception to this rule is the Action Man model which is, in effect, a doll designed specifically for boys. However, the context in which this doll is used is definitely masculine (the armed services, war, exploration and space travel) and is opposite to the feminine activities of washing, dressing and comforting the 'babies'.

16. See, for example, Hartshorne and May's studies and Durkin, 1959-61.
17. We have already seen that the classic S-R paradigm appears less successful in this respect than do Freud's processes of identification.

Chapter 5

1. See Turiel (1970) for an account of the replication work which has been carried out and is at present under execution.

2. The relevant data is presented in the accompanying table:

<table>
<thead>
<tr>
<th>Junior Classes</th>
<th>Boys</th>
<th>Girls</th>
<th>Difference (B - G)</th>
<th>Percentage Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior I</td>
<td>3828</td>
<td>3683</td>
<td>-145</td>
<td>4.0</td>
</tr>
<tr>
<td>Junior II</td>
<td>3715</td>
<td>3739</td>
<td>14</td>
<td>0.3</td>
</tr>
<tr>
<td>Junior III</td>
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<td>289</td>
<td>7.5</td>
</tr>
<tr>
<td>Junior IV</td>
<td>3593</td>
<td>3452</td>
<td>141</td>
<td>4.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Secondary Classes</th>
<th>Boys</th>
<th>Girls</th>
<th>Difference (B - G)</th>
<th>Percentage Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Year</td>
<td>3676</td>
<td>3364</td>
<td>312</td>
<td>8.0</td>
</tr>
<tr>
<td>Second Year</td>
<td>3405</td>
<td>3231</td>
<td>174</td>
<td>5.0</td>
</tr>
</tbody>
</table>

(Source: Sheffield Department of Education)

3. The distribution of children aged 7-12 years in Sheffield Schools on 31.12.66 is given in the accompanying table:

<table>
<thead>
<tr>
<th>Age (yrs)</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>6572</td>
</tr>
<tr>
<td>8</td>
<td>6415</td>
</tr>
<tr>
<td>9</td>
<td>6302</td>
</tr>
<tr>
<td>10</td>
<td>5938</td>
</tr>
<tr>
<td>11</td>
<td>5595</td>
</tr>
<tr>
<td>12</td>
<td>5643</td>
</tr>
</tbody>
</table>

4. Eight of the eleven junior schools which fed Westfield Comprehensive were in Derbyshire and were ignored to maintain comparability with data based in the Sheffield Education Department area.

5. The sample figures were rounded slightly where necessary to allow an equal distribution between the two sets of schools.
6. Certain children were excluded from the list of school populations; the list did not include:

(a) Children whose father or mother was dead, or whose parents were separated (legally, deserted or by imprisonment). This exclusion was made in anticipation of the second part of this study where it was proposed to approach both parents of some of the children in an attempt to gauge their attitudes to certain areas of childrearing. Obviously there is a case for considering these broken families as a special form of influence on the child and an alternate research design might validly compare the moral development of children from complete and broken homes.

(b) children whose school records were incomplete; this was most often with regard to father's occupation and meant that the social class stratification of the sample could not accurately include these children. This group formed only a small minority of the total exclusions.

(c) children aged 10 years at comprehensive school, children aged 11 years at junior school and children aged 7 years at infant school. These few children were excluded by accident; they are exceptional cases and their presence out of the normal age levels which typifies British educational streaming was not realized sufficiently early to allow their inclusion.

(d) a few children who entered the schools between the compilation of the sample and the completion of the study.

7. Unfortunately this was not the case with the parents!

8. This attitude apparently extended to her schoolwork as well.

9. In the parent questionnaire, all personal information was requested on the final sheet and was given in full on each returned schedule. See Appendix G.

10. This was out of a total of 2320 situations presented.

11. This last reason could be interpreted as evidence of an immature response since the judgement is based on the number of people to whom each lie is told.

Chapter 6

1. All tables and graphs show the data for immature responses
only. The trends for the mature answers would show a mirror image of those indicated since the frequencies of mature and immature responses are interdependent. The percentage of mature answers can easily be determined in each case should this be necessary.

2. The parents of children in both of these groups of exceptions formed the basis of the second empirical investigation of this study which is reported in Chapter 7.

3. This implies that the exceptional children might all be girls; in fact, this is not the case. Among the older children there were 7 boys and 9 girls who showed consistently immature responses; among the younger children there were 8 boys and 8 girls who showed consistently mature responses.

4. It is worth noting in this respect that the replication studies of Kohlberg's ideas on moral development, which have superseded Piaget's to a large extent, have all used the same battery of test situations.

Chapter 7

1. See Wright (1968) for a discussion of the empirical data relating to these separate aspects of conscience and an argument that, in fact, each functions relatively independently of the others.

2. The PARI contained a further 9 dimensions which were not thought directly relevant to the present study and which were ignored. These were called martyrdom, seclusion of the mother, dependence of the mother, marital conflict, irritability, rejection of the homemaking role, ascendency of the mother, in considerateness of the husband and approval of activity. Most of these were designed to estimate the mother's satisfaction of her role and her opinions her husband and marriage in general.

3. The following abbreviations are used throughout the discussion of the results:

C7 - children aged 7 and 8 years in the control group of 'normal' scorers in Piaget's moral judgement tests.
E7 - the group of children aged 7 and 8 years who performed exceptionally well on Piaget's tests.

E12 - the group of children aged 11 and 12 years who performed exceptionally badly on Piaget's tests.

C12 - children aged 11 and 12 years in the control group of 'normal' scorers

4. That is, husband and wife both ringed D_v on the PARI schedule or that one parent ringed D_w while the other ringed D_w.
APPENDICES
APPENDIX A

RAW DISTRIBUTIONS OF SCORES
BY CARD, AGE, SEX AND SCHOOL.

<table>
<thead>
<tr>
<th>CARD I</th>
<th>Myers Grove - Boys</th>
<th>Westfield - Boys</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>1 1 0 0</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>11</td>
<td>0 1 0 0</td>
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<tr>
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<td>0 0 0 0</td>
</tr>
<tr>
<td>7</td>
<td>0 9 0 0</td>
<td>0 0 0 0</td>
</tr>
</tbody>
</table>

Score

<table>
<thead>
<tr>
<th></th>
<th>1 2 3 4 5 6 7</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>11</td>
<td>0 1 0 0 0 0 0</td>
</tr>
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APPENDIX A (Continued)

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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Score
APPENDIX B

Results of a Test of Significance of the Differences in the Frequency of Immature Responses to Moral Judgement Tests by Age and Area

Note: The formula used for this test and for those in Appendices C and D is:

\[ z = \frac{p_1 - p_2}{\sqrt{\frac{2pe qe}{N_i}}} \]

for samples of equal size (Guilford, 1964, p. 186, formula 9.9) where:

- \( p_1 \) = proportion of immature responses in Sample 1.
- \( p_2 \) = proportion of immature responses in Sample 2.
- \( pe = \frac{p_1 + p_2}{2} \)
- \( qe = 1 - pe \)

and \( N_i \) = size of each sample

The results are significant at the 0.05 level if \( z = 1.96 \)

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>C - S</th>
<th>S - L</th>
<th>C - L</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>0.75</td>
<td>0.86</td>
<td>1.56</td>
</tr>
<tr>
<td>11</td>
<td>0.75</td>
<td>1.95</td>
<td>1.94</td>
</tr>
<tr>
<td>10</td>
<td>0.19</td>
<td>1.27</td>
<td>1.07</td>
</tr>
<tr>
<td>9</td>
<td>1.30</td>
<td>1.94</td>
<td>0.64</td>
</tr>
<tr>
<td>8</td>
<td>0.33</td>
<td>0.65</td>
<td>0.97</td>
</tr>
<tr>
<td>7</td>
<td>1.35</td>
<td>2.17</td>
<td>0.69</td>
</tr>
</tbody>
</table>

C - S: comparison between data for clumsiness and stealing
S - L: comparison between data for stealing and lies
C - L: comparison between data for clumsiness and lies.
APPENDIX C

Results of a Test of Significance of the Differences in the Frequency of Immature Responses to Moral Judgement Tests by Age and Test

Note: See Appendix B for the formula for this test. The data showed significant differences if $Z = 1.96$. In the table below a dash (-) indicates that no significant differences were found at any age levels; a number indicates at which age level any significant difference was found.

<table>
<thead>
<tr>
<th>Test Number</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
<th>VI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test</td>
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<td>Test Number</td>
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<td>Test Number</td>
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<td>Test Number</td>
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<td>X</td>
<td></td>
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</tr>
<tr>
<td>II</td>
<td>- X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>7 7 X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>9 9 7,9 X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V</td>
<td>- - 7,8 - X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI</td>
<td>- - - 9 7,8,9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Test Number
APPENDIX D

Results of a Test of Significance of the Differences in the Frequency of Immature Responses to Moral Judgement

Tests by Age and Sex

Note: See Appendix B for the formula for this test; the results show significant differences at the 0.05 level if $z = 1.96$. The test was carried out on the largest difference observable at each of the age levels indicated. None of those differences proved to be significant; since the sample sizes remain constant for each comparison, and since all other differences were smaller than those tested, no significant values of $z$ would appear if these data were tested.

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Aggregate</th>
<th>Area</th>
<th>Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>12,11*</td>
<td>0.56</td>
<td>1.04</td>
<td>1.29</td>
</tr>
<tr>
<td>10</td>
<td>0.22</td>
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<td>1.18</td>
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<tr>
<td>9,8 **</td>
<td>1.38</td>
<td>1.59</td>
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</tr>
<tr>
<td>7</td>
<td>1.90</td>
<td>1.34</td>
<td>1.32</td>
</tr>
</tbody>
</table>

* the samples at these ages were of equal size

** the samples at these ages were of equal size
APPENDIX E

Results of $X^2$ Test of the Significance of the Differences in the Frequency of Immature Responses to Moral Judgement Tests by Intelligence Group and Age - Aggregate Scores

<table>
<thead>
<tr>
<th>Age</th>
<th>$X^2$</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>6.02</td>
<td>-5.1</td>
<td>5.9</td>
<td>-0.8</td>
</tr>
<tr>
<td>11</td>
<td>9.81</td>
<td>-11.4</td>
<td>4.0</td>
<td>7.4</td>
</tr>
<tr>
<td>10</td>
<td>28.34</td>
<td>-2.2</td>
<td>-14.2</td>
<td>16.4</td>
</tr>
<tr>
<td>9</td>
<td>27.25</td>
<td>-8.8</td>
<td>-16.4</td>
<td>25.2</td>
</tr>
<tr>
<td>8</td>
<td>13.83</td>
<td>-14.7</td>
<td>-2.6</td>
<td>12.1</td>
</tr>
<tr>
<td>7</td>
<td>15.87</td>
<td>-13.6</td>
<td>16.5</td>
<td>-3.9</td>
</tr>
</tbody>
</table>

significant at the 0.05 level if $X^2 = 5.99$

significant at the 0.01 level if $X^2 = 9.21$

significant at the 0.001 level if $X^2 = 13.82$

A: above average I.Q. B: average I.Q. C: below average I.Q.
APPENDIX F

Results of $X^2$ Test of the Significance of the Differences in the Frequency of Immature Responses to Moral Judgement Tests by Intelligence Group and Age - Area Scores

<table>
<thead>
<tr>
<th>Age</th>
<th>$X^2$</th>
<th>Clumsiness</th>
<th>Stealing</th>
<th>Lies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(f - $f_e$)</td>
<td>(f - $f_e$)</td>
<td>(f - $f_e$)</td>
</tr>
<tr>
<td>12</td>
<td>4.91</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>11</td>
<td>8.97</td>
<td>4.3</td>
<td>1.3</td>
<td>2.6</td>
</tr>
<tr>
<td>10</td>
<td>6.47</td>
<td>-2.3</td>
<td>-1.8</td>
<td>4.5</td>
</tr>
<tr>
<td>9</td>
<td>10.35</td>
<td>-3.5</td>
<td>-5.4</td>
<td>8.9</td>
</tr>
<tr>
<td>8</td>
<td>13.57</td>
<td>-7.5</td>
<td>4.7</td>
<td>2.2</td>
</tr>
<tr>
<td>7</td>
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</tr>
<tr>
<td>11</td>
<td>3.14</td>
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<td>22.52</td>
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<td>5.50</td>
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<tr>
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<td>3.97</td>
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<td>-</td>
<td>-</td>
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<tr>
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<td>2.52</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
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<td>-</td>
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</tr>
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<td>7.02</td>
<td>-1.3</td>
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<td>8.0</td>
</tr>
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<td>4.28</td>
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<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7</td>
<td>2.55</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

A: above average I.Q.  B: average I.Q.  C: below average I.Q.

Significant at the: 0.05 level if $X^2 = 5.99$
0.01 level if $X^2 = 9.21$
0.001 level if $X^2 = 13.82$
Results of $X^2$ Test for the Significance of the Differences in the Frequency of Immature Responses to Moral Judgement Tests by Social Class and Age - Aggregate, Area and Test Scores

<table>
<thead>
<tr>
<th>Age</th>
<th>Aggregate</th>
<th>Area</th>
<th>Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>C</td>
<td>S</td>
</tr>
<tr>
<td>12</td>
<td>0.58</td>
<td>0.001</td>
<td>0.63</td>
</tr>
<tr>
<td>11</td>
<td>3.20</td>
<td>3.02</td>
<td>0.39</td>
</tr>
<tr>
<td>10</td>
<td>3.74</td>
<td>0.12</td>
<td>3.66</td>
</tr>
<tr>
<td>9</td>
<td>1.02</td>
<td>0.01</td>
<td>0.74</td>
</tr>
<tr>
<td>8</td>
<td>20.59</td>
<td>7.32</td>
<td>5.27</td>
</tr>
<tr>
<td>7</td>
<td>5.94</td>
<td>2.53</td>
<td>0.64</td>
</tr>
</tbody>
</table>

C: clumsiness  S: stealing  L: lies

significant at the 0.05 level if $X^2 = 3.84$

significant at the 0.01 level if $X^2 = 5.41$

significant at the 0.001 level if $X^2 = 6.64$
APPENDIX H

THE REPLICATION LITERATURE

The purpose of this Appendix is to present in fairly brief form the aims and findings of the twenty or so studies carried out in the validation and testing of Piaget's ideas on moral development as put forward in The Moral Judgement of the Child (1932). These studies are presented in chronological order except when a series of investigations has been executed by a single author when they are considered as a whole. Details of sample size and structure are given in order to indicate the validity of the follow-up studies in suggesting modifications of Piaget's hypotheses.

Harrower (1934)

Sample: 112 children aged 5 to 11 years in two contrasting groups—one working class from L.C.C. schools and 'the poorer parts of London' and the second middle class ('of cultured parents') presumably from a private school. Two types of comparison were attempted:

1) between working class group and Piaget's subjects ('from the very poor districts' (1932, p. 129)); a cross-cultural comparison.

2) between working and middle class groups in this study.

Technique: one Piaget-type situation was used to assess the child's attitude to punishment and there was also adopted a very free form
of questioning in relation to cheating. The scope of this investigation was therefore very limited.

Results: age progressions in any group are difficult to establish from Harrower's data since he compares two age groups (5-7 years and 8-10 years) without any internal breakdown. Harrower shows that his experimental group (from a more favourable social background) displayed more mature forms of judgement much earlier than the disadvantaged group for both the dimensions investigated. The control group showed stages of development similar to those suggested by Piaget. Harrower concludes that either Piaget's scheme is applicable to only a specific environment (very poor home background) or that there are factors present in certain other environments which may accelerate the child's development through Piaget's stages so quickly that the highest level of reasoning can be found in some very young children.

Abel (1941)

Sample: 94 girls with two main sub-samples of mentally retarded girls. In one, 20 girls housed in an institution were compared with 20 girls housed in the community; in the other, 15 girls who had been in the institution more than six years were compared with 15 girls who had been in the institution less than one year.

Technique: seven Piagetian stories were used in all; there was one concerned with the definition of wrong as being caught and punished and two stories in each of the areas of objective responsibility, immanent justice and expiation v. restitution.
Results: four main conclusions were reached. These were:

i) in all areas the girls housed in the institution performed worse than those housed in the community.

ii) in all areas the girls who had been in the institution more than six years performed worse than those who had been there for less than one year.

iii) then mental age of the girls proved to be a significant influence in only one area (expiation v. restitution) although there was a tendency for less able girls (M.A. 6-8 years) to perform worse in the objective responsibility dimension than slightly more able girls (M.A. 9-11 years).

iv) the obedience of the girls within the institution to the demands of the staff was a significant factor in the dimension of objective responsibility. The more troublesome girls (i.e. those who were less socially competent) did better on this test than the obedient girls.

The first two results were interpreted as evidence of the detrimental effects of institutionalization especially insofar as the staff relied on the threat of immanent justice and on retributive punishment as forms of control.

Dennis (1943)

Sample: 95 Hopi children aged 12 to 14 years.

Technique: a single dimension (immanent justice) investigated using stories similar to those of Piaget taken from Lerner's (1937a) study.

Results: Hopi children showed greater belief in animism and immanent
justice than that found by Lerner among white American subjects of the same ages. These differences were attributed to certain unknown cultural factors although Dennis noted a uniformity in the responses of the younger children in his own and Lerner's studies which he proposed were due to universal childhood experiences and mental immaturity.

Liu (1950)

Sample: uncertain - this summary is taken from secondary sources notably Bloom (1959) and Medinnus (1959); but the main comparisons are between Chinese and American-born children both raised in the U.S.A.

Technique: investigation of immanent justice and objective responsibility.

Results: native born American children showed greater severity of judgement, greater belief in immanent justice and much less subtlety of analysis than the Chinese born children. These trends are linked with two features of the Chinese family life - the greater intimacy of the Chinese family and the child's exposure to Confucian philosophy which encourages a consideration of moral questions (c.f. Boehm, 1962 and 1963a and b).

Ugurel-Semin (1952)

Sample: 291 Turkish children aged 4 to 16 years.

Technique: a more practical approach to morality. Poses a situation where an odd number of nuts has to be shared out between
two children. The behaviour of the child and the reasoning by which he justified his actions showed certain developmental trends. Results: it was found that a decline in selfishness (keeping the odd nut) and an increase in generosity (giving the odd nut to the partner) was associated with age, socio-economic position and family size but not with respondent's sex. Ugurel-Semin isolated seven aspects of moral judgement, each of which he says dominates the child's thinking at successively later ages. These are egocentrism, sociocentrism, awareness of social reaction, superficial reciprocity, enlarged co-operative reciprocity, altruism and justice; these are very similar to the stages proposed by Kohlberg in his scheme of moral development - see Chapter 4 of the text. On the theoretical aspect of Piaget's work, Ugurel-Semin suggests a process of decentration as the mechanism in declining egocentrism and movement towards more mature forms of thought.

MacRae (1954)

Sample: 244 boys aged 5 to 14 years.

Technique: two tests of objective responsibility taken from Piaget (1932); some items from Lerner's (1937a) study; some items of his own design relating to expiative and immanent justice. MacRae also devised a questionnaire to estimate parental strictness in some areas of control over the child and attempted to link these estimates with the child's moral development.

Results: i) MacRae demonstrated three clusters of correlations among
the aspects of morality he studied rather than a single cluster as could be expected if there were a general trait of morality. These correlations were found only within particular dimensions and not between any of them.

ii) the characteristics of a morality of co-operation (which is Piaget's more mature form of judgement) is not necessarily linked with a decrease in parental control as measured by MacRae's questionnaire. There was the expected negative correlation of parental strictness and moral development in some areas but not in others.

iii) high status children (i.e. those from better home backgrounds) return more mature answers at each age level than low status children; this was thought to be due to the greater intellectual maturity of the former group.

iv) MacRae distinguishes two major forms of moral judgement - those based on cognitive factors (a knowledge of cultural expectations with regard to the question asked) and those based on emotional factors (the extent to which the child can identify with the situation and bring to bear his personal attitudes to deviance). This is an important distinction since the better performance of high status children on Piaget's tests may be due to the intellectual advantage of these children and the cognitive nature of the tests; on the other hand low status children who tend
to encounter peer group interaction at an earlier age and for more prolonged periods may mature more quickly with regard to 'emotional' situations (c.f. Boehm, 1962a).

Morris (1958)

Sample: 94 children by school class placings.

Technique: 14 situations in which individual and parental wishes were opposed; asked the subjects what the individual should do and what in fact he would do.

Results: answers became more complex with age, dependence on authority declined in favour of independent judgement and there was a slow decline of judgements based on self-interest. There were marked discrepancies between what the individual should and would do - and there were important situational differences in the level of moral judgement. These findings support MacRae's indication of situational differences and they are extended by Durkin (1959-61).

Medinnus (1959)

Sample: 240 children at four age levels - 6, 8, 10 and 12 years.

Technique: 18 stories relating to immanent justice similar to those of Piaget.

Results: Medinnus notes that previous studies have pointed out the need to consider intelligence, social class and culture as factors which might influence the child's rate of development with regard to immanent justice. Generally belief in immanent justice declines
with age although Havighurst and Neugarten (1955) note an exception to this trend which they interpret as being a result of very strong cultural patterns which place different emphases than do the white communities on the nature of man and his environment.

From his own study Medinnus notes the situational variations in level of judgement especially insofar as the child might have experienced the situation in real life (when there was a tendency to reject immanent justice) and as explanations using or implying immanent justice appear in the situations (when there is a greater tendency to accept the dimension). Medinnus hypothesizes that parental teaching can affect the child's level of thought with regard to immanent justice.

**Durkin (1959-61)**

Two of the five reports by Durkin are summaries of the trends shown in the three experimental studies she carried out. The summaries are given in the 1960 and 1961 reports and the discussion below concentrates on the other three studies.

**Samples:** 1959a, c; 1960; 1961 - 101 middle class children aged 7, 10 and 13 years. 1959b - 101 middle class children + 89 lower class children aged 7, 10 and 13 years.

**Techniques:** related to Piaget's dimensions of punishment by authority v. retaliation and reciprocity in the definition of rights. For the first the subjects were questioned about acts of aggression and for the second situations were used which involved justice in other areas.
Results: generally Piaget's proposed trends were not supported in middle class children (1959a) or in lower class children (1959b); in both cases a curvilinear age progression was established such that older and younger children sought restitution by an adult. For the non-aggressive stories, Durkin found that the specific situations were important influences on the child's apparent level of development and that, contrary to Piaget's suggestions, reciprocity was favoured most by the younger children (1959c). Durkin was unable to distinguish any sex variations in her data although she does note that middle class girls tended to show more variety in their choice of non-reciprocal punishments than did middle class boys who consistently chose telling an authority figure (1960). In general, Durkin concludes that Piaget's approach to reciprocity is insufficiently sensitive to use as a classification (1961, p. 12) and that at the very least Piaget's theory 'minimizes the influence of the environment on a child's understanding of what is just' (1959c, p. 294).

Johnson (1962a)

Sample: 307 children in Hawaii; school grades 5, 7, 9 and 11 (approximate ages 10, 12, 14 and 16 years). Sub-sample of 167 children were given the Gorham Proverbs Test (Gorham, 1956) to estimate the abstractness of their thought; questionnaire sent to the parents of 128 of these children (and 96 pairs of forms were returned) to estimate attitudes in a number of areas.
Technique: 20 Piaget-type situations in the areas of immanent justice, objective responsibility, expiation v. restitution, the efficacy of severe punishment and communicable responsibility. Aiming to check the intercorrelations within and between the areas of moral judgement and to consider the effects of various antecedent conditions (adult constraint, 'egocentricity', age, I.Q. and parental occupation).

Results: correlations were established within each of the areas investigated but they were of a lower order than Piaget's work would suggest. In contrast to other studies, Johnson also found close relationships among some areas of moral judgement (objective responsibility, retribution v. restitution, and efficacy of severe punishment) although the other two (immanent justice and communicable responsibility) were less closely related. Parental attitudes were found to relate to the last two areas only and egocentricity (measured somewhat crudely by the Gorham test) allowed only slight correlations with moral judgement. Intelligence and parental occupation were related positively to mature moral judgement in all areas. Johnson's general conclusion is that most findings were in the direction predicted by Piaget but at a lower level than he suggests.

Boehm (1957-64)

Samples: 1957 - 29 Swiss and 40 American children aged 6 - 15 years 1962a, b 1963a - 237 children aged 9+ years who could be formed into
various sub-groups for considerations of differences in socio-economic status, intelligence and religious belief (Catholics and Jews).

1963b - 51 children aged 3 - 5 years
(Boehm and Nass) 1962 - 160 children aged 6 - 12 years.

Techniques: two situations each for objective responsibility and reliance on adults to administer punishments were used in all but the first study.

Results: 1957 - the quicker maturation of American pre-school children in certain areas of social development (particularly in the reliance on adults to administer punishments) was attributed to a less egocentric mode of thought in the American child as a result of an earlier transference from adult dependence to peer group dependence and consequent freedom of thought and judgement.

Boehm and Nass (1962) - this study failed to show social class as an important variable in affecting the rate of moral development, but this could be due to the small variation in the occupations considered; another examination of bigger social class differences (Boehm, 1962b) was able to point to some class variations. Boehm and Nass note the importance of specific situational cues and age in moral judgements; since they found a marked change in the maturity of responses after the age of 9 years, the subsequent studies concentrated on children younger than nine to minimize the effects of age and concentrate on other variables.

1962a - academically gifted children mature earlier with
regard to objective responsibility as do upper middle class children. Working class children show earlier peer group reciprocity and independence from adults than do upper middle class children (c.f. MacRae, 1954).

1962b - children in Catholic schools show earlier mature moral judgements than children in Public schools in relation to objective responsibility and adult-independent behaviour. This is apparently explained by the necessity of the Catholic child to be prepared for confession at the age of 7 years and his consequent earlier consideration of intentions in actions.

1963a - Jewish children proved to be more peer related than children in either the Catholic or Public schools when situations involving an injured peer are considered but also more reliant on adult authority in situations where no such injury was considered. This is another example of the situational specificity of moral judgements.

1963b - 20 (or 39%) of these very young children showed responses to Piaget's story about the man who loses his way as a result of a trick played by a boy (1932, p. 145-46) which were mature by Piaget's interpretation. The fact that only this one story was used allows no estimate of the generality of this level of maturity and it may well be that this particular situation is easier to answer in mature fashion than others (see the discussion in the text in Chapter 5).

These findings point as a whole to the need for a consideration
of environmental factors and specific situational variations as important influences on the process of moral development.

Porteous and Johnson (1965)

Sample: 235 ninth grade (approximately 14 year old) children in Honolulu.

Technique: Piagetian situations assessing the cognitive aspects of conscience were contrasted with an affective approach which allowed the subjects to complete a story in which a child has just committed or is about to commit an undetected offence. I.Q. considered as a possible influence and was not controlled - the emphasis in this study is on mental age rather than chronological age.

Results: intelligence did in fact prove to be a most important influence in both sorts of test. Girls showed a greater maturity than boys on both measures of morality although there was less correlation for the girls between the scores on both tests; there was a significant though small relationship between scores on each test for the boys.

Breznitz and Kugelmass (1967)

Sample: 1,014 Israeli adolescents.

Technique: a questionnaire designed to test three aspects of the development of the principle of intentionality (as opposed to reliance on consequences) in judgement. These principles were the ability to use intentionality in judgements, the ability to
phrase spontaneously the principle of intentionality, and the ability to verbalize a general principle of intentionality. 

Results: It is suggested that there are four stages in the use of intentionality in moral judgements. The first stage (of Pre-verbalized Usage) is typified by the child's ability to apply the principle of intentionality without being able to specify the criteria he uses. In the second stage (Verbalization of the Principle) the subject can apply the principle and also explain the criteria he uses. In a third stage (of Recall of the Principle) the subject can now explain the principle without specific external cues such as the story situations which were needed for subjects in the previous stage. In the final stage (Refined Application of the Principle) there occurs an increasing differentiation of the dimension of intentionality. These trends are remarkably similar to the process of cognitive development proposed by Piaget (see Chapter 1 of the text) and lend support to those critics who point out that Piaget is investigating only a limited part of the whole of moral development (see, for example, Wright, 1968, or Kohlberg, 1963a).

All the studies reported so far have accepted the validity of Piaget's framework of moral development and have attempted to isolate factors which might alter the child's rate of development through the stages outlined. A more serious modification of Piaget's theory has been suggested by Kohlberg (see Chapter 4 of the text) who believes that Piaget's scheme is insufficient to
account for moral development through adolescence and into adulthood. The same weakness of the Piagetian theory of moral development is noted by the final author in this review:

Bull (1969)

Sample: 360 children with equal numbers of boys and girls at each of six age levels (7, 9, 11, 13, 15 and 17 years). The girls were of higher intelligence than the boys and this casts some doubt on the validity of sex differences which Bull notes.

Technique: 6 written tests and 4 verbal tests. Some of the tests designed to allow classification of answers into one of four stages of moral development - which Bull terms anomy, heteronomy, socionomy and autonomy - although it appears that these stages were drawn up before the investigation rather than being determined by the data. The variables investigated were age, sex, socioeconomic class, I.Q and religious participation. Bull also suggests that the home background of the child (especially parental adoption of psychological measures of control) might help the internalization of conscience although he collected no data relevant to this hypothesis.

Results: Piaget's final stage of moral development is insufficiently mature to account for moral judgements made by some adults and adolescents; it was therefore necessary to develop an alternative scheme of moral development. Working within his proposed four stage scheme of moral development Bull shows that a spurt in development is apparent during the period 9 - 11 years; during this time anomy
and heteronomy (the more immature forms of judgement) decline most rapidly along with socionomy while autonomy (the highest level of judgement) generally increases.

Intelligence appeared to be an important influence as does socioeconomic class; apparently girls achieved their developmental spurt some two years before boys but this may be accounted for in part by the higher I.Q. of the girls. Religious participation (as measured by church affiliation) did not relate to moral judgements in any strong way; Bull suggests that what little evidence there was to connect moral development and religious attendance was linked more to the general home atmosphere rather than church attendance in itself.

Bull's work, along with that of Kohlberg, points to the severely limited applicability which Piaget's scheme of moral development has for adults and even young adolescents. The extension of Piaget's theory to allow the inclusion of more sophisticated forms of thought is at least as important as the previous research which has been carried out on the variables effective in differential rates of moral development.
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SUMMARY

1. **Aim** - a better perspective on Piaget's theory of moral development through:
   
   (a) comparison with Piaget's theory of cognitive development (Chapters 1 and 2).
   
   (b) discussion of the replication studies deriving from Piaget's work on moral development (Chapter 3).
   
   (c) comparison of Piaget's theory of moral development with those of other theorists, especially Freud, Kohlberg and S.-R. theorists. A model of conscience involving 3 dimensions (Knowledge, guilt and action) is developed (Chapter 4).
   
   (d) the clarification of the relationships between the child's rate of moral development (as measured by Piaget's tests) and parental attitudes in various areas (see Section 2).

2. **Original Work**

   (a) A study of the moral judgements of 368 Sheffield school children aged 7-12 years inclusive.

   (i) **Technique** - six specially constructed tests after the fashion of Piaget; two tests in each of 3 areas of behaviour - clumsiness, stealing and lying. All tests relate to
Piaget's moral dimension of objective responsibility. (Chapter 5).

(ii) Results

Chapter 6 - moral judgements tended to become more mature with increasing age but two groups of exceptional children were isolated - a group of sixteen 7 and 8 year olds whose moral judgements were consistently mature by Piaget's standards, and a group of sixteen 11 and 12 year olds whose responses were consistently immature. The parents of these children formed the basis of the second empirical investigation of this study (see section 2b).

Children's responses showed little variation in maturity between the broader moral areas (clumsiness, lies and stealing) but more marked fluctuation between tests, particularly those tests relating to lies, was noted.

There was a correlation between greater moral maturity in the child and both a higher intelligence and a middle class family background. There were no differences in rate of moral development between boys and girls.

(b) A study of parental attitudes and their relationship with the child's rate of moral development (Chapter 7).

(i) Sample - both parents of 32 exceptional children noted in the first part of the study plus a control group of both parents of 32 'normal' children. Of 128 parents approached, 85 returned the completed attitude scale.
(ii) **Technique:** 14 dimensions of the Parental Attitude Research Instrument (Schaeffer and Bell, 1958) were incorporated as a separate attitude scale. The dimensions selected were Breaking the Will, Strictness, Suppression of Sex, Excluding Outside Influences, Deification, Intrusiveness, Fostering Dependence, Suppression of Aggression, Fear of Harming the Baby, Encouraging Verbalization, Equalitarianism, Comradeship and Sharing, Avoidance of Communication and Acceleration. Scores for husband and wife in each family unit were compared and the family was assigned to one of three categories - high scorers, where both parents scored high along the particular dimension, low scorers, where both scored low, and mixed where one was high and one was low.

(iii) **Results** - The effect of different parental attitudes along the dimensions studied varied with the age of the child, but generally it was the younger child who was most influenced by parental opinion. It was suggested that the younger child, with his less well organized and more unstable systems of thought and moral judgement, was more sensitive and susceptible than the older child to variations in parental attitudes (both acceleratory and retardatory).

The correlations suggested by the present data
indicated that parental attitudes have been wrongly neglected in the past whenever the child's moral development has been studied. These results suggest that further research should consider certain aspects of parental opinion (particularly in relation to the child's autonomy, democracy in the home, strictness and overprotection) as an important group of social factors influencing the rate of moral development in the child.
KEY TO GRAPHS

1a & b  A - Aggregate scores

1c  
2a, b & c  
C - Clumsiness
S - Stealing
L - Lies

1di, ii & iii  Test Numbers - I, II, III, IV, V & VI
3a, b & c

4 - 6cii  Sex:  B - Boys
          G - Girls

7 - 9cii  Intelligence Group:
          A - Above average
          B - Average
          C - Below average

10 - 12cii  Social Class:
            A - manual
            B - non-manual
Percentage

Age (years)
Percentage

Age (years)

7 8 9 10 11 12
Percentage

Age (years)

7 8 9 10 11 12

6 ci
Percentage vs Age (years)

- Line A
- Line B
- Line C
The graph shows the percentage of distribution over age for groups A and B. Group A remains relatively constant until age 9, after which it decreases rapidly. Group B shows an initial decrease until age 8, then increases sharply after age 9.