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THE RELATIONSHIP OF SOCIAL CONTEXT TO MORAL AND SOCIAL
CONVENTIONAL REASONING: A CROSS-CULTURAL STUDY

City University of New York

PH.D. 1983

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THE RELATIONSHIP OF SOCIAL CONTEXT TO MORAL AND
SOCIAL CONVENTIONAL REASONING:
A CROSS-CULTURAL STUDY

by

LEONARD F. TOPP

A dissertation submitted to the Graduate
Faculty in Educational Psychology in partial
fulfillment of the requirements for the degree
of Doctor of Philosophy, The City University of
New York.

1983

ABSTRACT

THE RELATIONSHIP OF SOCIAL CONTEXT TO MORAL AND
SOCIAL CONVENTIONAL REASONING:
A CROSS-CULTURAL STUDY

by

Leonard F. Topp

Adviser: Professor David Bearison

This study investigated the relation of cultural context to children's moral and social conventional reasoning. It was hypothesized that the structural properties of a social system affect the cognitive behavior of individuals developing within that system. Delays in the development of advanced levels of moral reasoning were hypothesized to be a function of social context. Children from traditional cultures were hypothesized to judge social conventional violations more severely than children from less ethnocentric social backgrounds.

One hundred fifty-seven children, representative of three different levels of ethnocentrism were interviewed.

The results of the analyses of variance supported the hypothesis that high ethnocentric children were less likely to use intentions in making moral judgments than were low and middle ethnocentric children. No social context by agent (ingroup, outgroup member) interaction in judging moral transgressions was found.

Chi-square analyses of responses to questions regarding the distinction between moral and social conventional rule violations supported the hypothesis that low and middle ethnocentric children would distinguish between moral and social conventional rules, by judging a moral rule violation as more serious than a social conventional rule violation, to a greater extent than high ethnocentric children. Results of the three (levels of social context) x two (moral and social conventional rules) repeated measures ANOVA, on the importance children attributed to particular moral and social conventional rules, were counter to expectation. High ethnocentric children judged all rules (moral and social conventional) as more important than did the other two groups. All groups, however, judged moral rules as more important than social conventional rules. The results of chi-square analyses of responses to the questions regarding the changeability and cultural universality of moral and social conventional rules indicated that high ethnocentric children, relative to low and middle ethnocentric children, tended to judge particular moral and social conventional rules as unchangeable, and culturally universal.

These results supported the hypothesized relation of cultural influences on moral and social conventional reasoning, and questioned the use of individual importance ratings in assessing children's knowledge of moral and social conventional rules.

ACKNOWLEDGMENTS

To Dr. Erwin Singer, of blessed memory, whose encouragement, psychoanalytic insight, and support were instrumental throughout this endeavor, I express a debt of gratitude.

To those others who inspired by their scholarship and teaching, I express my thanks. To Dr. Herbert Nechin of the City College of New York, and to the community of scholars at Clark University, where this work began, in particular the late Professor Heinz Werner, and Professors Sy Wapner, Bernard Kaplan, Joachim Wohlwill, Tamaro Dembo, Mort Wiener, Walter Crockett, and Robert W. Baker, I will be forever grateful.

I would like to express my appreciation to Dr. David Bearison for the time he spent reading, editing, and helping to create a more organized dissertation. I would also like to thank Dr. Geoffrey Saxe for his sensitivity and thoughtful contributions. I would especially like to thank Dr. Martin Hoffman who despite his demanding schedule, consistently and patiently made available his wisdom, experience, kindness, and critically scholarly approach.

To those at the Graduate Center whose friendship, support, and helpfulness were always appreciated, especially Drs. Allan Gross, Bernard Leibman, Shirley Feldman, and my friends Warren Cohen and Betty Einerman I am truly grateful.

To my colleague and good friend Dr. Irvin Sam Schonfeld, I cannot thank him enough for his editorial and theoretical contributions. He gave uncompromisingly of his time and energy, both as a friend offering support and encouragement and as a statistician and scholar.

I would like to give special thanks to Larry Nagel for all the time and effort he spent in the typing of this manuscript.

To my very special friends Perri and Wes Brier, Marlene and Abe Mordowitz, Judy (who read it cover to cover) and Morris Tuchman, and to my colleagues and friends at the Committee on the Handicapped, especially Michael T. Zangwill, Jack Stein, Joe Rosenberg, and Ronnie Cohen, I am especially grateful for their tolerating my difficult behavior for the past few years.

To those dear friends who supported and encouraged me all along, in particular Miriam and Sam Brach, Sylvia and Moishe Hammer, and Janet and Willie Rosenfeld, I am truly appreciative.

I would like to express my deepest appreciation to my family, especially to my wife Shelley, who diligently and lovingly worked side by side (at times through the night) with and without appointment, typing, correcting, editing, patiently offering advice and support. Without her this task would not have been remotely possible. To Deborah Shani, Kalman, and Daniella (who arrived in the middle), I will be forever indebted for the consideration with which they accepted lovingly, and not so lovingly, the constant imposition of their time. They helped record data, offered encouragement and critical support

("Who is ever going to read this?") and aided in the development of the tasks by offering the child's point of view. Without them the task would not have even been remotely worth pursuing.

Finally, I would like to dedicate this work to my parents; to my loving mother, may the Almighty continue to give her the strength to pursue her chosen task of serving humanity and to the memory of my father and teacher Reb. Kalman z"l who loved learning and was wise enough to teach by process of demonstration rather than by words the eternal value of the quest for knowledge.

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CHAPTER I

INTRODUCTION

People are social beings whose thoughts and behavior are influenced by the actions of others. To understand the process of development, the effects of the organization of interpersonal relations on cognition must be investigated.

A state of undifferentiation and fusion with his surroundings characterizes the egocentric, asocial existence of the infant. With development, the child moves away from a self-contained "one view" attitude toward the world and attains a more differentiated perspective which incorporates the viewpoints of others. Yet for the entire life span, the individual is "destined" to maintain remnants of this egocentric or self-contained view of the world.

Allegiances to groups and nationalities develop throughout the life span, creating situations which may limit the range of operations of the individual. Such allegiances may weaken the individual's desire, or ability, to resolve conflicts that require the individual to take the perspective of others. The complexity of one's environment may be increased or reduced as a function of the amount of conflict that one allows into one's life space. A more heterogeneous and complex environment may stimulate the individual to learn to deal with the viewpoint of others, by drawing the individual away from an egocentric, "one view" of the world.

Cultural anthropologists such as Geertz (1973) and Benedict (1964), as well as sociologists such as Mead (1934), recognized the importance of social context in the development of the self. For Vygotsky (1962), "the true direction of the development of thinking is not from the individual to the socialized, but from the social to the individual" (p. 20). For these social behaviorists, cognitive development has its roots in social interaction.

Until most recently, however, psychologists working within a Piagetian paradigm failed to investigate the interdependence or the interrelation between physical cognition and social cognition. Piaget's work has focused more on the development of logical-mathematical and scientific intelligence than on affective and social cognition (Voyat, 1978). It was clear, however, even from Piaget's limited writings on affective intelligence that he never intended to view the child as a purely cognitive, affectless being. Piaget held that purely logical cognition was a necessary but not sufficient condition for the development of social cognition. Looft (1972) advanced the view that Piaget's research suggests that "egocentricity of thought--the illusions caused by the immediate point of view--has perhaps been the central problem in the history of human affairs" (p. 73).

The structural cognitive development point of view, as represented by Piaget (1970) and Kohlberg (1969), underlined the child's declining egocentrism in the realm of moral development. They proposed a model of moral development that focused on the emergence of the concept of justice, with a morality based on cooperation eventually replacing a

morality based on constraint. Cognitive developmental theory postulated that common organizing principles underlie cognitive operations affecting various content domains including the social cognitive domains. These common principles are thought to be reflected by the structural affinity of children's responses across the different content domains.

Turiel (1975, 1978a, 1978b, 1979) suggested that moral reasoning and conventional reasoning are separate domains. He concluded that children are capable of recognizing this distinction. For Turiel, both the development of the understanding of social conventions and the development of moral reasoning, progress in a stage sequence. However, he stressed that concepts are organized within domains and not necessarily across domains and morality is distinct from social convention.

The present study investigated the influence of different cultures on the child's moral and conventional reasoning. It was expected that social groups that demanded a greater degree of loyalty, and isolated its members from the mainstream American culture, would retard social cognitive development among group members by virtue of the constraints which they place on interpersonal contact with outsiders. It was therefore expected that children from heterogeneous and low ethnocentric environments would manifest advanced social cognitive reasoning relative to children from homogeneous and high ethnocentric environments. Furthermore, children from homogeneous and high ethnocentric social contexts were expected to be better able to judge the intentions of members of their own group than the intentions of outsiders. On the

other hand, children from heterogeneous and low ethnocentric social contexts were not expected to show a distinction between how they judged the intentions of their own group as opposed to outsiders.

The present study also examined Turiel's distinction between social conventional and moral reasoning. The less complex, homogeneous environment of the high ethnocentric child, by providing additional stress on social conventions, taboos, and rules, furnished an opportunity to examine the influence of a culture which places a greater value on social conventional activities than a more complex, heterogeneous environment. The comparison between children from the less complex homogeneous environment and children from a more complex heterogeneous environment provided an appropriate research context for the investigation of the universality of Turiel's hypothesized distinction between the moral and social conventional content domains.

Thus, the present study examined the relationship between the level of ethnocentrism as a structural property of a social system, and the cognitive behavior of individuals who functioned within that system. Finally, it afforded the opportunity to examine and extend the proposed distinction between moral and social conventional reasoning.

CHAPTER II

REVIEW OF THE LITERATURE

The review of the literature will develop the position that egocentrism and ethnocentrism are parallel constructs. Ethnocentrism is presented as a collective form of egocentrism. The construct of egocentrism will be analyzed within the framework of the movement from centration to decentration. This movement, according to Piaget, takes place through the mechanism of social interaction and conflict. Evidence will be presented that different social contexts provide differing opportunities for such interaction, which in turn lead to differences in decentration in both physical and social cognition. Then cross-cultural evidence that appears relevant to a social contextual point of view will be presented. Next, Turiel's position and his critique of Piaget will be discussed, and a social contextual argument will be made that is consistent within a Piagetian framework.

It is argued that different social contexts provide different opportunities for the development of both moral and social-conventional reasoning. It is hypothesized that the more differentiated, complex, and heterogeneous social context, by providing more diverse opportunities for social interaction, interpersonal contact, and conflict, will advance children's development of moral reasoning. The less differentiated, homogeneous, and less complex social context, which stresses rules, conventions, and taboos, is expected to affect the development of moral reasoning by its greater emphasis on social-conventional rules.

This conceptualization of moral and social-conventional reasoning emphasizes the relevance of social context to both moral and social-conventional reasoning.

Ethnocentrism

The concept of ingroup, outgroup, and ethnocentrism was first presented by Sumner (1906) in Folkways.

Ethnocentrism is the technical name for this view of things in which one's own group is the center of everything and all others are scaled and rated with reference to it. . . . each group nourishes its own pride and vanity, boasts itself superior, exalts its own divinities, and looks with contempt on outsiders. (p. 12)

Thus, the group sees itself as special, exaggerating and intensifying its own traditions, ideas, attitudes, and looking with some degree of contempt or scorn at other groups. This latter feature is crucial and may be analyzed according to the degree of social distance that the group members set between themselves and "outsiders."

In general, ethnocentrism implies a universal, moral rightness of beliefs and what is referred to as "phenomenal absolutism" (Segall, Campbell & Herskovits, 1966) which is described as a tendency to assume that the world is exactly as one sees it. This tendency is complemented by the feeling that other groups see the world in the same way but act differently because they are evil and/or incompetent.

An example of how outsiders to the group may be viewed with suspicion is seen in the unwillingness of in-groups to send their children to schools that either have children representative of outgroups, and/or outgroup teachers who may convey negative values. The values and atti-

tudes of outsiders are perceived as having a negative influence on the ingroup members. A very common phenomenon in our society is for ethnocentric groups to "blame the out-group for the troubles and deprivations of in-group members" (LeVine & Campbell, 1972). In-groups thus blame the outsider for their problems and show scorn and contempt for the outsider's system of values and beliefs. The greater the group cohesiveness, the greater are the pressures for homogeneity and cohesiveness (Rosenblatt, 1964). Ethnocentrism has been found to lead to a drop in intragroup hostility, crime, and suicide (Williams, 1947).

It is not the intention of this study either to deal with the reasons for the development of ethnocentrism or attempt to understand why one group is more ethnocentric than the other. For the purpose of the present study, the quality of "one's own group being in the center of everything" is operationally defined as the degree of "social distance" (LeVine & Campbell, 1972, p. 15) that is maintained between in- and outgroup members.

Just as with strengthened group identification, tolerance increases within the group; similarly intolerance for the outsider increases. In this respect, it is helpful for the group to have another group upon which to vent its anger and hate. Thus the Jews rendered a basic service to civilizations that have been their hosts. Universal love as a pillar of faith within a Christian community leads to its opposite toward those who are outside the community (Freud, 1961). The

giving up of one's personal narcissism for the sake of the family or group may be later replaced with patriotism which is seen as a form of national narcissism.

In the psychoanalytic literature there is much made of group prejudice and scapegoating (Ackerman & Jahoda, 1950; Bettelheim & Janowitz, 1950; Freud, 1961). Stereotyping of outgroups was viewed as a projection of fantasies that are derived from unconscious needs of the ingroup members onto members of outgroups. For example, the more a group inhibits sexuality, the more they tend to perceive outgroup members as immoral and promiscuous. The more a group values cooperation and honesty, the more it will perceive outgroups as dishonest and untrustworthy (LeVine & Campbell, 1972). Survival of the group is thus dependent upon the narcissistic energy which gives its members great importance and a feeling of righteousness and superiority (Fromm, 1964).

From a psychoanalytic viewpoint, ethnocentrism was seen as a universal syndrome and was cast in terms of individual psychology. Freud (1955) viewed ethnocentrism as emerging out of self-love or narcissism leading to the "undisguised antipathies and aversions which people feel towards strangers with whom they have to deal" (p. 101). Freud's position was that self-love acts to preserve the individual and is accompanied by an evidence of readiness to hate and aggress. The group's function is to allow for greater tolerance and love within the group, thereby limiting the individuals' sense of narcissism, because "love for oneself knows only one barrier, love for others, love for objects" (Freud, 1955, pp. 101-102).

Freud saw "narcissism as the primary characteristic of man" because it inflated the importance that one attaches to one's own life, while it devalues the lives of others. Attachment to a group thus helps to separate "those who are like me or belong to me" from those who one considers "outsiders and aliens." Fromm (1964) advanced the view that one may stay within the confines of the family, the nation, and the group, as a means of denying one's own responsibility and power in the world. Fromm, who called this phenomenon "incestuous symbiosis," argued that it takes root in such concepts as "group," "nation," "blood," "mother or fatherland" and what is described in the present study as ethnocentrism.

LeVine and Campbell (1972), working within a naturalistic setting, found that whereas some "out-groups" were viewed negatively, others were viewed quite positively. They devised a lengthy interview designed to uncover the distinctions that individuals make with regard to those groups they would be willing to accept; those that were considered hard-working or lazy; those they considered honest or dishonest. LeVine and Campbell found that individuals tend to distinguish between honesty and trustworthiness on one hand, and dishonesty and treachery on the other, depending on whether they were characterizing their own group or outsiders to their group. This in turn leads to differences in dealing with foreigners as opposed to how they deal with "their own people."

The theoretical focus of the psychoanalytic writings, the ethnographic research in naturalistic settings, and the limited experimental findings all support the value of the present study.

Becker (1973) concluded that an understanding of the phenomenon of group behavior may be applied to the "present day problems of slavishness, viciousness, and continuing political madness" (p. 134). He continued:

This, it seems to me, is the authentic line of cumulative critical thought on the human condition. The astonishing thing is that this central line of work on the problem of freedom since the Enlightenment provides so little of the concern on ongoing activity of scientists. It should form the largest body of theoretical and empirical work in the human sciences, if these sciences are to have any human meaning. (p. 134)

Egocentrism and Ethnocentrism

In this section it will be shown how the concept of egocentrism has been conceptualized in the literature. The argument will be developed that the concepts of egocentrism and ethnocentrism are relevant to each other. It is argued that ethnocentrism may be conceived of as a collaborative form of egocentrism.

The psychoanalytic concept of narcissism, which was presented earlier, is consistent with the organismic-developmental views of Piaget (1970) and Werner (1948). The child's initial sense of undifferentiation may be considered a state of fusion between self and environment. Just as ethnocentrism is being embedded in one's own group as the center of things, similarly egocentrism is being embedded in one's own point of view. A number of researchers (Bearison & Cassel, 1975; Chandler & Greenspan, 1972; Selman, 1971) studied perspective taking as a developmental phenomenon. Langer (1969b) referred to the quality of "perspectivism" as the ability to differentiate among many different viewpoints. The distinction between one's own world view and

the view of others is crucial to an understanding and mastery of interpersonal relations. It is assumed that there are formal parallels in the properties of interpersonal and cross-group relations (cf., Werner, 1948, p. 28, on the principle of parallelism) such that what exists in a one-to-one relationship also manifests itself as a function of group belongingness. Egocentrism in interpersonal relations and ethnocentrism in intergroup relations may be viewed as formally similar. Members of a group, therefore, will be more apt to view the perspective of their own group members than the perspective of outsiders, in both moral and nonmoral social cognitive domains.

Centration-Decentration:
Egocentrism to Perspectivism

The next section describes the process of centration and the developmental progression toward decentration in the realm of physical and social cognition. The process of centration is intrinsic to the concept of egocentrism. Piaget (1950) dealt with the issue of salience in regard to a stimulus array in terms of the concept of centration. According to Piaget, decentration, in both the realms of physical and social cognition, is a cognitive process. The child, at the earlier stage of development, cannot organize the percept in a coordinated fashion because of an inability to transform the basic cognitive structures. Such cognitive restructuring, for Piaget, is neither the result of maturation or learning, but the product of the interaction between the organism and the environment.

In the realm of physical cognition, the child cannot integrate the salient aspects of the stimulus array because the child is unable at the pre-operational level (approximately 2-7 years of age) to coordinate the complex task of managing more than one aspect of the percept. The child assimilates only the surface aspects that dominate his perceptual field. During related developments occurring within the concrete operational period, the child becomes aware of the need to simultaneously consider different vantage points (Piaget & Inhelder, 1969).

Piaget's examination of the development of concrete operational thought in the area of conservation highlighted the importance he placed on the ability to consider multiple perspectives. Young children typically center their judgments of quantity on one dimension (e.g., height). As the child grows, he becomes more and more able to differentiate himself from the external world and assimilate and coordinate all those features of his environment other than those which are perceptually dominant. It is not only objects which must be dealt with in a conserving and decentering manner, but similarly, within the realm of interpersonal relations, one view, unconflicted, "centered," and developmentally undifferentiated, ultimately gives way to a more differentiated and decentered view.

Within the realm of the interpersonal, the young child cannot take the position of another or infer their perspective. This is so, because they are incapable of "understanding the nature of the relation between the self's and others perspectives" (Selman, 1974, p. 5). Piaget (1928) noted that the egocentric child not only assumes that he makes himself

perfectly clear to his listeners but also believes he understands perfectly when he is the listener. The child is a poor interpersonal communicator not only because he fails to consider the viewpoint of the other, but because he is incapable of cognitively organizing such knowledge. For Piaget, understanding the other person is not only learning more about them, but also possessing the necessary organizing skills to assimilate and coordinate this knowledge. Through the child's interaction with his social environment, and particularly with his peers during the concrete operational period (approximately ages 7-11), he begins to overcome his childish egocentrism both in the realm of physical and social cognition.

In the realm of social cognition many studies (Armsby, 1971; Berg-Cross, 1975; Chandler, Greenspan, & Barenboim, 1973; Costanzo, Coie, Grumet, & Farnill, 1973; Crowley, 1968; Glassco, Milgram & Youniss, 1970; Sternlieb & Youniss, 1975) have referred to and made use of the concept of decentration. The evolution from egocentrism to perspectivism in the realm of social cognition is a direct result of an increased ability to decenter.

The creation of developmental stage models of the ability to view the other's perspective, and to infer or go beyond the information given has been the focus of much research (Feffer, 1970; Flavell, 1968, 1974; Selman, 1971; Selman & Byrne, 1974). An example of a general model of interpersonal sequential role taking is that of Flavell (1974). In Flavell's model, the child must first recognize that there exists in another person some covert psychological event, which requires (needs)

some inference about the other. The inference may, in turn, require some accommodation (application) on the part of the listener. Flavell (1963) noted that "The sense of conflict and striving for resolution allows the child to conserve logically, and also to deal with interpersonal relations. It is social interaction which gives the ultimate coup de grace to childish egocentrism" (p. 157).

Social Conflict--Mechanism of Change

Piaget (1932) argued that the shock of one's thoughts coming "into contact with that of others produces doubt and the desire to prove The social need to share the thoughts of others and to communicate one's own with success is at the root of our need for verification" (p. 204). Feffer (1970) wrote of Piaget's "discussion among equals" as the ultimate liberating force which allowed children to decenter, to stand back and look at themselves and others as objects to be thought of and about. For Piaget, the occurrence of some kind of conflict as a result of interpersonal contact was necessary for the development of decentration in the interpersonal and affective realm just as decentration is necessary for cognitive growth in the physical or object realm. If such contact is not present, and a concomitant need for "verification" is not present, the quality of centration will persist even though the individual may be capable of, and show qualities of, decentration in other areas and other relationships. According to Feffer (1970), we modify our responses in anticipation of the other's reactions to our behavior and this modification is informed by cognitive decentering. However, in those cases where cooperation or the need to

cooperate is minimized, the tendency to see the world from a single perspective would be more likely to dominate the individual's perception of the interpersonal event (Flavell, 1974).

According to Looft (1972), the Piagetian view held that social interaction creates the "stress and conflict that induce cognitive transformation" (p. 76). When stress and conflict are resolved by creating social distance rather than interaction, the need to take another's view will be inhibited.

The development from one level of cognitive functioning to the next takes place, according to Piaget (1950) when the system is in a state of disequilibrium. Smedslund (1961) found that cognitive conflict may lead to the reorganization of structures relevant to performance on conservation tasks. The work of Turiel (1969) and Rest, Turiel, and Kohlberg (1969) indicated that the transition from one stage of development of moral reasoning to another may be facilitated by an externally induced conflict. Children, when confronted with moral arguments one level above their own assessed level of moral reasoning, tend to adopt the more advanced level of reasoning.

Langer (1969a), in underlining the role of the affective component of development, wrote that the child's own actions provide the basis for his psychological development. He concluded that the child "will only change if he feels consciously or unconsciously that something is wrong" (p. 36). That is to say, that in order for the child to change, he must experience perturbation (or disconcordance). Structural change is expected only if the new stimulus is experienced as discordant, and thus

results in disequilibrium. Langer (1969a) concluded that both "affective and organizational (intellectual) disequilibrium are necessary conditions" (p. 36) for the child's engagement in the adaptive, constructive mental activities that comprise the sources for cognitive change and development.

"To see another's point of view and recognize the importance of another's intentions," wrote Piaget (1928), "one must have some sense of openness to the others" (p. 116). To communicate effectively, one must modify one's intended behavior in anticipation of the other's reaction to this behavior. To understand the other is to recognize the other's own distinctive point of view and intentions.

"The amount of conflict presented by the environment," wrote Turiel (1969), "is interrelated with the potentiality of an individual to experience disequilibrium" (p. 130). Thus, in complex and heterogeneous environments, there may be greater likelihood of social conflict. The experience of social conflict, in turn, may promote growth and structural change. The perception of structural contradiction generated by experimental manipulation may also depend on the internal state of the organism. Turiel (1969) found that children whose answers to moral questions included a greater degree of stage mixture (i.e., children in a transition period will give a number of responses which may be characterized as representing different stages of moral development) relative to peers whose answers reflected lower development levels were likely to respond to stories containing moral conflict with relatively advanced moral judgments. According to Turiel, the more

complex environment, by providing the child with a diversity of viewpoints, a greater degree of social interaction, and conflict, provokes greater disequilibrium. This disequilibrium is reflected in the degree of stage mixture characterizing the child's responses to moral judgment questions. In turn, he concluded that a more heterogeneous and complex environment would lead to greater stage mixture.

It was expected that externally induced cognitive conflict would accentuate existing differences between groups from differing social contexts. The reason for this is that the groups from a more heterogeneous and complex environment, i.e., social contexts which encourage lower levels of ethnocentrism, would be more open to experiences involving novel or conflictual social situations. "Complex heterogeneous environments" would thus serve to facilitate growth because children from such environments will more readily perceive contradictions and thus experience conflict more frequently.

Social Context and Cognition

This section presents evidence from cross-cultural studies that support a relation between culture and the development of cognition. Cultural influences begin with the child's earliest social interactions. In both the earlier work of Piaget (1932) and from the more recent extensions by Kohlberg (1969, 1976), Turiel (1978a, 1978b), Damon (1977), Bearison and Cassel (1975), and Hollos and Cowan (1973), social interaction is seen as a critical determinant in transition from one developmental level to another. Cognitive transformation is critically affected by the stress and conflict of an internal nature that may be

stimulated by external conflicts. Contextual variables may interact with the internal state of the organism to engender disequilibrium and subsequent change. Moreover, task and contextual variables may differentially affect individuals at different levels of equilibrium and disequilibrium. For example, in the social cognitive realm, the child presented with an argument that is two stages in moral development above his own cannot explain or make use of such an argument (Rest, Turiel, & Kohlberg, 1969; Turiel, 1966). The internal organization must be in disequilibrium for the child to perform any new or creative actions.

Hollos (1975; Hollos & Cowan, 1973) investigated the issue of how specific cultural and environmental variables affected social and physical cognition as measured by tasks of role taking, spatial relations, conservation, and class inclusion. Her findings indicated that the amount of verbal and social interaction affected social cognition, but had no effect on physical cognition. She found that farm children, who had a lesser degree of social participation and experience in interaction than village and town children, showed significantly poorer role-taking ability.

Hollos suggested guidelines consistent with the concerns of the present investigation. She noted that studies of the effects of environment should not focus on global definitions such as class or cultural membership, but rather on the specific components of the particular environments that are expected "to form the immediate context relevant to the child" (p. 649). More generally, Looft (1972) suggested that there is a need to investigate the developmental criteria of

universality in regard to the concept of childhood egocentrism. It is possible that the ability to coordinate different perspectives and to judge another's intention, are differentially related to social context. Whereas attitudes and activities encouraged by some social contexts or cultures may facilitate the coordination of different perspectives, other social contexts may have the opposite effect.

There exists considerable evidence that differing social contexts play varying roles in the development of physical and social cognition. Greenfield (1966) found marked differences in Piagetian reasoning tasks between schooled and unschooled children in rural and urban Senegal. Greenfield and Bruner (1969) used these findings to support their claim that it is the spoken and written language environment of the schooled child which "stimulates and provides the necessary tools for conceptual growth."

Further evidence of cultural influences on cognitive development is suggested by the cross-cultural data from the Temne and Mende tribes in Sierra Leone (Dawson, 1967). The Temne society values conformity, group reliance, maintenance of authority, polygamy, and strict discipline. In contrast, the Mende society is a more permissive environment and encourages individual initiative. Using tasks of physical cognition such as the Embedded Figure Tests, Dawson found the Temne "significantly more field dependent" than the Mende. Berry (1966) found similar differences between the Temne and Canadian Eskimos. The Canadian Eskimos were described as the recipients of unconditional love and approval and as having been taught earlier, without use of verbal or

physical punishment, to be self-reliant. Berry (1966) argued that cognitive differences between the Temne and the Canadian Eskimos are related to differences in "socialization practices."

There is also evidence in the cross-cultural literature (Kahana, 1970) that children may respond atypically within a developmental paradigm. Kahana found that just as the Atayal adolescents (Kohlberg, 1964) showed a regression in dream concepts, so, too, Chassidic youngsters showed a similar regression beginning at about age nine. Kahana found that even though the preadolescent youngsters were capable of recognizing the nonmaterial nature of dreams (stage 6), they "showed marked confusion regarding the internal-external nature of dreams" (p. 6). Although they recognized that dreams were thoughts (nonmaterial, stage 6), they were often "located in the dreamer's house or room, near or around the dreamer." These older children had greater difficulty with the question of internal versus external nature of their dreams than did younger children. His results agree with Kohlberg that the confusion and loss of certainty "may represent the attempts of a child who has attained higher levels of thinking to come to grips with the lower level adult ideology" (p. 7). Kahana concluded that his "study underscored the importance of cultural influences in affecting the sequence of cognitive development" (p. 8), even to the extent that "demand characteristics of the environment may cause reversals in cognitive development."

Finally, an example of how social context may affect the development of attitudes toward rules and conventions may be found in the work of Havighurst and Neugarten (cited by Hoffman, 1970). They found that 75% of Navajo Indians sampled felt that rules of American games could be changed. On the other hand, only 1 out of 28 felt that rules of Navajo games could be changed. Havighurst and Neugarten concluded that "there is one type of morality for tribal life and one for that part of life in white culture" (Hoffman, 1970, p. 275).

Studies that address within-culture interfamilial differences are also relevant to the development of social cognition. Certain events may take on significance in one type of family that have no such significance for another type of family. Bearison and Cassel (1975) found a relationship between parental attitudes toward child rearing (person vs. position orientation) and "communicative effectiveness." Thus, there exist shared standards within a family or community that "constitute a psychological reality" (p. 36) different in form from other families, and communities. Just as children in a position oriented family live within the context of a social orientation that constitutes a particular psychological reality to which they must constantly adapt, so, too, children from highly ethnocentric communities are required to adapt to particular social contexts that require allegiance to conventions, codes, taboos, and strong constraints in regard to authority. Whether or not children perceive an issue as

requiring a moral judgment, and how they use this knowledge to mediate their subsequent judgment, becomes to some degree a function of social context.

Piaget on Moral Reasoning -- Empirical Findings

This section discusses the research which was stimulated by Piaget's studies of children's moral reasoning. The section includes research evidence on the universality of Piaget's moral stages. It also explores the relation between each of the following variables and moral reasoning: (a) intelligence; (b) social class; (c) child-rearing practices; (d) peer interaction; (e) educational programs. Finally, evidence is presented which has bearing on the performance effects of task variables which have been used in the assessment of moral reasoning in children.

Although the bulk of Piaget's research concerned children's knowledge of physical aspects of the environment, his studies of children's moral reasoning constituted his primary efforts regarding how children understand their social environment. In his most noted studies in this area, Piaget presented children with moral dilemmas in which they had to decide which of two story characters is naughtier: (a) a well-intentioned child who accidentally causes major damage, (b) a poorly intentioned child whose actions cause minor damage (Piaget, 1932).

Piaget found that children at the preoperational stage of development judged culpability primarily on the basis of the magnitude of the material consequences of the action. Children at this stage also

think that justice is expiatory rather than restitutive. At the concrete-operational stage of development, children were able to consider the intentions of the story characters and to use this knowledge to mediate their moral judgments. Thus, intentionality replaces material consequences as criteria for judging culpability. Children's ability to infer intentions in judging moral transgressions represents their increasing capacity to make inferences about the psychological qualities of others.

In addition to studies of children's use of intentionality, Piaget studied other dimensions of children's moral reasoning including the changeability of rules in children's games, obedience to authority, and immanent justice. Findings from these studies led Piaget to postulate two broad stages of moral development, a morality of constraint or heteronomous morality and a morality of cooperation or autonomous morality. Although Piaget referred to the moralities of constraint and cooperation as two separate "stages," he did not view them as tightly organized or clearly separated from each other. "In light of subsequent research," wrote Rest (in press), "Piaget's two moralities probably are best regarded as characterizations of the poles of development--that is, the two moralities are rough descriptions of the beginning and end points of the course of development, rather than successive transformations in cognitive systems over the course of development" (p. 33).

Investigators, in general, have confirmed the presence of these two "stages" in development. General reviews of this area can be found in Hoffman (1970), Karniol (1978), Keasey (1977), Lickona (1976), Rest (in press), and Schantz (in press).

Universality of Piaget's Moral Stages

Many studies have focused on one or more of the major attributes or dimensions of Piaget's stages. The objective of much of this research was to determine "if there is a natural tendency for the attributes to appear in the postulated developmental order" (Hoffman, 1970, p. 269). Consistent with Piaget's stage sequence assumptions, Hoffman (1970) reported over 20 studies which found developmental age trends in regard to one or more of the major attributes of Piaget's moral stages. The findings included a variety of populations representing both sexes, different levels of cognitive capacity, and socioeconomic status. Regardless of class or IQ, the results were consistently in accord with Piaget's postulated sequence. These studies provided a great deal of support for Piaget's postulated sequence in Western countries" (Hoffman, 1970, p. 263).

Although the presence and invariant sequence of these stages has been confirmed in studies of children from Western countries, the evidence regarding such age trends in primitive cultures, however, is ambiguous. Jahoda (1958) and Dennis (1943) found the expected decrease in immanent justice in "non-Western" cultures. Havighurst and Neugarten (1955) studied moral reasoning in 10 American Indian groups. In relation to the concept of immanent justice, four of the groups showed

no age trends while six of the groups evidenced a trend toward the increased belief in immanent justice with age. They also studied attitudes toward rules of American games and found that three of the groups showed an increase in the children's conception of rules as rigid, fixed, and unchangeable. Hoffman concluded that the findings must be taken as evidence against the universality of Piaget's moral stages. He argued that the findings were not the result of a developmental arrest because there was an increase in "immanent justice" and "fixed rules" with age, which constituted a "reversal of the sequence." It is possible that although Piaget's stages are invariant within the structure of Western society, socio-cultural factors in non-Western cultures may play a significant role in regard to the stage sequence.

Some of the other questions to which researchers addressed themselves were whether movement through the stages was accelerated or retarded by virtue of differences in cognitive development (i.e., IQ), social experiences, child-rearing practices, peer interaction, and educational intervention.

IQ and Moral Reasoning

Hoffman (1970) reported that many studies confirm the existence of significantly high positive correlations between Piaget's dimensions and IQ. These studies which reported a positive influence of IQ on moral reasoning were consistent with Piaget's argument that progress through moral stages is accelerated in advances in cognitive development.

Social Class and Moral Reasoning

The influence of social class on Piaget's moral attributes is reported in the literature as being consistently in the positive direction. The argument that this finding may be the indirect result of class differences in IQ is counter-indicated by Boehm's (1962) study in which IQ was partially controlled. It is also possible that these differences may be related to class differences in parental disciplinary style. The greater involvement of lower-class children with law enforcement agents or with symbols of adult authority may result in a greater reliance on a morality of constraint, i.e., lower levels of moral reasoning. These hypotheses remain unsubstantiated (Hoffman, 1970).

Child-Rearing Practices and Moral Reasoning

Hoffman (1970) reported that the findings for child rearing practices "appear to be less supportive of Piaget's view that egalitarian child rearing practices would accelerate moral development" (p. 271). More recent studies, however, appeared to support Piaget's contention that egalitarian child-rearing practices accelerate moral reasoning. Montemayor (1977) used the person-position classification (Bernstein, 1972) and an assessment procedure adapted from Bearison and Cassel (1975) in comparing moral reasoning ability in two groups of children. A person orientation is one in which appeals are made on the basis of individual needs. A position orientation is one in which appeals are made on the basis of a person's ascribed class, religion, sex, or authority. Montemayor found that children with person-oriented

mothers used intentionally as a criterion for making moral judgments to a greater extent than children with position-oriented mothers. This was consistent with Bearison and Cassel's (1975) finding that children from person-oriented families show better performance on tasks involving interpersonal communication skills than children from position-oriented families.

Other studies have questioned the effect of child-rearing practices on moral reasoning from the vantage point of progress through Kohlberg's more differentiated six-stage model of moral development. These studies provided correlational data which supported a positive influence of democratic family discussion styles (Dickenson, cited in Rest, in press; Holstein, cited in Rest, in press; Pirikh, cited in Rest, in press; Schoffiett, cited in Rest, in press), and of the "induction" style of discipline (Hoffman, 1970; Hoffman & Saltzstein, 1967; Saltzstein, cited in Rest, in press) on moral reasoning.

Peer Interaction and Moral Reasoning

Piaget stressed the overriding importance of peer interaction in the child's development toward a more perspectivistic and less egocentric style of thought. Peers help shape children's faith in the source of rules and the developing recognition that rules by norms of reciprocity can be changed. Piaget emphasized the importance of mutual role taking which is present in interaction with peers.

Hoffman (1970) noted that the effect of peer interaction has been neglected in the research. He concluded that there is general support for the view that social experience enhances forward movement along

Piaget's attributes; however, "the mechanism by which this occurs is unclear. There is no evidence, for example, that reciprocal interaction--with peers or parents--is central" (p. 273).

Correlational data exist which are consistent with Piaget's expectation of a positive relationship between indices of peer interaction and moral reasoning (Edwards, 1978; Harris, Mussen, & Rutherford, 1976; Keasey, cited in Rest, in press; Maqsud, cited in Rest, in press). Edwards (cited in Rest, in press) found that students attribute "the greatest change in their personal values to encountering ethnic and racial heterogeneity at school and to going away from home to live" (p. 36).

Educational Programs and Moral Reasoning

It has been argued that practice in solving moral dilemmas, and mutual probing of each other's solutions among peers fosters the development of moral judgment ability (Blatt & Kohlberg, (cited in Rest, in press). Review of these educational intervention studies may be found in Lawrence (1980) and Lockwood (1978). The major findings reported in the literature were that peer discussion of controversial moral dilemmas fosters moral judgment development. These findings, however, must be interpreted with some caution. Rest (in press) pointed out how difficult it was to raise the average moral judgment score of any group by an intervention. He argued that many studies reported no changes and when change occurred, it tended to be slight. From these

studies it was unclear what specific pedagogical practices or curriculum materials are most effective with which groups and under which conditions.

Task Variables and Moral Reasoning

The assessment paradigm: Modifications. Criticism of Piaget's original paradigm resulted in a body of research directed toward the modification of the assessment paradigm in order to unconfound variables of intentions (intentional/accidental), consequences (major/minor), and motives (good/bad). One group of investigators (Buchanan & Thompson, 1973; Costanzo, et al., 1973; Hebble, 1971) addressed the problem of confounding by requiring the child to separately evaluate each of four basic story types (good intention/high damage; good intention/low damage; bad intention/high damage; bad intention/low damage). Other investigators (Gutkin, 1972; Irwin & Moore, 1971; Keasey, 1977; Keasey & Sales, 1977b) used story pairs and required the children to identify the naughtier actor in up to six possible pairings.

Berg-Cross (1975) compared the relative effect of these two paradigm modifications (individual stories versus story pairs) on the judgment of intentions by first-grade children. He found that the children gave more subjective responses when the stories were presented individually than when they were presented in story-pair form. Since a major difference between the two modes of presentation was that in the individual presentation the "accidental" or "intentional" nature of the

action was explicitly stated by the investigator, Keasey argued that one cannot conclude from the above that the single story format was more effective in increasing children's subjective responses.

Another important body of research directed toward the modification of the assessment paradigm focused on the accidental/intentional distinction in Piaget's story couplets. Piaget (1932) and most subsequent investigators employed stories which failed to differentiate between these two dimensions. Karniol (1978) argued that the assessment of children's understanding of the distinction between accidental and intentional actions required that the stories used in the assessment paradigm clearly differentiate between accidental and intentional actions. A group of studies which met this requirement (Armsby, 1971; Buchanan & Thompson, 1973; Farnill, 1974) led Karniol to conclude that children judge story characters engaged in intentionally negative acts as naughtier than those whose accidental actions produce greater damage.

Other studies (Buchanan & Thompson, 1973; Gutkin, 1972; Keasey, 1977; Keasey & Sales, 1977b) which focused on the accidental/intentional distinction varied the consequences across story pairs, held consequences constant or eliminated consequences, in order to reduce surplus information which masked children's judgment of intention. The results indicated that the mere presence of consequences information reduced young children's ability to demonstrate their understanding of intentions. When consequences were varied across story pairs rather than held constant, an even greater reduction of intentions responses occurred.

Finally, another body of research modified the assessment paradigm in order to unconfound the variables of motives (good/bad) and intentions (accidental/intentional). Peterson and Keasey (1976) studied three groups of pre-operational children, ages 3:8, 4:4, 4:11. The children were presented with three stories resulting in identical positive outcomes. In one case, however, the outcome was the result of an accident, while in the other two instances, it resulted from either a good or badly motivated action.

Children at all three age levels clearly differentiated between actions with good as opposed to bad motives even though the actions led to similar outcome. On the other hand, children's responses to the accidental stories were randomly distributed leading to the conclusion that children were unable to systematically differentiate accidental actions from either good or bad motives. The children's understanding of the distinction between good and bad motives as opposed to intentions was also reflected in their moral reasoning. Whereas over 25% of the children gave responses reflecting a correct understanding of the actor's motives, only one of 36 children identified the unintentional nature of the accident.

Keasey (1977) argued that since children's understanding of intentions and motives appeared to follow different developmental sequences (the concept of motive emerging first) it was important in the design of a study to differentiate between these two concepts. Whereas children as young as three years of age were capable of differentiating good motives (for example, helping another child) and bad motives (for

example, not helping another child) (Peterson & Keasey, 1976; Weiner & Peter, 1973), and the concept of bad was learned before the concept of good (Berndt & Berndt, 1975), children did not learn to differentiate accidental from intentional events much before their sixth birthday (Keasey, 1977). Considering the above, Keasey argued that children's evaluations of moral dilemmas may initially reflect a discrimination along the line of motives rather than intentions. This was consistent with Piaget's observation that preoperational children lacked the notion of chance or probability and attributed causality to all events. In the same sense, they would find psychological motives behind all behaviors.

Other variables which were postulated to affect moral reasoning were the severity of the consequences, the recipient of the consequences, the order of the presentation of the salient variables, and the mode of presentation.

Severity of the consequences. Armsby (1971) found that children's judgments of intentions were affected by the severity of the consequences. The frequency of subjective responses declined systematically in six and eight year olds as the severity of four levels of consequences increased (consequences varied from the breakage of one cup to the breakage of a brand new television set).

Recipient of the consequences. Another group of researchers (Berg-Cross, 1975; Imamoglu, 1975) found that negative consequences which were directed toward humans rather than toward physical objects resulted in an increase in subjective responses.

Order of presentation of the salient variables. Nummedal and Bass (1976) presented groups of six-year-old children with tasks requiring judgments of intention. Half the children were presented the dilemmas in the usual order (intentions followed by consequences). The other half had the order reversed. They found that the order of presentation resulted in a significant influence on the ratings of intention in these preoperational children. They argued that by presenting intentions first and consequences last, the children's attention was drawn to the consequences as the more recent and therefore more salient cue "thereby masking the child's competence vis-a-vis intentions" (p. 475).

Mode of presentation. The medium used in assessing moral reasoning was also shown to play a role in eliciting subjective responses by reducing the task complexity and better approximating real-life encounters. A group of researchers modified the verbal presentation of the stories using film (King, 1971) and videotape (Berndt & Berndt, 1975; Chandler et al., 1973; Farnill, 1974). Chandler et al. (1973) found that first graders gave significantly more subjective responses to video tape than to stories which were read, but Berndt and Berndt (1975) found no differences among 4, 8, and 11 year olds. "At the present time," wrote Keasey (1977), "it is impossible to resolve the contradictory data and opinions as to the relative effectiveness of verbal versus videotape presentation in eliciting subjective responses from young children" (p. 235).

The assessment paradigm: Modifications in the child's responses.

Keasey (1977) also summarized research data which addressed the question "What response should be required of the children in assessing their knowledge of intentions?" Many researchers had followed Piaget's approach which required children to reason about their moral judgment regarding which of two story characters was naughtier.

Some researchers, however, relied only on children's opinions without requiring an explanation (MacRae, 1954). Others used the multiple-choice format (Grinder, 1964), while others used both opinions and explanation (Cowan, Langer, Heavenrich, & Nathanson, 1969; Sternlieb & Youniss, 1975).

In order to better quantify children's use of intentionality, some investigators asked children to rate story character's degree of naughtiness along a numerical scale (Costanzo et al., 1973; Shantz & Voydanoff, 1973). Others used children's response latency as a measure of the recognition of intentionality (Imamoglu, 1975; Peterson & Keasey, 1976). They found that accidental actions resulted in greater response latency.

Although some studies have utilized two or more of the indices (typically moral opinions and ratings) few studies have compared the different indices in order to determine if they achieved comparable results. One such study was that of Imamoglu (1975) which compared the ratings from a naughtiness rating procedure with a response latency in groups of 5, 7, 9, and 11 year olds. He found that accidental acts were evaluated more slowly (i.e., greater response latency) than intentional

ones by all four age groups. On the other hand, using a rating task measure, only three older groups were able to differentiate accidental from intentional acts. It appeared, then, that the response latency was a more sensitive measure of intentionality than a ratings measure.

Peterson and Keasey (1976), however, used response latency as a measure of the judgment of intentions but did not replicate Imamoglu's findings.

The most thorough investigation of the various indices was carried out by Keasey and Sales (1977b). They studied the judgment of intentions in groups of 5, 6, and 7 year olds, using moral opinions, moral reasoning, and naughtiness ratings. They also asked the children what was meant by the word "accident". Thus they incorporated three of the four indices used by previous investigators in their study and introduced a new one. They found that patterns of improvement in all three age groups were similar for all three indices. This was reflected in the children's percent of "correct" responses. The indices also showed identical patterns of relative difficulty across all three age groups. The easiest task for the children was the judgment of intentions using moral opinion as a measure, while the hardest task was defining the word "accident". Because the rating data could not be converted to percentages, its relative difficulty could not be compared to the other three indices. Keasey and Sales (1977a) argued that the moral reasoning task was superior to the other measures because it minimized the number of false positives. It also eliminated the ambiguity of inferring the basis for the children's responses which was present in the case of moral opinions, ratings, and response latency.

In general, any index which required the children to verbalize the accidental/intentional distinction or discuss the concept of motive is more demanding than ones which required children to rate good and bad motives or accidental and intentional actions (Keasey, 1977, p. 256).

In summary, the question as to which of the indices is better must be answered "for what?" (Keasey, 1977, p. 252). If one wishes to know the age at which children first become aware of the concept of intentions, and "begin to differentially respond to the accidental/intentional distinction, then either the moral opinion or rating tasks would seem more appropriate" (Keasey, 1977, p. 252). If the research interest, however, is not a concern with age of onset, but rather a more differentiated view of how children reason about moral issues, then the more complex demands made upon the child by the moral reasoning task would be preferable.

In concluding this brief review of the empirical data on Piaget's contribution to moral reasoning, it should be noted that the vast body of empirical findings were basically supportive of Piaget's "stage" theory of moral reasoning. Piaget's methodological shortcomings by present-day standards were secondary to the general direction of his approach which drew attention "to the complex inner processes that underlie adult 'common sense' and proposed that morality is rooted in a person's basic understanding of the social world. Subsequent research in the cognitive developmental tradition has improved on Piaget's methodology, yet only elaborated Piaget's general vision" (Rest, in press, p. 36).

Piaget's vision was that of a society where moral development was a natural outgrowth of the interaction among equals. For Piaget, the movement from obedience to cooperation was dependent upon an environment where "everyone does his best to obey the same obligations and does so out of mutual respect. By drawing attention to one's own needs, one's own difficulties, even one's own blunders, and pointing out their consequences, one creates an atmosphere of mutual help and understanding" (Piaget, 1932, p. 138). In turn, he described an atmosphere that requires "ritualistic and external obedience" as antithetical to the "atmosphere of mutual help and understanding." Piaget (1932) concluded that "the more differentiated the society . . . the greater will be the opportunity for intellectual and moral cooperation" (p. 397).

As presented earlier, Bearison and Cassel (1975) advanced the view that "structural properties of a social system were related to "the cognitive behavior of individuals developing within that system" (p. 35). Delays in the development of advanced levels of moral reasoning may, consistent with Bearison and Cassel's view, be hypothesized to be a function of social context. When children subordinate psychological dimensions to considerations of institutionalized norms and status prescriptions, these children may develop less differentiated concepts of social interaction. Consequently they may fail to respond to psychological states in others that differ from their own.

Moral and Social Conventional Reasoning

This section presents a review of Turiel's (1978a, 1978b) model of the development of moral and social conventional reasoning and its relation to Piaget's theory of moral development. Turiel argued that from an epistemological point of view, a distinction must be made between the moral and societal domains. He also maintained that empirical findings supported the view that young children are capable of distinguishing moral and social conventional rules.

Turiel (1978a) defined moral prescriptions as concepts related to the "welfare of others, protection of rights, or avoidance of physical or psychological harm to others" (p. 27). Morality, argued Turiel, must be "narrowly defined" as justice." Moral reasoning, then, is relevant to "a relatively limited range of issues, such as value of life, physical and psychological harm to others, trust, responsibility, etc." (p. 27). Social conventions, on the other hand, are described as "behavioral uniformities that serve the function of coordinating the actions of individuals participating in social systems. . . . Social conventional acts are arbitrary in the sense that they represent regularities that achieve social coordinations" (p. 26). Social conventions include forms of address, dress codes, and national allegiance. These contrast with moral prescriptions and may be considered as part of the individual's descriptive understanding of systems.

For Turiel, both social conventions and concepts of justice develop separately, alongside one another, and rather than being interdependent, inform one another. Turiel (1979) showed that children as young as four years of age can adequately distinguish between acts involving harm to others and acts that involve violations of social conventions. The distinction is viewed as nondevelopmental in that the capacity to distinguish between moral and social conventional rules does not evolve with age; only the child's conceptualization of social conventions is seen as age and stage related. He presented evidence that children are capable of distinguishing between moral and social conventional rules by showing a clear-cut ability to judge acts involving a violation of social convention. Turiel pointed out that moral concepts have often been studied using violation of game rules and the forbidden toy paradigm, both of which, he argued, are not related to moral reasoning.

Damon (1977), on the other hand, described a different view of the ontogenesis of social rule reasoning. He proposed four qualitatively different levels of reasoning about social conventions. At the earliest levels no distinction was made between social conventional or moral rules while only at the highest levels did children consistently distinguish between "conventions" and "principles." Damon (1977) found that only 37% of four and five year olds thought stealing was worse than eating with one's fingers. At age six, he found that 60% of the children rated stealing as worse.

Turiel's ontogenetic view of the development of moral and social conventional reasoning conflicted with Piaget's conceptualization of the development of children's moral reasoning. Piaget's (1932) classic study of moral judgment began with a study of children's attitudes toward a set of particular social rules, the rules of games involving marbles. Piaget's study of children's conceptions of the rules of games must, however, be viewed within a wider context.

For Piaget (1932) the stage model of moral-judgment development was based on the assumption that autonomous moral reasoning develops out of and replaces a morality of constraint. For the young child, "whatever conforms to the dictates of adult authority is just" (Piaget, 1932, p. 315). For a child operating within a morality of constraint, unilateral respect is stronger than mutual respect and justice is defined by concepts such as law, duty, and obedience. The child's interactions with peers fosters an appreciation of the value of cooperation and mutual respect. With the progressive development of autonomy and the priority of equality over authority, equalitarianism begins to outweigh other considerations.

In elaborating Piaget's two "stage" model, Kohlberg advanced the view that a less developed moral system is based on conformity to conventionally defined rules while more advanced systems are based on principles distinct from conventional rules (Turiel, 1979). Within Kohlberg's system, adherence to social conventions is treated as part of moral development and relegated to early developmental stages.

Although Piaget (1932) began his study of moral reasoning with an analysis of children's attitudes toward the game of marbles, he never equated game rules and moral reasoning as Turiel (1978) suggested he did. Piaget postulated that the development of the child's attitudes toward the rules of games and toward the development of a morality of cooperation follow analogous paths. "The passage from obedience to cooperation," wrote Piaget (1932), thus marks a progress analogous to that of which we saw the effects in the evolution of the game of marbles; only in the final stage does the morality of intention triumph over the morality of objective responsibility" (p. 138). The child's earliest attitudes toward games come out of the morality of unilateral respect. The longer and stronger one maintains such a morality the more likely one would respect conventions, rules, and taboos.

Turiel argued that social conventions do not involve perspective talking or intentionality. From the work of Havighurst and Neugarten (cited by Hoffman, 1970) which was noted earlier, it is clear that social conventions, as characterized by attitudes toward games, may be perceived by the child differently, depending on the cultural influences.

For children from a more conventionally oriented, rule-following environment, rules are seen as the cement that holds the community together. The breaking of rules becomes as much a moral offense as does an act causing harm to others. The more cohesive the group, the more rules play a dominant role, the more each person is invested with the responsibility to maintain the essential order for the good of the

community. In this way, rules take on a new perspective. The basic underpinning of moral judgment is the resolution of a situation that pits the conflict between one's own self-gain against that of other. When the good of the community is seen as essential to the welfare of the individual, then individual acts that flout the conventional norms of that society take on a greater degree of importance and take on the quality of moral judgments.

From the Piagetian framework, the distinction between moral and social conventional content domains that Turiel found four-year-old children capable of making, might not stand up to experimental test. Some cultures place greater significance on social conventional reasoning than others. Within such cultures, harm to individuals may be seen as a less significant violation than the harm to the group that occurs because of the violation of social conventional norms. Children whose social context places great importance on tradition and loyalty to the group, thereby elevating unilateral respect for authority to a moral issue, may have much greater difficulty in distinguishing between social conventional acts and moral issues.

The present study of the relationship between social context and moral and social conventional reasoning has the added dimension of providing an opportunity to investigate Turiel's distinction between the separate content domains of moral and social conventional rules within a cross-cultural setting.

Methodological Issues

Two sets of couplets, labeled Type 1 and Type 2, were developed to investigate moral and social conventional reasoning. The first set of couplets (Type 1) employed in the present investigation, provided the test of the major hypothesis of differences in moral reasoning. Stories were matched such that they followed the couplet paradigm developed by Piaget (1932). In one story a well-intentioned character inadvertently caused major damage and in the companion story a malintentioned character caused minor damage. (See Appendix A for the entire set of Type 1 couplets.)

Example: Peter has lived here in town all of his life. He knows the names of the streets quite well. One day a boy asked him where 14th Street was. Peter decided to play a trick on the boy and pointed in the wrong direction. But the boy didn't get lost and managed to find the street anyway.

Thomas did not know the streets very well since he was new in town. One day a boy stopped him in the street and asked him if he knew where 14th Street was. Thomas said, "I think it's over there" and pointed in the wrong direction. The boy lost his way and could not find the street. (derived from Piaget, 1932, p. 149)

As noted earlier, in the original Piagetian (1932) story paradigm, motive (good versus bad), intention (accidental versus on purpose), and consequences (major damage versus minor damage) were often confounded. These problems generated a great deal of research (Berg-Cross, 1975; Buchanan & Thompson, 1973; Costanzo et al., 1973; Keasey, 1977) which attempted to modify Piaget's paradigm in order to clarify "when children

first begin to use intentionality in making moral judgments" (Keasey, 1977, p. 232). Keasey (1977) outlined "at least eight different modifications of the original paradigm."

It was clear that creating stories and story pairs that were less complex heightened the saliency of the intentionality feature of the story and improved children's performance, while surplus information made it more difficult for young children to demonstrate their understanding of the accidental/intentional distinction (Keasey, 1977, p. 238). In the present study, the social-contextual questions which were raised and their relationship to moral and social conventional reasoning ability were best examined with the more complex story pairs. This was true because the concern of this investigation was less with the question at what age moral reasoning first began and more with how social context affected children's ability to center on the salient issues in making moral judgments.

Thus the Type I couplets chosen differed from the Piagetian paradigm in a number of ways. First, they were designed specifically to eliminate any violation of a parental will by focusing only on interaction among peers. In many of the Piagetian (1932) story couplets, a poorly intentioned act which violated a parental injunction and resulted in minor damage was pitted against a well-intentioned act leading to major damage. In these couplets there was a confounding of the judgment of intentionality with the violation of the parental injunction. Piaget (1932) did not address himself to this question and no evidence in the literature was found where this issue was discussed.

In a pilot study, the present investigator found that high ethnocentric children's responses to the moral reasoning dilemmas may have been unexpectedly influenced in the direction of higher levels of moral reasoning because they focused on the violation of the parent's will, thus leading to a spurious interpretation of the findings. The child's choice of the poorly intended actor as "naughtier" was not considered representative of the emerging morality of cooperation but due to the child's fear of retribution by the parent, i.e., a morality of constraint. It was for the above reason that all the dilemmas used in this investigation (both Piaget's and those specifically created for the study) involved interactions among peers, without the intrusion of "authority" figures.

In addition, each story in the couplets was presented to the children with an accompanying photograph of a child. A different photograph was used to represent either the well-intentioned or poorly intentioned protagonist. The appearance and attire of the child in the photograph was distinctly from either the subject's own ethnic group or an outgroup. This aspect of the study is discussed fully in the Method section.

The second set of couplets (Type 2) comprised a series of hypothetical situations which highlighted specific violations of both social conventional and moral rules. Rather than judging individual situations of social conventional violations as Turiel (1978b) has done, the present study utilized the Piaget story couplet paradigm, directly

pitting violations against one another. Although Turiel matched violations at home, and at school he did not in any way attempt to compare directly violations in different content domains.

The Type 2 couplets differed from the Piagetian paradigm in the following ways. There was no juxtaposition of minor versus major damage nor was the issue of differing intentions of significance. The Type 2 couplets involved agents acting within moral and social conventional content domains. The child presented with a pair of Type 2 couplets had to choose between the relative seriousness of moral and social conventional violations. The following is an example of a Type 2 couplet. (See Appendix A for the entire set of couplets.)

Example: Chaim wakes up one morning and it is very hot outside. He hears on the radio that it will be 95° that day. He decides to put on his bathing suit, tee shirt, and sneakers, and goes to school that way.

Dov Baer and his best friend make up to go to the park next Sunday. During the week another boy who is not as close a friend calls and tells Dov Baer that he has an extra ticket to the circus on Sunday. Sunday morning, Dov Baer tells his best friend that he is sick and cannot go the park. Dov Baer goes to the circus with the other boy. (Deborah Topp, 1980)

The children's responses to the Type 2 couplets and their responses to specific questions derived from Turiel's (1980) interview, which was designed to assess children's understanding of rules, provided the major test of Turiel's hypothesized distinction between moral and social conventional content domains.

The two varieties of story couplets provided the basis for the examination of the hypothesized social context differences in moral and social conventional reasoning.

Hypotheses

Hypothesis 1. It was hypothesized that children from different social contexts would differ in their judgments of the culpability of actors in stories involving intended harm to others (lying, stealing, trickery, etc.). It was expected that children from high ethnocentric social contexts would be less likely to use intentions in making moral judgments than would children from low ethnocentric social contexts.

Hypothesis 2. It was hypothesized that in judging the culpability of actors in stories involving intended harm to others, children's moral reasoning would reflect a significant social context by photograph condition interaction. It was expected that children from the high ethnocentric social context would use intentions more often in judging ingroup members than in judging outsiders. By contrast, children from low ethnocentric social contexts would use intentions equally in judging in-and outgroup members.

Hypothesis 3. It was hypothesized that children from low ethnocentric social contexts, as compared to children from high ethnocentric social contexts, would judge a moral transgression involving intended harm to others as more serious than a social conventional transgression.

Hypothesis 4. It was hypothesized that children from differing social contexts would differ in their assessment of the relative importance of moral and social conventional rules. It was expected that

children from low ethnocentric social contexts, as compared to children from high ethnocentric social contexts, would rate violations of moral rules as more important than violations of social conventional rules.

Hypothesis 5. It was hypothesized that children from high ethnocentric social contexts would differ significantly from children from low ethnocentric social contexts in understanding the changeability and cultural specificity of social conventional rules and the stability and universality of moral rules. Children from low ethnocentric social contexts, compared to children from high ethnocentric social contexts, would be more likely to recognize the changeability and cultural specificity of social conventional rules. By the same token, children from low ethnocentric social contexts, as compared to children from high ethnocentric social contexts, would be more likely to recognize the stability and cultural universality of moral rules.

CHAPTER III

METHOD

Settings

Children were sampled in three groups. Each group was considered to represent three increasingly greater degrees of ethnocentricity. All the children were New York school children attending private schools. They were all white, Jewish, and middle class.

The first group of children were from a Chassidic sect. These children lived within highly self-contained communities in the Boro Park and Williamsburg sections of Brooklyn. They attended school with other children of their own sect. Classes were segregated by sex and boys and girls attended classes in separate buildings. Although the younger children's attire was typical of New Yorkers in general, older boys wore white shirts and dark pants. Most boys wore the traditional (large velvet) yarmulkah, had flowing ear locks, and fringed outer garments (tzitzis) which gave them quite a different appearance from average middle-class children. The classes in these schools were held in Yiddish and the children had been in a formal school setting learning writing and reading since the age of three. Thus the high ethnocentric group may not be considered academically, socially, or linguistically "deprived." Their school work had been primarily in the area of Hebrew and Yiddish rather than English studies, and a great majority of them were more fluent in Yiddish than in English.

Many of these children came from large families where the presence of four or more siblings was not unusual. These Chassidic families have minimal interaction with members of other neighboring communities. There is little interaction with non-Chassidic, orthodox Jewish families socially, and it would be almost unheard of for a friendship with a non-Jew or nonreligious Jew to develop. The families often own small businesses or work in particular trades, such as the diamond line, where contact with outsiders is minimized. Chassidic men are often attired in black frock coats and wide brimmed felt hats or in dark suits with tieless white shirts. Sport jackets, light colored clothing, sport shirts, etc., are rarely, if ever, worn by these men. The married women always wear some kind of head covering in the form of a wig (sheitle) or kerchief (tichel). All women must wear dresses with high necklines and long sleeves. Shorts and pants of any kind are absolutely forbidden. Subsequently, people who do not dress in the traditional garb are usually assumed to be non-Jewish by the youngsters (even if such people are Jewish). Adults often refer to such "non-Chassidic" Jews in a way as to give the impression that they are, in fact "outsiders." The expression "Goy" refers to either a nonbeliever or an outsider. Thus the particular group sampled, although quite friendly, gregarious, kindly, and giving to people within the group, are much more suspicious and guarded with outsiders. Some Chassidic sects are often unfriendly and suspicious toward other Chassidic sects.

The members of the sect thus constitute a very closed group that allows minimal influence from the outside. Newspapers are generally of a highly ethnic and specific nature. So, for example, there are daily Yiddish speaking journals read by mainstream Yiddish speaking people that would never be allowed into Chassidic homes because of the newspapers' particular liberal or socialist attitudes. Some Chassidic groups are even more restrictive in terms of reading matter. However, Chassidic families do favor the reading of journal articles of a religious nature, books on Judaism, etc. The acquisition of knowledge and the study of Judaica is encouraged on a regular basis even for hard-working adults engaged in manual labor. Thus, all of these children are members of a highly motivated, learning oriented group.

Finally, it would be highly unusual for any of these families to own a television, or even allow a child to go into a home that allows television viewing. Popular movies are considered an unacceptable form of entertainment and are seriously discouraged. On the other hand, ball playing and games of physical skill in general, although not overtly encouraged, are tolerated for youngsters. After Bar Mitzvah, however, these games are looked upon with disfavor. Allegiance to the group is of primary significance and any deviation, even going against the simplest rule, is seen as damaging to the group as a whole.

The second sample, the middle ethnocentric group in this study, comprised Jewish middle-class children who were attending private day schools. The children in the second group, like the children in the first group, were bonded by a common attachment to Jewish traditional

values, albeit in a more liberal fashion. Their parents, unlike the parents of the children in the first group, were apt to be indistinguishable in terms of their attire and attitudes from other white middle-class New Yorkers. In terms of entertainment, books, and the theater, they were closer to middle-class New Yorkers than to the high ethnocentric group. Most of these families own televisions and read the New York Times or other New York dailies. The children attended movies in their various communities. The schooling of the children, although "parochial," was more liberal. For example, the schools they attended were coeducational Yeshiva day schools. By contrast, the Chassidic community rejects the idea of having boys and girls attending school together. In general, the children from the middle group looked and sounded more "American" although they too wore yarmulkahs both at school and at home. Except for the knitted and colorful yarmulkah, however, there was little to distinguish them from their neighbors' children. Here too, however, the tendency was for the children to play with their own, although the middle group imposed fewer restrictions against playing with outsiders than did the Chassidic group. Adults from the middle group were more apt to socialize with outsiders than Chassidic adults.

Children from the middle group were often fluent in both English and Hebrew with home conversation generally in English. In some homes, efforts were made to encourage Hebrew. Yiddish was rarely understood by the children and even more rarely spoken. The average family size was between two and three children.

The low ethnocentric group consisted of a sample of middle-class Jewish children attending a conservative Jewish day school in the New York metropolitan area. These children lived in a much more assimilated community than the children from the other two groups. Although when seen in the parochial school setting, children in the third group wore the traditional skull cap, it was rare that the skull cap was worn outside the school setting. The adults in this community were indistinguishable in terms of their attire and attitudes from other white middle-class New Yorkers.

Children from the low ethnocentric group came from a setting where two children or less in the family is the norm. They may be described as average, middle-class white youngsters with some degree of attachment to their ethnic group. This group may be thought of as representative of middle-class New Yorkers, and in contrast to the other two groups, the least ethnocentric in terms of allegiance and affiliation. Data pertaining to the ethnocentrism of all three groups are presented in the results section.

Sample Characteristics

This section addresses the problems relevant to the matching of the same groups on social class, IQ, and schooling.

In a study that examined the effects of social context on moral reasoning, as measured by judgments of intentionality, it was crucial to attempt to control for as many extraneous variables as possible. It was for this reason that the study included Jewish children who were receiving an education that stresses ethical and moral issues.

The choice of a Jewish sample group was consistent with the psychoanalytic explanations of ethnocentrism offered in the review of the literature. The "character" of the Jewish people historically has been concerned with its image of being an outsider and perhaps, to some degree, in response to this condition, closing of ranks has resulted. The differences in the degree to which the above has taken place in the three groups sampled was expected to contribute to our understanding of the relation of ethnocentrism to the development of moral and social conventional reasoning. By focusing on one ethnic group, the factor of ethnicity could be controlled.

Problems exist in creating adequately matched samples along socio-economic lines, family size, and nature of schooling. These problems, however, were not considered a detriment to the proposed study. First, the samples used can be loosely characterized as middle class. The middle group (modern orthodox) as well as the third group, typically have a large percentage of wage earners in the professional and business occupations. A considerable degree of commercial enterprise is characteristic of the Chassidic community. Secondly, Chassidic families are generally quite large since they treat the fulfillment of the Biblical commandment to "be fruitful and multiply" as a moral imperative. Although it was not possible to obtain a matched sample of low ethnocentric Jewish children from families of an average size as large as the Chassidic sample, subsets of matched smaller families (four or less) were chosen from within each of the three social contexts and performance on the couplets task was compared. It was also

difficult to assess accurately the import of an educational setting that teaches children in a "foreign" language. These variables, however, must be considered intrinsic to the conceptualization of "different social contexts."

Consistent with Hollos and Cowan's (1973) findings that "farm children performed as well or better than their village and town age mates" (p. 637) on tasks of physical cognition, there was no reason to believe that the groups in the present investigation would differ in intellectual ability. As noted earlier, the high ethnocentric children had been in a formal school setting learning reading and writing since the age three and may not be considered in any way deprived academically, socially, or linguistically. These were verbal children, who had considerable peer interaction at home and at school. All children were fluent in Yiddish and many, but not all, were equally fluent in English. Any group differences detected by measures employed in this study could not be attributed to either differences in verbal interaction or schooling. The children from any of the samples were in no way members of "primitive" or deprived cultures, but rather participants in different social contexts.

All of the children selected to participate in this investigation came from families that were strongly motivated toward academic achievement. Of even greater significance, in the realm of schooling and curriculum, the three groups sampled attended educational institutions where the development of high ethical and moral standards in their students was an important goal. The schools addressed the goal through

the study of Biblical figures whose ethical qualities were analyzed and discussed. Although differences in curriculum among the sample schools existed, none of the schools used Piaget or Kohlberg-type dilemmas or similar object lessons that might raise questions regarding teaching toward the specific moral reasoning tasks employed in the present study.

In summary, the groups reflected differing degrees of isolation or involvement in the general community at large, both geographically and philosophically. The children from the less ethnocentric group in comparison to the children from the high ethnocentric group, may be said to function within a more complex heterogeneous environment that provides considerably more stimulation in the realm of social cognition. This is true in the sense that these children, in contrast to the children in the high ethnocentric group, participate in communities in which social interaction with children from other ethnic groups goes on with relatively few restrictions. The children from the middle group, although given considerable exposure to a more complex, heterogeneous environment, have more of the social conventional rules and traditions, as well as attitudes consistent with those of the high ethnocentric group; however, the restrictions on the activities and restrictions regarding contact with outsiders is not as great. The children from the high ethnocentric group may be said to function in a less complex, homogeneous community that although providing rich general cognitive and linguistic stimulation, as well as within-group social interaction, does so in the context of a much more constrained environment which limits contact with many elements of mainstream American culture.

Subjects

One hundred fifty-seven Jewish, male school children were tested. They were randomly selected from those children whose parents gave written consent. The children ranged in age from 6 years, 0 months to 8 years, 11 months. There were 61 children in group 1, 55 children in group 2, and 41 children in group 3. Group 1 came from a Chassidic community in Boro Park and from neighboring Williamsburg, Brooklyn. Group 2 came from children attending a modern orthodox, coeducational Hebrew Day School in Queens, New York. Group 3 came from children attending a conservative, coeducational Hebrew Day School in Jericho, New York. In order to test for age-related developmental differences in moral reasoning, the children were arbitrarily divided into three age levels: 6 years, 0 months to 6 years, 11 months ($n = 42$), 7 years, 0 months to 7 years, 11 months ($n = 50$), and 8 years, 0 months to 8 years, 11 months ($n = 48$). All the children were tested alone either in an empty classroom or school library during school time at their respective schools except for 15 children from group 2 who were seen in a quiet room in a summer bungalow colony.

Materials

Eight photographs representing children from groups 1 and 3 were used in conjunction with the moral reasoning couplets described in the "Tasks" section. Appendix B contains an example of one of the photograph pairs used in conjunction with the moral reasoning couplets. Each of the photographs depicting children from the high ethnocentric group shows a close-up picture of a white boy wearing a large yarmulka

and/or flowing earlocks (payos). Each of the photographs depicting children from the low ethnocentric group shows a close-up picture of a white boy who might be found at any park or playground in New York City. The coding worksheet of the WISC-R was administered to each child. A stopwatch was used to time the coding subtest.

Tasks

Logical Operations

Two tasks were used which assessed the child's intellectual functioning.

Nonverbal. The coding subtest of the Wechsler Intelligence Scale for Children--Revised (WISC-R) measures nonverbal visual memory and fine motor coordination, speed, and accuracy (Wechsler, 1974). It has been shown to be related to skills associated with reading.

Verbal. Mathematics reasoning: The arithmetic subtest of the WISC-R (Wechsler, 1974) is a mathematical reasoning task involving concentration and attention, as well as the ability to work within time limits. It has been shown to reflect schooling and acculturation, and correlates highly with global measures of intelligence.

The procedures for the administration of scoring of the Coding Subtest and the Arithmetic Subtest of the WISC-R are those described in the WISC-R manual (Wechsler, 1974).

Determination of the Degree of
Ethnocentrism and Scoring

Ethnocentrism was operationally defined as the degree of social distance maintained by the individual between himself and members of "outgroups." An "outgroup" was defined as any group not considered by the individual to be part of the group with which his parents chose to affiliate themselves.

LeVine and Campbell (1972), working within a naturalistic setting, devised a lengthy interview designed to expose distinctions made by individuals in regard to those outside groups they would be willing to accept. Questions taken directly or adapted from their manual were utilized in this investigation.

Interview questions inquired into the influence of the media on the family (e.g., "What newspapers does your family read? Do you own or watch television?") as well as the amount of contact the child has with outgroup members (e.g., "Are any of your friends not Jewish?"). These questions were intended to determine the degree to which the ingroup permitted contact with the outside. The influence of outsiders on highly ethnocentric groups is, to a great extent, dependent upon the amount of social distance group members maintain between themselves and outsiders (LeVine & Campbell, 1972). Appendix A contains the complete interview.

Degree of ethnocentrism was judged by the distance maintained by the group toward all outsiders. The purpose of the interview, then, was to help corroborate what the pilot data and this examiner had already

established previously; namely, that the populations to be studied varied in degree of ethnocentrism as measured by the social distance they maintained between themselves and outsiders.

Scoring. Frequency distributions pertaining to responses to three questions were recorded.

1. Newspapers and periodicals in the home. Three levels of responses were recorded:

- a. Only ethnic, non-English (e.g., Algemeiner Journal, Der Yid).
 - b. Ethnic, English (e.g., Jewish Press, Jewish Week) + non-ethnic (e.g., New York Times, Post, etc.).
 - c. Only nonethnic (e.g., New York Times, Post, etc.).
2. Presence or absence of a television at home (yes or no).
3. Contact with non-Jewish children (yes or no).

Moral Reasoning

Moral reasoning task (Type 1 couplets). In the present study, four Piaget-type moral reasoning couplets were used with only some slight modification to be discussed later. The stories were those developed by Piaget (1932) and subsequently utilized in much of the research on judgments of intentions versus consequences (Bandura & McDonald, 1963; Cowan et al., 1969; Kurtines & Pimm, 1979). Appendix A contains the four Piaget moral reasoning couplets.

Each couplet included a story in which the actions of a well-intentioned child result in undesirable consequences (story A) and a story in which the actions of a child who intends to cause harm to others have

only minor consequences (story B). In all trials, the children were asked to name the child in the story who was "naughtiest" and explain his choice ("why?"). After the four moral reasoning couplets were presented and the child selected the naughtier of the two actors in each of the couplets, working backwards from the last story to the first, the child was questioned about his responses and given counter arguments ("You said Chaim was naughtier. Another boy said that Robert was naughtier because he made the stranger lose his way. What do you think?"). As Kurtines and Pimm (1979) pointed out, each child required a greater or lesser degree of such questioning in order to determine his level of reasoning. The counter arguments may be found in Appendix D.

1. Procedure. All the children in the three groups were presented with the four moral reasoning couplets. The presentation of the couplets was counterbalanced so that every other child was presented with story A first and story B second. The order was reversed for the remaining children.

In the moral reasoning task, which involved the Type 1 couplets, each story was told and then repeated, highlighting the essential features. For example, in the first couplet the following story features were emphasized: the fact that one child did not know the streets very well and unintentionally misdirected a stranger seeking directions who then lost his way (major damage), and by contrast, the fact that the other child intentionally misdirected a stranger seeking directions, in order to

trick him, who, nevertheless, did not get lost (minor damage). It was thus made quite clear that the first child unintentionally caused major damage whereas the second child intended to harm but caused minor damage.

Children from groups 1 and 3 were randomly assigned to one of two photograph conditions. The photograph conditions involved the presentation of the moral reasoning Type 1 couplets. Each of the stories in a couplet was presented together with a picture of a child representing either the child's own group or the outgroup. Appendix B contains the photographs which are described in the Materials section. In photograph condition 1, the well-intentioned protagonist was distinctly a child from the subject's own group. The protagonist's name, his attire, and appearance characterized an ingroup member. Appendix C contains the list of names used by the examiner in referring to each story child. The poorly intentioned protagonist, on the other hand, was characterized by name, attire, and appearance as an outgroup member.

In photograph condition 2, the conflict condition, the situation was reversed. The well-intentioned protagonist was an outgroup member and the poorly intentioned protagonist an ingroup member.

The photographs and names of the children associated with each story were counterbalanced such that no one picture or name was always presented with the same story.

The children from group 2 did not receive the photograph condition because it was suspected that it would be difficult to find photographs of children clearly representative of in- versus outgroup membership. These children were administered the moral reasoning couplets without the photographs.

In order to minimize the effect of variables related to the order of the presentation of the tasks, the following measures were taken. Half the children received the moral reasoning task (Type 1) first and the moral and social conventional violation task (Type 2) second. The other half of the children had the order reversed. Similarly the order of presentation of the stories within each couplet was presented such that half the children received story A first and half received story B first. Finally, the photographs used in the treatment condition and the particular names associated with each story were rotated such that no photograph or name was consistently associated with any one story.

2. Scoring. Each child received a score on each of the four couplets ranging from 0 to 2. Thus a child's score for four couplets ranged from 0 to 8. If a child's initial response to a couplet was classified as a moral heteronomy or "consequences" judgment (e.g., the child chooses the well-intentioned story actor whose actions result in greater consequences as naughtier) his score for the couplet was 0 and no counter argument followed. If a child's initial response constituted a "correct" moral autonomy judgment (the child chooses the poorly intentioned story actor whose actions result in minor consequences as naughtier), but is persuaded by counter argument to reverse his decision

and thus agrees that the well-intentioned story actor was naughtier, he is given a score of 0. If a child's initial response was to choose the poorly intentioned story as naughtier ("correct" moral autonomy judgment), but the counter argument resulted in some hesitancy or ambivalence (S: "I'm not sure but I still think he's badder." E: "Why?" S: "I don't know."), then the child received a score of 1. If a child's initial response constituted a "correct" moral autonomy judgment and he was not persuaded by a subsequent counter argument to change his response, he received a score of 2. It is important to note that the probing questions in the counter arguments were stated in such a manner so as not to intimidate or threaten the child. The purpose of the questions were not simply to get the child to change his mind, but to determine if he or she really understood the justification (Kurtines & Pimm, 1979, p. 6). The present scoring system as well as the method of questioning was derived from the method used by Kurtines and Pimm (1979).

Consistent with the above, not every child was given the same counter arguments since the counter arguments were constructed for each child and depended upon the child's own justification for the correct choice.

The basic rationale behind such varying remains the same: to insure a comparable probing of social knowledge in the . . . children. In short, the interview is adapted to the needs and peculiarities of the individual child. . . . The task is to assure that all children have a comparable understanding of the questions being asked them. (Damon, 1978, p. 57)

In addition, each child's original response (judgment without explanation) before the counter argument, was recorded and scored as either an intentions or consequences response. These data were subsequently analyzed separately and compared to the scores based on the judgments with explanation data. The additional analysis was carried out in order to provide a comparison between an analysis based on a straight judgment-only response and one which included the child's explanation of his response.

Finally a response latency was recorded for the child's first scorable response (without explanation). Response latency was measured from the moment the examiner completed asking the question (which child is naughtier?) to the time the child decided which of the actors in the story was naughtier.

Moral versus social conventional rules: Violations task A second set of 10 stories included situations dealing with specific moral and social conventional violations. These Type 2 couplets were used in the following three tasks: (A) Forced Choice Task, (B) Importance Task; and (C) Judgments of Changeability and Cultural Universality Task.

1. Forced Choice Task. This task consisted of the 10 stories presented in couplet form. The task matched specific moral violations with specific violations of a social conventional nature. The moral rule violations involved stories of intended harm to another person (hurting another's feelings, breaking a promise to a friend, minor acts of stealing) and were situations that children might encounter in everyday life. The social conventional rule violations were consistent with those used by Turiel (1978b, 1979) in his investigations. The particular social

conventional rules which were matched against the moral rules were pretested. Samples of children who were not used in the study, from all three groups (high--n = 53, middle--n = 37, low--n = 37) were pretested in their respective schools. They were given a list of 18 rules relating to social conventions, games, and sex roles, and asked to rate the rules in terms of importance on a scale of 1 to 5. Appendix F contains the list of 18 items and the specific instructions given to each child. Five rules were then chosen which were approximately equal in importance in all three groups. Those rules which were judged trivial or overly emphasized by one of the groups were excluded. It was expected that this would mitigate against social context related differences in ability to distinguish between moral and social conventional rules.

Procedure. The five couplets were presented such that half the children were presented couplets where each story concerning a moral violation preceded a paired story concerning a social conventional violation; the order was reversed for the other half of the children. After each couplet was presented, children were asked "Which of the two children in the stories was naughtier?" (Appendix A contains the complete set of couplets.)

3. Scoring. The responses of the children to the question "Which of the two children in the stories was naughtier?" were categorized by their choice of the "naughtier" actor as either the one committing the moral violation or the social conventional violation. This task provided one measure of the children's understanding of moral and social conventional rules.

Moral versus social conventional rules: Importance task. A second measure of children's understanding of moral and social conventional rules was derived from the 10 rules (five moral and five social conventional) presented in the Type 2 couplets. This task involved the examiner's restating of the 10 stories in the form of the particular rule which each story contained. The children were then required to rate the importance of each of the 10 rules individually. This task was consistent with procedures used in Turiel's (1978b) investigation of the differential importance children attribute to moral and social conventional rules.

1. Procedure. After the initial presentation of the stories in the form of five couplets, the children were read the following statement:

Let's go back to the stories that I read to you before. In each story I want you to tell me how important the rule is that the boy did not obey. I want you to tell me if you think the rule in the story was very important, important, only a little important, or not important.

The children were then handed a card on which these four categories were clearly printed in block letters. As each category was read the examiner pointed to the particular category.

Remember the story about There is a rule that one may not (e.g.) go out in the street without clothes . . . (break a promise to a friend). How important do you think that rule is? Is it very important, important, only a little important, or not important?

The specific rule which had been violated was restated in each case and the child was asked to rate the importance of the 10 moral and social conventional rules. Half the children were asked to judge the five moral rules first and half were asked to judge the five social conventional rules first.

2. Scoring. The children's scores were categorized on a scale from 1 to 4, with 1 representing "very important" and 4 "not important." Consistent with Turiel's (1978b) analysis, the means for each item, as well as the group means over all items, were computed. Thus each child had a score ranging from 1 to 4 for each item, and from 5 to 20 for the items combined (moral and social conventional). A higher score meant that a particular rule was less important.

Moral and social conventional rules: Changeability and cultural universality. These questions were derived from Turiel's (1978b; Weston & Turiel, 1980) interview which he used in investigating the hypothesized distinction between moral and social conventional rules.

1. Procedure. After the children were asked about the relative importance of each specific rule, the following two questions were posed: (a) "Could such a rule be changed?" (changeability); (b) "Suppose there is another country where no family (or school) has such a rule. Would it be okay to . . . (e.g.) go outside without clothes (break a promise to a friend)?" (cultural universality: "Is it O.K. to commit the act where no such rule exists?").

2. Scoring. Children's responses to questions regarding the changeability ("Could such a rule be changed?") and cultural universality ("Suppose there is another country where no family (or school) has such a rule. Is it O.K. to commit the act where no such rule exists?") of moral and social conventional rules were categorized in terms of whether or not the child agreed or disagreed with the statement that it was O.K. to

change the rule or to commit the act where no such rule exists. The frequency of agreement-disagreement responses were tabulated separately for each of the 10 moral and social conventional rules.

In summary, the Type 2 story couplets provided the major test of the hypothesized relation between social context and children's reasoning about moral and social conventional rules by furnishing three measures of children's understanding of rules: (a) Type 2 couplets, forced choice comparison (moral and social conventional rule violations were compared directly); (b) Importance task (moral and social conventional rules were individually rated for their levels of importance); (c) Changeability and cultural universality task (children responded to questions on the changeability and the cultural universality of particular moral and social conventional rules).

Design

The experimental design of the first part of the study on moral reasoning (Type 1 couplets) was a 2 x 2 analysis of variance (ANOVA). The two factors were social context (high and low ethnocentric) and photograph condition (photograph condition 1 and 2). The dependent measure was the score on the moral reasoning task.

An additional group was introduced for exploratory purposes. This group was hypothesized to be midway between the groups described above in terms of ethnocentricity. Except for the photograph conditions, the three groups received the same task. An additional one-way ANOVA was conducted to investigate the relation of the three levels of social context to performance on the moral reasoning task.

The experimental design of the second part of the study regarding moral and social conventional reasoning (Type 2 couplets) involved subjects from three social contexts (high, middle, and low ethnocentric) and resulted in five separate 3 (social contexts) x 2 (moral and social conventional rule violation) chi-square analyses of children's responses to five forced-choice situations. The dependent measure was the child's choice of either the moral or social conventional rule violation as "naughtier."

The experimental design of the third part of the study on the importance of moral vs. social conventional rules was a 3 (social contexts) x 2 (moral and social conventional rule violation) repeated measures factorial design. The between groups factor was social context (three levels) and the within groups factor was the five moral and five social conventional rules. The ANOVA was performed such that importance scores summed across five moral rules and importance scores summed across five social conventional rules constituted the dependent measures. In addition, five separate 3 (social contexts) x 2 (moral and social conventional rule violation) two-way ANOVAs were conducted in which importance ratings for each of the five moral-social conventional rule pairs constituted the within groups factor. Again, social context was the between groups factor in each analysis.

The fourth part of the study related to the changeability and cultural universality of moral and social conventional rules. It involved a set of 10 3 (social contexts) x 2 (moral and social conventional rule violation) chi-square analyses of children's responses to the questions

regarding the changeability and cultural universality of the 10 moral and social conventional rules. The dependent measure was the children's judgments of the changeability and cultural universality of the 10 moral and social conventional rules. A separate chi-square analysis was carried out for each of the moral and social conventional rules for both the changeability questions ("Could such a rule be changed?") and for the cultural universality question ("Suppose there is another country where no family [or school] has such a rule. Is it O.K. to commit the act where no such rule exists?").

CHAPTER IV

RESULTS

Measure of Intelligence

Two IQ measures, the arithmetic and coding subtests of the WISC-R, were used to assess the intellectual homogeneity of the groups. A one-way ANOVA was performed to assess group differences in intelligence. As expected, no significant differences among the groups on the arithmetic subtest, a measure of mathematical reasoning, were found. Group means are presented in Table 1.

Counter to expectation, however, significant differences in the groups' performance on the nonverbal coding subtest, a measure of visual-motor rote copying, were found, $F(2, 153) = 3.40, p < .05$. The mean scores for the coding subtest may be found in Table 2. Scheffe post hoc, pair-wise comparisons indicated that the low ethnocentric group performed significantly better than the high and middle ethnocentric groups at the .05 level.

The mathematical reasoning and coding subtests of the WISC-R were introduced as measures of children's intelligence. It was assumed that they might be used as covariates in the analysis of the results of children's moral reasoning performance. Although the mathematical reasoning subtest correlated significantly with performance on the intended harm to others--moral reasoning task ($r = .29, p < .001$), the nonverbal coding subtest which distinguished between the groups, showed

Table 1
Mean Math Reasoning Scores

Groups	(<u>N</u>)	Means	(<u>SD</u>)
High Ethnocentrism	(61)	13.21	(2.82)
Middle Ethnocentrism	(55)	13.24	(2.62)
Low Ethnocentrism	(41)	12.63	(2.47)

Table 2
Mean Coding Subtest Scores

Groups	(<u>N</u>)	Means	(<u>SD</u>)
High Ethnocentrism	(61)	11.13	(2.74)
Middle Ethnocentrism	(55)	10.74	(3.09)
Low Ethnocentrism	(41)	12.27	(2.85)

no significant correlation with the moral reasoning task. Thus the measure of cognitive functioning on which the groups differed (i.e., nonverbal coding), was found to be unrelated to moral reasoning performance. The measure of cognitive functioning which showed some relation to moral reasoning performance, mathematical reasoning, did not differentiate among the groups. Therefore, neither measure of intelligence was used as a covariate.

Levels of Ethnocentrism: Quantitative Analysis of Interview Data

As expected, the quantitative data gathered from the interview on levels of ethnocentrism strongly supported the hypothesized distinction among the three levels of ethnocentrism. Chi-square analysis relevant to three questions which were thought to distinguish the groups, (a) the presence or absence of a television in the home, (b), the availability of English language newspapers in the home, and (c) the children having friends from outside their own ethnic group, were performed. Tables 3, 4, and 5 contain distribution data relevant to the three questions.

The analysis of the television data revealed significant differences in the percent of children from each group that reported television ownership, $\chi^2 (2) = 157.00, p < .01$ (see Table 3). No child in the high ethnocentric group reported having a television in the home, while every middle and low ethnocentric child reported having a television in his home. The analysis of the newspaper data revealed significant differences in reported parental newspaper reading habits, $\chi^2 (4) = 102.81, p < .01$ (see Table 4). Children from the high

Table 3

Percent of Responses to Interview Questions on Ethocentrism:
Television in the Home

Social Context	(N)	Presence of Television in Home	Absence of Television in Home
High Ethnocentrism	(61)	0	100
Middle Ethnocentrism	(55)	100	0
Low Ethnocentrism	(41)	100	0

Table 4

Percent of Responses to Interview Questions of Ethnocentrism:
Newspapers in Home

Social Context	(N)	English Only Newspapers	English and Ethnic Newspapers	Non- English Newspapers Only
High Ethnocentrism	(61)	0	39	61
Middle Ethnocentrism	(55)	42	56	2
Low Ethnocentrism	(41)	76	24	0

Table 5

Percent of Responses to Interview Questions on Ethocentrism:
In- Versus Outgroup Friends

Social Context	(<u>N</u>)	With Outgroup Friend	Without Outgroup Friend
High Ethnocentrism	(61)	0	100
Middle Ethnocentrism	(55)	42	58
Low Ethnocentrism	(41)	98	2

ethnocentric group reported the heaviest presence of ethnic newspapers (Hebrew, Yiddish, or English). None of the low ethnocentric children reported the presence of Yiddish language newspapers in the home and very few reported any ethnic newspapers in the home. The middle ethnocentric children reported the presence of English ethnic (such as the Jewish Press and the Jewish Week) and nonethnic newspapers (such as The Times and Daily News). Only one child from the middle group reported the presence of a non-English Language ethnic newspaper in the home. The analysis of the "friend" data revealed significant differences in the percent of children from each group who reported having friends from an outgroup, $\chi^2 (2) = 97.24, p < .01$ (see Table 5). No child in the high ethnocentric group reported having outgroup friendships. Almost 42% of the children from the middle ethnocentric group reported having outgroup friends, and all but one of the children from the low ethnocentric group reported having outgroup friends.

Hypothesis 1

It was hypothesized that children from different social contexts would differ in their judgments of the culpability of actors in stories involving intended harm to others (lying, stealing, trickery, etc.). Children from high ethnocentric social contexts were expected to be less likely to use intentions in making moral judgments than were children from low ethnocentric social contexts, regardless of the ethnic identity of the actors.

A one-way analysis of variance (ANOVA) revealed a significant social context effect, $F(2, 137) = 5.12, p < .01$. The mean scores on the moral reasoning tasks are found in Table 6. A post hoc Neuman-Keuls test indicated that both the children from the low and middle ethnocentric social contexts were more likely to base their moral judgments on intentions than the children of the high ethnocentric social context. No other group differences were detected.

Table 7 contains the mean scores on the intended harm to others-moral reasoning tasks for children with three or fewer siblings. When family size was controlled by comparing only those children who had three or fewer siblings, a one-way ANOVA (on three levels of social context) revealed a significant social context effect, $F(2, 109) = 5.23, p < .01$. A post hoc Neuman-Keuls test indicated that both the children from the low and middle ethnocentric social contexts differed significantly from the children of the high ethnocentric social context ($p < .05$) in the hypothesized direction. No other social context differences were detected.

In addition, a 3 (age) x 3 (high, middle, and low ethnocentric social contexts) ANOVA was conducted and revealed significant main effects for age $F(2, 131) = 7.47, p < .01$. There was not a significant age by social context interaction. The differences between the groups as a function of social context are thus present across the three age levels. Table 8 contains the mean moral reasoning scores at each age level. A post hoc Neuman-Keuls test indicated that significant

Table 6
Mean Scores on the Intended Harm to Others--
Moral Reasoning Task

Social Context	(<u>N</u>)	Mean	(<u>SD</u>)
High Ethnocentrism	(44)	3.14	(2.86)
Middle Ethnocentrism	(55)	4.67	(2.79)
Low Ethnocentrism	(41)	4.80	(2.54)

Table 7

Mean Scores on the Intended Harm to Others--Moral Reasoning Task
for Subjects with Siblings of Three or Less

Social Context	(<u>N</u>)	Mean	(<u>SD</u>)
High Ethnocentrism	(27)	2.89	(2.72)
Middle Ethnocentrism	(44)	4.82	(2.81)
Low Ethnocentrism	(41)	4.80	(2.54)

Table 8

Mean Moral Reasoning Scores by Age Levels and Social Context

Age Levels	(N)	High Ethnocentric		Middle Ethnocentric		Low Ethnocentric		Age Total
		Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean (SD)
6 to 6-11	(42)	1.57	(2.59)	3.00	(1.96)	3.08	(1.96)	2.55 (2.24)
7 to 7-11	(50)	2.62	(3.10)	4.08	(2.90)	5.54	(2.57)	4.08 (3.01)
8 to 8-11	(48)	4.82	(1.98)	7.13	(1.31)	5.67	(2.35)	5.85 (2.11)
Groups Total		3.14	(2.86)	4.67	(2.79)	4.80	(2.54)	

differences in moral reasoning existed between all age levels--pairwise comparisons (oldest vs. middle, $p < .05$, middle vs. youngest, $p < .05$, oldest vs youngest, $p < .05$).

A chi-square analysis of the percent of the group's initial responses (without the use of an explanation-based scoring method) appears in Table 9. In the case of couplet 2, the differences among the groups were significant, $\chi^2 (2) = 7.29$, $p < .05$. The middle and low ethnocentric groups offered significantly more initial intention-based responses than the high ethnocentric group. In the case of the other three couplets, however, differences among the groups were not significant. This finding was consistent with the expectation that a pure judgments evaluation without explanation would be less representative of group differences in moral reasoning.

Hypothesis 2

It was hypothesized that in judging the culpability of actors in stories involving intended harm to others, children's moral reasoning would reflect a significant social context by photograph condition (ingroup vs.. outgroup) interaction. It was expected that children from the high ethnocentric social context would use intentions more often in judging ingroup members than in judging outsiders. In contrast, children from low ethnocentric social contexts would use intentions equally in judging in-and outgroup members.

Table 9

Percent of Intention and Consequence Responses to Moral Reasoning Task--
Child's Initial Judgment Without Use of Counter Arguments

Social Context	(N)	Story Couplet 1		Story Couplet 2		Story Couplet 3		Story Couplet 4	
		Inten- tion Responses	Conse- quence Responses	Inten- tion Responses	Conse- quence Responses	Inten- tion Responses	Conse- quence Responses	Inten- tion Responses	Conse- quence Responses
High Ethnocentrism	(61)	72	28	25	75	85	15	74	26
Middle Ethnocentrism	(55)	78	22	47	53	93	7	73	27
Low Ethnocentrism	(41)	88	12	44	56	98	2	73	27

Table 10 contains the mean moral reasoning scores for the groups (high and low ethnocentric social contexts) assigned to the two photograph conditions. A 2 (high vs. low ethnocentric social context) x 2 (ingroup vs. outgroup) ANOVA did not result in a significant social context by photograph condition interaction. The two-way ANOVA performed with two levels of social context, however, revealed a significant main effect for social context ($F(1,81) = 8.01, p < .01$). These findings were consistent with the one-way ANOVA used to test Hypothesis 1 with three levels of social context. In other words, differences between the moral reasoning scores for the high and low ethnocentric children were consistent across the two photograph conditions. As noted in the Methods section, the middle group was not assigned to the photograph conditions because this group was thought to be moderately assimilated to both the worlds of the high and low ethnocentric groups and, therefore, could not be expected to experience the photographs of the children as true in- and outgroup members.

Table 11 contains the mean latency scores in seconds as a function of social context and photograph conditions. A 2 (high and low ethnocentric social context) x 2 (photograph conditions) ANOVA, with response latency in seconds as the dependent measure was conducted. No main or interaction effects were found.

Table 10
 Mean Scores on Moral Reasoning Tasks by Social
 Context and Photograph Conditions

Mean Moral Reasoning Scores							
Social Context	(N)	Photograph Condition 1 ^a (Ingroup)		Photograph Condition 2 ^b (Outgroup)		Row Total	
		Mean	(SD)	Mean	(SD)	Mean	(SD)
High Ethnocentrism	(44)	3.40	(2.74)	2.92	(2.99)	3.14	(2.86)
Low Ethnocentrism	(41)	5.17	(2.85)	4.52	(2.29)	4.80	(2.54)

^aWell-intentioned protagonist is ingroup (no conflict).

^bWell-intentioned protagonist is outgroup (conflict condition).

Table 11

Mean Response Latency (in Seconds) on Moral Reasoning Tasks by
Social Context and Photograph Conditions

Social Context	(N)	Photograph Condition 1 ^a (Ingroup)		Photograph Condition 2 ^b (Outgroup)		Row Total	
		Mean	(SD)	Mean	(SD)	Mean	(SD)
Low Ethnocentrism	(44)	21.50	(24.92)	15.67	(11.49)	18.32	(18.80)
High Ethnocentrism	(41)	16.22	(13.36)	16.91	(20.11)	16.61	(17.28)
Total Column Means	(85)	19.00	(20.20)	16.28	(16.12)	17.49	(18.00)

^aWell-intentioned protagonist is ingroup (no conflict).

^bWell-intentioned protagonist is outgroup (conflict condition).

Hypothesis 3

It was hypothesized that children from low ethnocentric social contexts as compared to children from high ethnocentric social contexts would judge a moral transgression involving intended harm to others as more serious than a social conventional transgression, when required to make a forced choice. Chi-square tests were used to assess differences in the percent of responses of the children to the question of which transgression was considered more serious. Table 12 contains the percent of responses for the Type 2 couplets (forced-choice task), 1 through 5. In the case of the Type 2 couplets, chi-square analyses indicated that the percent of the responses of the children from the low and middle ethnocentric social contexts differed significantly from the percent of responses of the children from the high ethnocentric social context in the expected direction in only two of the five forced-choice comparisons.

Comparison 2 concerned blowing bubbles in a sibling's lunch vs. calling a teacher by his/her first name. Significant differences in the hypothesized direction were found in the comparison between the high and middle ($\chi^2 (1) = 9.40, p < .01$) and high and low ethnocentric groups ($\chi^2 (1) = 11.32, p < .001$). The children from low and middle groups chose the moral violation as more serious than did the social conventional violation significantly more often than did the children from the high ethnocentric group. In comparison 2, 90% of the low ethnocentric

Table 12

Percent of Responses to Type 2 Couplets (Forced Choice) Between Moral Vs. Social Conventional Rule Violations

Social Context	(N)	Violation 1 ^a ("naughtier")		Violation 2 ^b ("naughtier")		Violation 3 ^c ("naughtier")		Violation 4 ^d ("naughtier")		Violation 5 ^e ("naughtier")	
		Moral/Soc. Con.	Soc. Con./Moral	Moral/Soc. Con.	Soc. Con./Moral	Moral/Soc. Con.	Soc. Con./Moral	Moral/Soc. Con.	Soc. Con./Moral	Moral/Soc. Con.	Soc. Con./Moral
High Ethnocentrism	(50)	68	32	56	44	44	56	78	22	82	18
Middle Ethnocentrism	(54)	65	35	85	15	63	37	85	15	82	18
Low Ethnocentrism	(41)	59	41	90	10	78	22	85	15	73	27

^aBreaks promise to clean room/calls out in class.

^bBlows bubbles into brother's lunch/calls teacher by first name.

^cBreaks promise to best friend--park/goes outside without clothes on hot day.

^dMakes fun of another person/eats food with hands.

^eAllows wrongful blame of friend/sits during Pledge of Allegiance.

children and 85% of the middle ethnocentric children chose the moral violation as more serious than the social conventional violation. In contrast, only 56% of the children from the high ethnocentric group chose the moral violation as more serious.

Comparison 3 concerned breaking a promise to a best friend vs. going nude in the street on a hot day. Significant differences in the hypothesized direction were found in the comparison between the high and low ethnocentric groups ($\chi^2 (1) = 8.46, p < .01$). The children from the high ethnocentric social context chose the social conventional violation as more serious than the moral violation significantly more often than did children from the low ethnocentric social context. In addition, marginally significant differences in the percent of responses was found in the comparison of high and middle ethnocentric groups ($\chi^2 (1) = 3.03, p < .09$). Again, the children from the high ethnocentric social context chose the social conventional violation as more serious than the moral violation more often than did children from the middle ethnocentric social context.

In the above comparison, 78% of the children from the low ethnocentric group and 63% of the children from the middle ethnocentric group chose the moral violation as more serious than the social conventional violation. In contrast, only 44% of the children from the high ethnocentric group chose the moral violation as the more serious.

No significant differences in the distributions of the responses of the members of the high vs. middle and high vs. low groups were found for comparisons 1, 4, and 5.

Hypothesis 4

It was hypothesized that children from differing social contexts would differ in their assessment of the relative importance of moral and social conventional rules. It was expected that children from low ethnocentric social contexts, as compared to children from high ethnocentric social contexts, would rate violations of moral rules as more important than violations of social conventional rules.

A 2 (moral vs. social conventional rules) x 3 (high, middle, and low social contexts) repeated measures ANOVA was conducted for the sum of the scores attained in the five comparisons. The importance ratings on the rules was the dependent measure. The repeated factor was the two rules that were rated (moral vs. social conventional). Table 13 presents the mean importance scores for the five moral rules combined as compared to the five social conventional rules combined. A significant social context effect ($F(2, 142) = 6.77, p < .05$) was found. Scheffe pairwise post hoc comparisons between the high vs. low ethnocentric groups ($F(2, 142) = 6.77, p < .05$), and between the high vs. middle ethnocentric groups ($F(2, 142) = 9.42, p < .05$) were significant. These findings were counter to expectation since the high ethnocentric group rated moral and social conventional rules as more important than did the low and middle ethnocentric groups. No differences were found

Table 13

Mean Importance^a Ratings for Five Moral Rules (Combined) Compared to
Five Social Conventional Rules (Combined)

Social Context	(N)	Moral Rules Task 1-5		Social Conventional Rules Task 6-10		Row	
		Mean	(SD)	Mean	(SD)	Mean	(SD)
High Ethnocentric	(50)	6.16	(1.50)	8.52	(2.41)	7.49	(1.51)
Middle Ethnocentric	(54)	7.17	(2.27)	10.17	(3.23)	8.67	(2.20)
Low Ethnocentric	(41)	7.37	(2.21)	9.76	(2.80)	8.56	(2.06)
Total Mean	(145)	6.88	(1.99)	9.59	(2.89)		

^aChildren were asked to rate the rule as Very Important = 1, Important = 2, Only a Little Important = 3, Not So Important = 4. Therefore, across five rules a score of 20 is the highest possible score (reflecting the minimum in attributed importance) and 5, the lowest possible score (reflecting the maximum in attributed importance).

between the low and the middle ethnocentric group. No significant interaction effect was found. An examination of the mean importance ratings found in Table 13 supports the above conclusion that social context differences existed in evaluating the importance of rules in general, moral and social conventional. These differences did not substantiate Hypothesis 4 since the children from the high ethnocentric social context, to a greater extent than the children from either the middle or low ethnocentric social contexts evaluated all rules as more important, moral and social conventional. A significant task effect ($F(1, 142) = 113.14, p < .001$) was also found. In other words, all the children, irrespective of social context, evaluated moral rules as more important than social conventional rules.

Hypothesis 5

It was hypothesized that children from the high ethnocentric social contexts would differ significantly from children from low ethnocentric social contexts in understanding the changeability and cultural specificity of social conventional rules and the universality of moral rules. Children from low ethnocentric social contexts, compared to children from high ethnocentric social contexts, would be more likely to recognize the changeability and cultural specificity of social conventional rules. By the same token, children from low ethnocentric social contexts would be more likely to recognize the stability and cultural universality of moral rules.

Ten chi-square tests were used to assess differences in the number of subjects who thought it all right to change a particular moral or social conventional rules against the number of subjects who thought it not all right. Table 14 contains the percent of responses of the three groups regarding the changeability of each of the five moral and five social conventional rules. Table 15 contains chi-square values on the children's views on the changeability of moral and social conventional rules.

In regard to moral rules, it was found that in only one instance significant differences in the percent of group members' responses on the changeability of moral rules were found. In the case of rule 3 (breaking a promise to a best friend), the results were counter to expectation. A significantly greater number of high ethnocentric children rated this rule as unchangeable than did low ethnocentric children ($\chi^2 (1) = 10.90, p < .01$).

Children from the high ethnocentric social context also differed significantly from children from the other two groups in their view on the changeability of social conventional rules. In three of the five cases the groups differed significantly: Rule 6--raising one's hand in class, the middle ethnocentric children responded more frequently than the high ethnocentric children that the rule was unchangeable, $\chi^2 (1) = 6.60, p < .02$; rule 7--calling a teacher by title, the high ethnocentric children responded more frequently than the low ethnocentric children that the rule was unchangeable, $\chi^2 (1) = 21.33, p < .001$; rule 10--

Table 14

Percent of Responses to the Question of Changeability of
Moral and Social Conventional Rules

		Moral Rules									
		Rule 1 ^a		Rule 2 ^b		Rule 3 ^c		Rule 4 ^d		Rule 5 ^e	
Social Context	(N)	Cannot Be Changed	Can Be Changed	Cannot Be Changed	Can Be Changed	Cannot Be Changed	Can Be Changed	Cannot Be Changed	Can Be Changed	Cannot Be Changed	Can Be Changed
High Ethnocentrism	(50)	84	16	86	14	92	8	90	10	82	18
Middle Ethnocentrism	(54)	70	30	85	15	82	19	83	17	87	13
Low Ethnocentrism	(41)	78	22	81	20	61	39	75	25	81	20
Total Percent--Rules		77	23	84	16	79	21	83	17	83	17

^aPromise to do one's share of the work.

^bRespecting other's feelings.

^cKeeping promise to a friend.

^dOne should not make fun of another person.

^eAccepting blame for something one does wrong.

Table 14 (continued)

Social Conventional Rules											
Social Context	(N)	Rule 6 ^f		Rule 7 ^g		Rule 8 ^h		Rule 9 ⁱ		Rule 10 ^j	
		Cannot Be Changed	Can Be Changed	Cannot Be Changed	Can Be Changed	Cannot Be Changed	Can Be Changed	Cannot Be Changed	Can Be Changed	Cannot Be Changed	Can Be Changed
High Ethnocentrism	(50)	34	66	62	38	66	34	58	42	40	60
Middle Ethnocentrism	(54)	61	39	54	46	65	35	41	59	69	32
Low Ethnocentrism	(41)	27	73	12	88	54	46	39	61	68	32
Total Percent--Rules		42	58	45	55	62	38	46	54	59	41

^f Must raise hand to ask or answer question.

^g Must call teacher by title, not first name.

^h Must not go outside without clothes.

ⁱ Must eat with knife and fork.

^j Must stand for recitation of Pledge of Allegiance.

Table 15

Chi-Square Values from Social Context (3 Levels) by Changeability (2)
of Moral and Social Conventional Rules

Rule Type	Short Theme and Rule Description	$\chi^2(1)^a$	p <
<u>Moral Rules</u>			
Rule 1	Promise to clean room "Promise to do one's share of the work"		N.S.
Rule 2	Blowing bubbles into brother's lunch "Respecting other's feelings"		N.S.
Rule 3	Breaking promise to best friend--park "Keeping promise to a friend"	10.90 ^b High Ethn. vs. Low Ethn.	.01
Rule 4	Not allowing third boy into game and laughing "One shouldn't make fun of another person"		N.S.
Rule 5	Let other boy take blame for your action "Accepting blame for something one does wrong"		N.S.
<u>Social Conventional Rules</u>			
Rule 6	Calling out in class "Must raise hand to ask or answer question"	6.60 ^b High Ethn. vs. Middle Ethn.	.02
Rule 7	Calling teacher by first name "Must call teacher by title, not first name"	21.33 ^b High Ethn. vs. Low Ethn.	.01
Rule 8	Going out without clothes on hot day "Must not go outside without clothes"		N.S.

Table 15 (continued)

Rule Type	Story Theme and Rule Description	$\chi^2(1)^a$	p <
<u>Social Conventional Rules (cont.)</u>			
Rule 9	Eats spaghetti and meatballs with hands "Must eat with knife and fork"		N.S.
Rule 10	Boy decides to sit for Pledge and Star Spangled Banner	6.14	.01
	"One must stand for recitation of Pledge of Allegiance and Star Spangled Banner"	High Ethn. vs. ^b Low Ethn. 7.41 High Ethn. vs. ^b Middle Ethn.	.01

^aOne degree of freedom: Each group was compared separately with each of the other two groups.

^bIndicates the group which gave a greater percent of responses that the particular rule cannot be changed.

standing for the Pledge of Allegiance and Star Spangled Banner, both the low and middle ethnocentric children responded more frequently than the high ethnocentric children that the rule was unchangeable, $\chi^2 (1) = 6.14$, $p < .02$ (high vs. low); $\chi^2 (1) = 7.41$, $p < .01$ (high vs. middle). No other group differences were detected.

Table 16 contains the percent of responses regarding the cultural universality-specificity of five moral and five social conventional rules. Table 17 contains chi-square values on the children's views on the cultural universality-specificity of the five moral and the five social conventional rules. Ten chi-square tests were used to assess differences in the number of subjects who thought it all right for a particular moral or social conventional rule not to exist against the number of subjects who thought it was not all right.

In only one of five instances did the groups differ significantly in their assessment of the universality of moral rules. In the case of moral rule 4 (making fun of another person), the children from the high ethnocentric social context rated this moral rule as culturally universal more often than did the children from the other two social contexts, $\chi^2 (1) = 6.48$, $p < .02$, high vs. low; $\chi^2 (1) = 3.78$, $p < .05$, high vs. middle. These differences were counter to the expectation that children from the low and middle ethnocentric social context would view moral rules as culturally universal more often than children from the high ethnocentric social context. No other group differences in rating the cultural universality-specificity of moral rules were found.

Table 16

Percent of Responses to the Question of Cultural Universality-Specificity of Moral and Social Conventional Rules

		Moral Rules									
		Rule 1 ^a		Rule 2 ^b		Rule 3 ^c		Rule 4 ^d		Rule 5 ^e	
Social Context	(N)	Culturally Universal	Culturally Specific	Culturally Universal	Culturally Specific	Culturally Universal	Culturally Specific	Culturally Universal	Culturally Specific	Culturally Universal	Culturally Specific
High Ethnocentrism	(50)	66	34	76	24	74	26	82	18	74	26
Middle Ethnocentrism	(54)	50	50	57	43	56	44	63	37	59	41
Low Ethnocentrism	(41)	51	49	59	41	54	46	55	45	56	44
Total Percent--Rules		56	44	64	36	61	39	67	33	63	37

^a Promise to do one's share of the work

^b Respecting other's feelings.

^c Keeping promise to a friend.

^d One should not make fun of another person.

^e Accepting blame for something one does wrong.

Table 16 (continued)

Social Conventional Rules											
Social Context	(N)	Rule 6 ^f		Rule 7 ^g		Rule 8 ^h		Rule 9 ⁱ		Rule 10 ^j	
		Universal	Culturally Specific	Universal	Culturally Specific	Universal	Culturally Specific	Universal	Culturally Specific	Universal	Culturally Specific
High Ethnocentrism	(50)	44	56	54	46	68	32	58	42	20	80
Middle Ethnocentrism	(54)	35	65	24	76	39	61	30	70	22	78
Low Ethnocentrism	(41)	24	76	2	98	44	56	24	76	32	68
Total Percent--Rules		35	65	28	72	50	50	38	62	24	76

^fMust raise hand to ask or answer question.

^gMust call teacher by title, not first name.

^hMust not go outside without clothes.

ⁱMust eat with knife and fork.

^jMust stand for recitation of Pledge of Allegiance.

Table 17

Chi-Square Values from Social Context (3 Levels) by Cultural
Universality-Specificity (2) of Moral and
Social-Conventional Rules

Rule Type	Short Theme and Rule Description	$\chi^2(1)^a$	p <
<u>Moral Rules</u>			
Rule 1	Promise to clean room "Promise to do one's share of the work"		N.S.
Rule 2	Blowing bubbles into brother's lunch "Respecting other's feelings"		N.S.
Rule 3	Breaking promise to best friend--park "Keeping promise to a friend"		N.S.
Rule 4	Not allowing third boy into game and laughing "One shouldn't make fun of another person"	6.48 ^b High Ethn. vs. Low Ethn.	.02
Rule 5	Let other boy take blame for your action "Accepting blame for something one does wrong"	3.78 ^b High Ethn. vs. Middle Ethn.	.05
<u>Social Conventional Rules</u>			
Rule 6	Calling out in class "Must raise hand to ask or answer question"		N.S.
Rule 7	Calling teacher by first name "Must call teacher by title, not first name"	25.75 ^b High Ethn. vs. Low Ethn.	.01
		8.60 ^b High Ethn. vs. Middle Ethn.	.01
Rule 8	Going out without clothes on hot day "Must not go outside without clothes"	4.40 ^b High Ethn. vs. Low Ethn.	.04

Table 17 (continued)

Rule Type	Story Theme and Rule Description	$\chi^2(1)^a$	p <
<u>Social Conventional Rules (cont.)</u>			
		7.70	.01
		^b High Ethn. vs. Middle Ethn.	
Rule 9	Eats spaghetti and meatballs with hands	9.06	.01
	"Must eat with knife and fork"	7.40	.01
		^b High Ethn. vs. Middle Ethn.	
Rule 10	Boy decides to sit for Pledge and Star Spangled Banner		N.S.
	"One must stand for recitation of Pledge of Allegiance and Star Spangled Banner"		

^aOne degree of freedom: Each group was compared separately with each of the other two groups.

^bIndicates the group which gave a greater percent of responses that the particular rule was culturally universal.

Chi-square values on children's responses to questions regarding the cultural universality-specificity of social conventional rules indicates that children from the high ethnocentric social context differed significantly from the other two groups in their views of the universality of social conventional rules. High ethnocentric children, in three of five instances, rated particular social conventional rules as culturally universal, i.e., it would be inappropriate for such a rule not to exist, more often than did middle and low ethnocentric children; rule 7--calling a teacher by title, $\chi^2 (1) = 25.75$, $p < .001$, high vs. low, $\chi^2 (1) = 8.60$, $p < .01$, high vs. middle; rule 8--wearing of clothing, $\chi^2 (1) = 4.40$, $p < .05$, high vs. low, $\chi^2 (1) = 7.70$, $p < .01$, high vs. middle; rule 9--eating with knife and fork, $\chi^2 (1) = 9.06$, $p < .01$, high vs. low, $\chi^2 (1) = 7.40$, $p < .01$, high vs. middle. In all instances chi-square analysis were derived from separate comparisons of high versus middle and high versus low; the $df = 1$.

Correlational Data

One of the strengths of Turiel's research was that it did not rely on correlational data. Turiel (1978b) had argued that evidence which supported a structural relation between the logical, physical and social domains of cognition came from correlational studies. He rejected this evidence because "correlations between different measures of developmental level do not provide an adequate means of testing the hypothesis of structural relations" (p. 47). He maintained that correlational data might provide an assessment of the degree of

correspondence in (and patterns of) the rates of change of two measures. On the other hand, it could also provide misleading data when high correlations were found between measures of two structurally unrelated aspects of development if there is a correspondence in their individual rates of change. In the present study an experimental design was the focal point of the research, however, correlational data may be offered to support the hypothesized relation between cultural influences and moral and social conventional reasoning.

Correlations Involving Age

As expected, children's moral reasoning ability was found to be positively related to age, i.e., older children scored higher on the moral reasoning task ($r = .469$, $p < .01$).

A positive relationship, albeit weaker than the above, between the response that a moral violation was more serious than a social conventional violation (forced choice task), and age was found in the case of comparison 4 (Appendix A contains the stories and the specific rule violations) ($r_{pb} = .18$, $p < .05$) and comparison 5 ($r_{pb} = .29$, $p < .01$). The correlations between the moral reasoning scores and comparison 1 ($r_{pb} = .11$), comparison 2 ($r_{pb} = .06$), and comparison 3 ($r_{pb} = .11$) were not significant.

Older children were more likely to recognize that social conventional rules are changeable in the case of rule 6 ($r_{pb} = .31$, $p < .01$), rule 7 ($r_{pb} = .16$, $p < .06$), rule 8 ($r_{pb} = .22$, $p < .01$), rule 9 ($r_{pb} = .32$, $p < .01$), and rule 10 ($r_{pb} = .37$, $p < .01$). A marginally

significant relationship was found between age and the total importance attributed to social conventional rules ($r = .15$, $p < .08$). Age was not found to be related to the importance attributed to moral rules. No relationship was found between age and the cultural universality/specificity of moral and social conventional rules except for social conventional rule 9 which was marginally significant ($r_{pb} = .16$, $p < .06$), i.e., older children were more apt to judge the rule as culturally specific.

In general, the correlational findings indicated that age was found to be positively related to the recognition of the changeability of social conventional rules, i.e., older children were more likely to judge social conventional rules as changeable, and that an inverse relationship existed between age and the total importance attributed to social conventional rules, i.e., older children were more likely to judge social conventional rules as less important. On the other hand, age was not found to be related to the importance, unchanging nature, and cultural universality of moral rules.

Correlations Between Task Measures

This section contains the correlational data that have bearing on the relation between moral reasoning scores and other task measures including; (a) the force choice task; (b) mathematical reasoning; (c) importance task. These findings are relevant in regard to understanding the consistency between task measures. The relation between children's

responses to the changeability and cultural universality of particular moral and social conventional rules and the importance attributed to moral and social conventional rules will also be presented.

A positive relationship was found between moral reasoning scores and the response that a moral violation is more serious than a social conventional violation (forced choice task) in the case of violation 1 ($r_{pb} = .17, p < .07$); violation 2 ($r_{pb} = .21, p < .02$); violation 3 ($r_{pb} = .26, p < .001$); violation 4 ($r_{pb} = .41, p < .001$); violation 5 ($r_{pb} = .24, p < .001$).

Moral reasoning scores were found to be a significant predictor of intelligence as measured by the mathematical reasoning subtest of the WISC-R ($r = .29, p < .001$), but not of intelligence as measured by the coding subtest of the WISC-R.

The moral reasoning scores were found to be a significant predictor of the importance attributed to social conventional rules ($r = .24, p < .01$). In other words, children who scored higher on the moral reasoning task attributed lesser importance to social conventional rules. On the other hand, performance on the moral reasoning task did not predict importance attributed to moral rules.

The response that moral rules were unchangeable was found to be positively related to the importance attributed to moral rules in the case of rule 3 ($r_{pb} = .19, p < .03$) and rule 4 ($r_{pb} = .19, p < .03$). In other words, children who responded that moral rules 3 and 4 were unchangeable were more likely to attribute greater importance to moral

rules. No relationship was found between the response that moral rules were unchangeable and the importance attributed to moral rules in the case of rule 1, rule 2, and rule 5.

The response that social conventional rules may be changed was found to be marginally negatively related to the importance attributed to moral rules in the case of rule 9 ($r_{pb} = .16, p < .06$). In other words, children who responded that social conventional rule 9 may be changed were more likely to attribute lesser importance to moral rules. No relationship was found between the response that a social conventional rule may be changed and the importance attributed to moral rules, in the case of rule 6, rule 7, rule 8, and rule 10.

The response that moral rules were unchangeable was found to be marginally positively related to the importance attributed to social conventional rules in the case of rule 4 ($r_{pb} = .15, p < .06$). In other words, children who responded that moral rule 4 was unchangeable were more likely to attribute greater importance to social conventional rules. No relationship was found between the response that moral rules were unchangeable and the importance attributed to social conventional rules in the case of rule 1, rule 2, rule 3, and rule 5.

The response that social conventional rules may be changed was found to be negatively related to the importance attributed to social conventional rules in the case of rule 6 ($r_{pb} = .19, p < .05$), rule 7 ($r_{pb} = .16, p < .07$), rule 8 ($r_{pb} = .37, p < .01$), rule 9 ($r_{pb} = .36, p < .01$), and rule 10 ($r_{pb} = .27, p < .01$). In other words, children who

responded that social conventional rules 1, 2, 3, 4, and 5 may be changed, were more likely to attribute lesser importance to social conventional rules.

The response that moral rules were culturally universal was found to be positively related to the importance attributed to moral rules in the case of rule 1 ($r_{pb} = .33, p < .01$), rule 2 ($r_{pb} = .19, p < .03$), rule 3 ($r_{pb} = .21, p < .02$), rule 4 ($r_{pb} = .25, p < .01$), and rule 5 ($r_{pb} = .23, p < .01$). In other words, children who responded that moral rules were culturally universal were more likely to attribute greater importance to moral rules.

The response that social conventional rules were culturally specific was found to be negatively related to the importance attributed to moral rules in the case of rule 7 ($r_{pb} = .15, p < .01$), and marginally negatively related in the case of rule 6 ($r_{pb} = .14, p < .09$), and rule 9 ($r_{pb} = .15, p < .07$). In other words, children who responded that social conventional rules 6, 7, and 9 were culturally specific were more likely to attribute lesser importance to moral rules. No relationship was found between the response that social conventional rules were culturally specific and the importance attributed to moral rules in the case of rule 8 and rule 10.

The response that moral rules were culturally universal was found to be negatively related to the importance attributed to social conventional rules in the case of rule 4 ($r_{pb} = .20, p < .02$), and rule 5 ($r_{pb} = .21, p < .01$). In other words, children who responded that

moral rules 4 and 5 were culturally universal were more likely to attribute lesser importance to social conventional rules. No relationship was found between the response that moral rules were culturally universal and the importance attributed to social conventional rules in the case of rule 1, rule 2, and rule 3.

The response that social conventional rules were culturally specific was found to be negatively related to the importance attributed to social conventional rules in the case of rule 9 ($r_{pb} = .27, p < .01$), rule 10 ($r_{pb} = .22, p < .01$), and marginally negatively related in the case of rule 6 ($r_{pb} = .15, p < .09$). In other words, children who responded that social conventional rules 6, 9, and 10 were culturally specific were more likely to attribute lesser importance to social conventional rules. No relationship was found between the response that social conventional rules were culturally specific and the importance attributed to social conventional rules in the case of rule 7 and in rule 8.

Summary of Findings

The results of the one-way ANOVA, on three levels of social context, supported the hypothesis that children from high ethnocentric social contexts would be less likely to use intentions in making moral judgments than would children from low ethnocentric social contexts. Corroborative support for this hypothesis was produced in the 2 (levels of social context) x 2 (photograph conditions) ANOVA which resulted in a

significant main effect for social context. Counter to expectation, however, no differences were found as a function of social context in judging outgroup as opposed to ingroup members.

The results of the chi-square analyses of children's responses to questions regarding the distinction between moral and social conventional rules (forced choice task) supported the hypothesis that children from low and middle ethnocentric social contexts would distinguish between moral and social conventional rules in two of the five forced choice comparisons. In the case of comparisons 2 and 3, children from the high ethnocentric social context, more frequently than children from the low and middle ethnocentric social contexts, judged the social conventional rule violation as more serious than the moral rule violation.

Results of the 3 (levels of social context) x 2 (moral and social conventional rules) repeated measures ANOVA on the importance scores children attributed to the five moral and five social conventional rules were directly counter to the hypothesis that children from the low and middle ethnocentric social context would judge moral rules as more important than children from the high ethnocentric social context. In contrast to the previous findings (forced choice task), when the children were required to judge individually the level of importance of five moral and five social conventional rules, the high ethnocentric

group attributed more importance to all rules--both moral and social conventional rules--than did the other two groups. All groups, however, judged moral rules as more important than social conventional rules.

The results of the chi-square analyses of children's responses to the questions regarding the changeability of cultural universality of the five moral and five social conventional rules were counter to expectation that the low ethnocentric children would be more likely to recognize the stability and cultural universality of moral rules. These results were consistent with the results of the repeated measures ANOVA. In other words, a significantly greater number of high ethnocentric children judged particular moral and social conventional rules as unchangeable and culturally universal than did the low and middle ethnocentric children.

Correlational data were presented which showed a positive relationship between age and moral reasoning ability and between age and other task measures (older children were more likely to recognize the changeability and lesser importance of social conventional rules). Correlational data were also presented which showed a relationship between task measures. Moral reasoning was found to be a significant predictor of the following abilities: (a) the ability to distinguish between moral and social conventional rules as measured by the forced-choice task; (b) mathematical reasoning; and (c) the importance attributed to social conventional rules (children who scored higher on the moral reasoning task attributed lesser importance to social

conventional rules). In general, children who judged both moral and social conventional rules as unchangeable and culturally universal, were more likely to judge all rules, moral and social conventional, as more important. For example, children who responded that moral rules were culturally universal were more likely to attribute greater importance to moral rules. In turn, children who responded that social conventional rules were culturally specific also were more likely to attribute lesser importance to moral rules. Children who responded that social conventional rules were changeable were more likely to attribute lesser importance to social conventional rules.

The significance and interpretation of these findings will be presented in the Discussion section.

CHAPTER V
DISCUSSION

Moral Reasoning and Social Context

As expected, it was found that children from the high ethnocentric social context used intentions less frequently in making moral judgments than did the children from the low and middle ethnocentric contexts. These results indicated that differences in moral reasoning ability reflected cultural differences. This section provides a more extended discussion of the above findings. Alternative interpretations of the observed differences will be offered which are consistent within a Piagetian framework.

It was argued that participation in a highly rule-oriented ethnocentric social context depressed the individual's propensity to reason in moral terms, particularly in relation to outsiders. In such societies, rules govern a great many areas of conduct and "competent" and acceptable authorities exist to decide for members, questions of moral conduct. Moral decisions in ethnocentric, homogeneous cultures, which are basically highly literate and intellectually minded communities, are often made available to the public in the "religious" literature. Yet what generally takes place is that whereas a small percentage of the population may in fact read, understand, and deal conceptually with these moral decisions, the general population receive them in the form of a finished product or rule (it is permitted, it is

not permitted, it is permitted with the following stipulations).

Children are taught early that decisions which determine the conduct of ingroup members have, in general, already been made and are presented to them as complete and unchangeable. Whether it is allowed or not and whether it is right or wrong are unequivocally presented at home and reinforced at school.

As demonstrated later in the anecdotal section, children from the high ethnocentric social context were capable of pointing out the immorality of a particular action and manifesting some understanding of the consequences of the action. When, however, the high ethnocentric children were faced with a choice involving complex decision making, they found it more difficult than the low ethnocentric groups. When there was one right answer as was in the case of pure arithmetical reasoning, the high ethnocentric children did as well, if not better, than the other children. Yet when confronted with a morally complex issue where nuances of intention made it necessary to weigh pros and cons, they did not appear as capable of handling the complexities of moral decision making as did the low ethnocentric children.

To refer to the high ethnocentric children as less moral is to miss the point completely. These children, in fact, may be considered more moral, i.e., more strict in observing the rules of morality. For these children, the rules of morality by definition appeared to fit more closely to Piaget's description of the morality of constraint. One might argue it was precisely for this reason that they had difficulty in

dealing with the ideas in the complex moral dilemma which was presented to them. At the same time they had to accept the task of making a decision, by carefully weighing the relevant data. They were accustomed to having rules already made by authorities, whereas the moral tasks presented in this investigation called for something more than just the citing of authority. In the moral reasoning paradigm the issues were complex and unclear to the children, particularly when the counter arguments were presented (e.g., "but another boy said that he was worse because when the candy fell out of his pocket, the second boy got it back, but the baker never got the bread back"). Although these children clearly understood and were being taught in school concepts of justice, mercy, helping another, and giving charity (see anecdotal section), they had greater difficulty integrating the above data when faced with conflicting points of view.

Another possible and related interpretation of the observed differences may have been the effect of the importance of the authority figure in high ethnocentric groups. Certainly the examiner may have very well represented such an authority figure to the children. The examiner, in turn, obviously "suggested" that the youngsters' initial response (see results; Table 9) was wrong when he presented counter arguments, and that the "other boy" was right (even though the examiner was careful to disclaim that he believed the other boy was right). This interpretation may be mitigated on the basis of the data on the children's initial intention-based responses. In the case of judgments

without explanation, the children's moral reasoning score consisted primarily of the child's first response to the naughtier actor in the dilemma with no consideration given to the explanation later given. Here, too, the children from the high ethnocentric group performed more poorly than the children from the low ethnocentric group, but a significant difference was found only in the case of couplet 2.

The prominence of authority in general and in particular the adult authority figure, is always a crucial factor in a highly ethnocentric social context. In the presence of an adult, social interaction was much more apt to be dominated by the "adult other" either in fact or in mind. Any introduction of the adult must have changed the interactional context into one involving constraint. Such an acknowledgment of the powers given to the adult is inherently different from either the real or imagined powers of an adult in relation to the child in the low ethnocentric social context whether it be at home or in a more structured school setting.

Within the high ethnocentric community, not only children, but adults as well tend to follow obligations in the moral realm precisely because they are rules which are unalterable and must not be individually challenged. Only a higher authority (i.e., rabbinical court) has the right to alter a rule, rendering a formal decision which follows after a thorough search of the literature. There is a comprehensive body of literature which the rabbinical court or authority makes use of in rendering a decision. So that if members of the community are faced

with a moral dilemma (for example, a couple questions the permissiveness of an abortion if the fetus has been determined to have Tay-Sachs or Down's Syndrome, or they wish to use artificial insemination in the case of a fertility problem), it is required that this decision be made in consultation with rabbinic authorities.

Although children are rarely, if ever personally involved in the decision-making process or consultation, they are aware of the value and significance associated with particular authority figures in their community and the reverence and respect with which these figures are treated. The rabbinic authority is cast in the role of moral mediator and every child is aware of his function and significance. In some communities, every important decision (marriage, family, business) requires a visit to the rabbinic and spiritual leader. Such an emphasis on the adult decision-making power may have impeded the child's learning to weigh and evaluate the nuances and differences involved in moral reasoning.

It was expected that children from the high ethnocentric social context would use intentions more often in judging ingroup as opposed to outgroup members. Counter to Hypothesis 2, however, no social context by photograph condition (in versus out) interaction was found. The children from the high ethnocentric social context did not use intentions more often in judging ingroup members than in judging outsiders. Although a social context effect on moral reasoning was found, both the high and low ethnocentric groups used intentions equally

in judging in- and outgroup members. Differences between the moral reasoning scores from the high and low ethnocentric children were consistent across the two photograph conditions. Using response latency as a dependent measure resulted in no main or interaction effect. It had been expected that the conflict condition (the photograph of the well-intentioned protagonist was an outgroup member) would result in a greater response latency for the high ethnocentric children. Thus neither the photograph conditions nor the latency response measure captured the differences between groups in their judgment of the intentions of outgroup as opposed to ingroup members.

Imamoglu (1975) used response latency as a dependent measure, as well as a naughtiness rating scale and found that accidental acts were evaluated more slowly than intentional ones by four age groups (5, 7, 9, and 11 year olds). However, only the ratings of the three older age groups differentiated accidental from intentional acts. He argued that response latency was a more sensitive index of intentionality than ratings. The present findings, however, are consistent with those of Peterson and Keasey (1976) which provided no support for using response latency as an index of intentionality.

That differences between the group's perceptions of outgroup members existed, however, was demonstrated in a number of ways. High ethnocentric children often spontaneously commented on the ethnicity of the actors (see anecdotal data) during the time that they vacillated in making the choice of the "naughtier" actor. Many of the children's eyes

were also observed to dart back and forth between the two photographs while they verbalized the conflict which they were experiencing. The responses of the children from the high ethnocentric sample often reflected a sense of confusion over the task of integrating the complex data presented in the moral dilemmas.

The high ethnocentric children, as noted, verbally expressed an individual awareness of the outgroup person as portrayed in the photograph conditions. Of greater significance, however, the high ethnocentric children also demonstrated a differential application of moral obligations and responsibilities. They showed this by accepting restrictions on their own behavior while not making a reciprocal demand on others. For example, asked whether particular moral and social conventional transgressions were permissible where no such rule existed, they often replied "Is it okay for me?" The "me" in their question implicitly included their family, their friends, and their entire community, thereby excluding outgroup members from the additional obligations and restrictions. A more extensive discussion of this issue appears in the anecdotal section.

In summary, the fact that the photograph conditions and latency measures used in testing Hypothesis 2 did not capture any group differences in reasoning about outsiders merely reflected the inadequacy of the measures rather than the nonexistence of these differences.

In concluding his major work on moral reasoning, Piaget (1932) wrote, "There must be relations of a new type between individuals, relations founded on reciprocity, relations that will suppress egocentrism and suggest to the intellectual and moral consciousness, norms capable of purifying the content of the common laws themselves" (p. 395). In contrast to a relationship of cooperation, Piaget characterized the relation of constraint as the imposition upon individuals from the outside of a system of rules with an obligatory content. For Piaget, the relation of society to the individual was considered to be a relation of constraint. This was particularly true in regard to the relation of adults to children. In a social context that is highly ethnocentric and homogeneous, the imposition of adult constraints is dramatically overstated and highlighted. Adults' opinions, laws, customs, traditions, specific taboos, and rules become exaggerated in importance. The child in such a society is neither expected nor encouraged to make moral decisions on his own. Such decisions are made for him by society and its representatives.

What Piaget characterized as relations of cooperation which were defined by equality and mutual respect, is more generally available in a less ethnocentric setting where these qualities are more valued. In such settings, an outsider is more likely to be perceived as an equal. In contrast, a society in which social distance from mainstream culture is valued will, by necessity, foster distrust of outsiders. Members of such a society will manifest less respect for outsiders than for group

members. Thus the greater the degree of ethnocentrism, the lesser are the opportunities for cooperation with and respect for the outsider, which in turn affects the ingroup member's capacity to make moral judgments vis-a-vis the outsider.

In every moral judgment one is required to take the view or perspective of the other. As such, the other's perspective is always that of an outsider. Ethnocentrism engenders a more static system of rules where the development toward a morality of cooperation is more likely to be discouraged. A morality of constraint would be more appropriate to the maintenance of the social system. In such a system, moral issues and social conventional issues become inextricably bound, making the distinction between these two realms much less clear. The overlap and ambiguity between moral and social conventional domains is dealt with at length later in the discussion.

Moral and Social Conventional Rules: Forced-Choice Paradigm as
Compared to Individual Importance Ratings and Cultural
Changeability/Universality Questions

This section discusses findings, experimental and correlational, that relate to Turiel's hypothesized distinction between children's moral and social conventional reasoning. Turiel presented two distinct arguments. First, he argued on an epistemological level that moral and societal domains are independent of each other. Second, he argued from an ontogenetic point of view that children are capable of distinguishing

even at a very young age between different types of social interactions, i.e., moral transgressions are conceptualized and treated differently from social conventional violations.

From an epistemological point of view, Turiel (1978a, 1978b) described morality as prescriptive understanding, and social conventions as descriptive. He maintained that social conventions were "a central element in the coordination of social interactions within stable social systems and is thus part of the societal domain" (p. 49). Whereas morality referred to developing concepts of justice and fairness, social conventions were described as "behavioral uniformities that coordinate the actions of individuals participating within a social system." For Turiel, modes of dress and addressing a person by title, involved social conventional rules which were arbitrary and did not have an intrinsically prescriptive basis.

By contrast, Rest (in press), also arguing from an epistemological point of view, claimed that "this distinction is not adequate, since concepts of social organization are logically implicated in both morality and social conventions. . . . Concepts of justice provide standards by which to judge social organization. How could there be justice or morality without social organization?" (p. 113c). Rest (in press) quotes the philosopher John Rawls, "justice is the first virtue of social institutions, as truth is of systems of thought" (p. 7). Piaget's concept of justice, as an equilibrated social system, and

Kohlberg's six stages of moral development both "link justice to concepts of social organization. . . . The development of the concepts of justice presupposes the concepts of social organization" (p. 113c).

Rest, however, offered no empirical data to support or contradict Turiel's findings, namely that preschool children as young as four years of age understood the difference between moral and social conventional rules, recognizing their differential importance, and the changeability and cultural specificity of social conventional as opposed to moral rules. This section discusses the empirical data, both experimental and correlational, that relate to Turiel's findings.

Turiel (1978b) advanced the view that children's attitudes toward the cultural relativity of social rules were related to the domain of the particular rule (moral or social conventional). With regard to the moral domain he found that the majority of subjects at all ages stated that it would not be right for another country to fail to have a rule prohibiting stealing (i.e., the cultural universality of moral issues across all ages), and that it would not be right to steal in a country where no such rule existed. On the other hand, a social conventional rule (for example, calling a teacher by his first name) was judged by the majority of the children to be irrelevant if no such rule existed.

Weston and Turiel (1980) found that in the case of a moral violation (e.g., hitting another child), most children stated that it would not be "all right" for a school to fail to have a rule regarding the activity. On the other hand, in the case of a social conventional

violation (e.g., going without clothing), most subjects stated that it would be all right for a school to permit a child to remove his clothing and for a child to adhere to this policy.

Turiel (1978b) found no differential understanding of the relative importance of individual moral and social conventional rules as a function of age. He argued that these findings constituted evidence that the greater importance attributed to moral as compared to social conventional rules was not related to the relative importance attributed to particular rules. Rather, his findings were related to the conceptualization of moral and social conventional domains as separate and different. He concluded that his finding no age differences in the importance ratings, supported the separate domains hypothesis because "if the differences in attribution of importance did not stem from a systematic conceptual source, then it is likely that there would be more variability in the importance ratings of subjects of different ages" (p. 56).

The evidence from the present study, however, was that a sizeable proportion of the children did not distinguish between moral and social conventional rules. The present findings contradict Turiel's conclusions regarding children's ability to distinguish between the "separate domains" of moral and social conventional rules.

The next section discusses findings from the forced choice task which are contradictory to Turiel's findings.

The forced choice situations were used in testing the hypothesis that children from low ethnocentric social contexts as compared to children from high ethnocentric social contexts would judge moral transgressions involving intended harm to others as more serious than social conventional transgressions (Hypothesis 3). It was found, in two of the five forced choice comparisons, that the percent of the responses of the children from the low and middle ethnocentric social contexts differed significantly from the percent of responses of the children from the high ethnocentric social context in the expected direction. For example, in one of the forced choice dilemmas, children were asked to compare the seriousness of a moral transgression (breaking a promise to a best friend) to a social conventional transgression (going nude in the street on a hot day). Although the children from low and middle ethnocentric groups chose the actor in the moral violation as the naughtier one, a majority of the high ethnocentric children chose the actor who committed the social conventional transgression as having committed the more serious violation. By contrast, Weston and Turiel (1980) had found that most of the children agreed that it would be okay for a school to permit the removal of clothing. These contradictory findings demonstrated the complexities involved in a "separate domains" interpretation and suggested the need for a closer examination of Turiel's methodology and results.

The need for a closer examination was further indicated by the results found in regard to the hypothesis that children from low ethnocentric social contexts as compared to children from high ethnocentric social contexts, would rate violations of moral rules as more important than violations of social conventional rules (Hypothesis 4). In contrast to the results obtained in the forced-choice paradigm, the results obtained from the importance rating of moral and social conventional rules (which were designed, with some modification, specifically to replicate Turiel's study) were counter to expectation.

Children from the high ethnocentric social context rated all rules, moral and social conventional, as more important than did the children from the low and middle ethnocentric social contexts. Interestingly, however, the results were also consistent with Turiel's findings, since all the children, regardless of social context, rated the moral rules as more important than the social conventional rules. Recall, however, that in the importance paradigm, the children evaluated moral and social conventional rules individually, and were not required to directly compare them. The data from the direct comparisons were contradictory to the above findings and made it more difficult to interpret Turiel's results.

Turiel also argued that the ability to distinguish between moral and social conventional rules was not age related, since he found children as young as four years of age capable of making the distinction. Correlational data contradicted the contention that the ability

to distinguish between moral and social conventional rules was not age related. Although age did not act as a significant predictor of the importance, stability and cultural universality of moral rules, age was found to predict children's attitudes toward the changeability, cultural specificity, and importance of social conventional rules. In other words, older children, compared to younger children, were more likely to judge social conventional rules as changeable and less important.

Of perhaps greater significance was the fact that higher moral reasoning scores were found to be a significant negative predictor of children's attitudes toward social conventional rules. In other words, children who scored higher on the moral reasoning task attributed lesser importance to social conventional rules. This finding suggested that it may be the cognitive level of the child that was the critical variable in distinguishing between moral and social conventional rules.

Finally, children in general, from all social contexts, tended to view all rules as important, often rating a particular moral or social conventional rule a 1 (very important) and rarely rating a rule a 4 (not important). In the light of the above, the lack of correlation between age and attitudes toward moral rules, thus, may have been more a function of ceiling effect than a confirmation of Turiel's position.

It appeared that Turiel committed a methodological error when he employed children's independent judgments of the importance of specific moral and social conventional rules to assess children's differential evaluation of such rules. Analysis of the combined importance scores

showed differences between the groups with the high ethnocentric group attributing the most importance to the moral rules. Inspection of the individual mean importance scores showed that high ethnocentric children rated all five moral rules as more important than did the children from the other groups.

One might have been tempted to conclude from the above that the high ethnocentric group valued moral rules to a greater extent than did the other two groups since they rated moral rules as more important; however, other data greatly weaken this explanation. First, the high ethnocentric children tended to rate all rules, moral as well as social conventional, as more important, reflecting the rule-oriented nature of their culture. Second, the data from the forced-choice paradigm (in two of the five pairings), where children were asked to compare directly a moral rule and a social conventional rule violation contradicted the group differences in importance attributed to moral rules. The children from the high ethnocentric group tended, in the direct comparison paradigm, to choose the moral violation less frequently than children from the other two groups.

Thus analyzing the "importance" data as if the children had actually directly compared the importance of a moral and a social conventional rule would have led to the unwarranted conclusion that the children from the high ethnocentric social context were better able to make the distinction between moral and social conventional rules than children from the other two groups. The reversals, however, which took

place in the case of forced-choice violations 2 and 3, when contrasted with the results of the importance ratings, highlighted both the methodological problems and the importance of considering cultural influences in evaluating Turiel's "separate domains" hypothesis.

A recent study which is of interest because it partially replicated Turiel's methods and addressed itself to the validity of independent importance ratings was that of Shantz (1982). Shantz compared social conventions (combing one's hair and boys playing with dolls) to moral issues (hitting, stealing, and not sharing). She found, in regard to importance ratings, that "the mean ranks suggested that the 6 and 7 year olds as a group were making the distinction between conventions and moral rules." A closer inspection of the data, however, determined that only 38% of the children were consistently rating social conventional violations as less serious than moral ones. Thirty out of 48 of the children studied did not consistently judge social conventional violation as less serious than the moral violations. She concluded that the reason for the differences in the mean ranks was due to "a few children whose extreme ratings weighted the means." "Children," wrote Shantz, "seem to view a rule as a rule, and combing your hair, for example, is as bad as hitting someone without provocation" (p. 184).

The complexity of the issue may be further underlined by analyzing a reversal in the low ethnocentric children's responses regarding the rule of standing during the Pledge of Allegiance. The rule concerning

standing during the Pledge of Allegiance was included in the investigation despite the fact that it was much more important (according to the pretest data) to the low ethnocentric group and more "trivial" to the children from the high ethnocentric group. A high percentage of high ethnocentric children were not only unfamiliar with the custom of standing during the Pledge of Allegiance but also had never heard of the Pledge. For these children an additional explanation had to be offered with great care not to use analogies of a religious nature such as comparing it to the religious custom of standing during prayers. It was interesting how some of the high ethnocentric children immediately elevated what appeared to be a meaningless rule in their culture to something of great importance (18% of the children deemed its violation as more serious than wrongfully blaming a friend, and 40% judged the rule as unchangeable).

Although the children from the low ethnocentric social context, as expected, viewed this rule as more important than did the children from the high ethnocentric group and independently judged it as being more important than the wrongful blame moral rule; when confronted with a forced-choice situation, they chose the moral violation as more serious than the social conventional violation. Thus, despite the greater importance ratings given to specific rules when presented independently, the low ethnocentric children distinguished between the moral and social conventional rules when presented in a forced-choice paradigm, by choosing the moral rule violation as more serious. Although the

independent importance ratings did not predict the forced-choice performance, a fact which may be offered as a critique of Turiel's methodology, the children's ability to distinguish between the two rules in the forced-choice paradigm, appeared to substantiate, at least in this one instance, Turiel's hypothesis. One of the problems in interpreting data as being supportive or contradictory to Turiel's hypothesis, lies in the nature of the data analysis and the particular "hazards" that such an analysis presents. "Group performance," wrote Shantz (1982), "may not describe even a majority of the children, and the attribution of modal reasoning patterns runs the risk of masking the important individual differences" (p. 188).

It was clear that differences existed between what one child viewed as a social convention, and what another child viewed as a moral offense. These differences existed both between and within groups. For example, many of the children in all three social contexts judged not raising a hand in class, calling a teacher by a first name, and public nudity (which Turiel described as "unambiguous" examples of social conventional rules) as examples of moral violations. The children's explanations of their choices reflected the fact that they perceived the issues in question as involving harm to others ("Nobody will be able to learn anything," or "It's not respectful"). Thus a dilemma which purported to measure the child's ability to distinguish between a social convention and a moral issue, was cognized by the child as a choice between two moral violations.

Turiel's conceptualization of the distinction between moral and social conventional rules may in itself be a reflection of the ethnocentrism of our prevailing culture. Societies' values and attitudes which seem to change every decade are presented as prescriptive rather than descriptive in nature, i.e., they "ought" to be accepted by all peoples in all cultures. These attitudes prevail not only in regard to which social conventions, traditions, and customs deserve to continue, and which should be discarded, but also exert a great deal of pressure in setting standards regarding dress codes, sexual mores, attitudes towards authority, and even attitudes toward the elderly.

Nucci (1981) argued that in some instances there was a problem in distinguishing whether a particular rule belonged in one domain or another. In such instances, where it was unclear as to which domain a particular rule belonged, there was bound to be individual disagreement over whether engaging in the act should be considered a social conventional or moral violation. Nucci recognized that "overlap among domains was illustrative of the complex nature of social cognition" (p. 121). He maintained, however, that his studies, and similarly Turiel's (1978b), investigated relatively unambiguous examples of actions in each domain. It remains for further research to address how instances of overlap among various domains are conceptualized and, in fact, whether the rules used by Nucci (1981) and Turiel (1978b) were universally unambiguous.

The present study demonstrated that what Turiel (1978a, 1978b, 1979), Weston and Turiel (1980), Nucci and Turiel (1978), and Nucci (1981) considered "relatively unambiguous examples of actions in each domain" may, in fact, be examples of actions that were unambiguous in their severity of consequences, or trivial quality of the rule in each particular domain. When, however, the severity of the particular actions, irrespective of domain, was closer in terms of penalty, reprimand, and traditional mode of acting, then children may less readily make distinctions in terms of relative naughtiness, importance, changeability, and cultural universality.

In this investigation, the issue of the possible trivial quality of some social conventional rules, and the concomitant factor of severity of consequences, was addressed in a pretest study. Only what were found to be nontrivial social conventional rules for all three groups were chosen. Children (from each of the three social contexts) who participated in a pilot study, found these social conventional rules to be approximately equal in importance. As noted, the only exception was in the case of the Star Spangled Banner and Pledge of Allegiance which was considered less important to the high ethnocentric children. Moral violations were similarly chosen to reflect situations that small children might encounter, such as breaking a promise to a friend or taking a candy (stealing). Thus broad moral issues such as abstract notions of theft that might overpower the child's sense of right and wrong were avoided.

When a particular rule is judged by a child to be very important (i.e., nontrivial), or if violating a particular rule is apt to bring strong sanctions (i.e., severe consequences), then the child may be less apt to distinguish between moral and social conventional rules. It remains for further research to investigate the implications and validity of these issues.

Turiel (1978a, 1978b) argued that Piaget was mistaken when he took the position that a child's concept of rules and the development of morality evolved out of childish egocentrism and a morality of constraint. Results of the present study provided evidence that contradicted Turiel's "separate domains" hypothesis particularly in instances where rules from different domains earned equally severe punishment from transgressions or converged upon traditionally sanctioned modes of conduct. Anyone who has watched a preoperational child argue that one cannot play a game in a particular way because there is a rule against such conduct, and who remained totally inflexible in his unwillingness to change the rule, must recognize that Piaget's theoretical position which was partially derived from the investigation of children's rules of marble games, remains a significant contribution to the understanding of children's moral reasoning.

In conclusion, an alternative hypothesis consistent with Piaget's formulations may be offered. Younger children at first view all rules in a similar fashion. Since they operate within a morality of constraint, they understand that rules are to be followed, and

irrespective of the severity of the consequences following a particular rule violation, rules are seen as important, as unchangeable, and culturally universal. Children do not, however, conceptualize moral and conventional rules as being in separate domains. As the children develop, however, their view of rules becomes tempered by other considerations and both severity of a particular rule and its perceived domain may become relevant issues to be used in making moral judgments. Both the severity and the perceived domain of a particular moral of social conventional rule, in turn, are clearly linked to the influence of the social context.

Thus, a particular social convention, which is deemed more important or carrying a greater penalty for its violation (for example, public nudity, or calling a teacher by his first name) will continue to be judged as more important than even a moral violation (not respecting another's feelings or breaking a promise to a best friend) if the penalty in a particular culture is great enough. When seen in the above light, children's judgments were much more apt to be affected by the severity of penalty for the particular violation or other considerations such as concern for authority, rather than by any cognizance of the separateness of domains (maintenance of societal regularity versus harm to others).

Differences among the children's responses (both inter- and intragroup) are presented in the Anecdotal data section. The data provided further support for the relevance of cultural influences in understanding ambiguity and overlap between the moral and social conventional domains.

Anecdotal Data

In this section anecdotal data are presented that relate to (a) the alternative hypothesis of the effect of authority on children's moral reasoning; (b) the distinction made by the high ethnocentric group between in- and outgroup members which included the differential application of moral obligations; (c) the blurring of the distinction between moral and social conventional rules which has bearing on Turiel's ontogenetic model, and raised questions in regard to the epistemological distinction between the moral domain and the societal domain.

The social contextual implications of the present study were found most dramatically in the rich, varied, and often spontaneous comments of the children. Differences were found among the groups in moral reasoning ability which masked the generally high level of moral concern shown by the children of the most ethnocentric group. What was most evident in examining the protocols of the three groups was the greater focus put by the high ethnocentric group on authority. Thus, for many of these youngsters, a rule such as calling a teacher by a first name, which Turiel deemed a social convention, was clearly much more than just

that. For example, one youngster from the high ethnocentric group who, on the basis of his scores, was verbal, moral, and bright deemed all rules as extremely important and except for one instance (going without clothes on a hot day) viewed all rules as unchangeable and culturally universal. For this youngster, moral rules were conceptualized not only in regard to combatting harm to others, but also in terms of respect for authority and rules in general. For this youngster, a teacher's right not to be called by his first name came precisely from his status as an authority, "a teacher is like a father!" In this child's eyes, once he has made this statement, it needs no further explanation. Respect for a revered person, whether teacher or parent, was clearly a moral issue.

The parent is entitled, by virtue of his status, to a certain degree of respect and honor. It cannot be changed, it cannot be different elsewhere, and is true even if a parent is not present. This particular youngster indicated the complexity of the problem when he recognized that hurting another's feelings is wrong and as a rule unalterable because "one may not embarrass ('farshame') another person." Yet he spontaneously added that a promise to a friend can only be broken by the specific intervention of the "rebbe." Thus, in the child's view, the authority of the rebbe or the Torah seemed to have the power to circumvent the importance of the harm to the other. Such a respect for authority and the elevation of all rules to a level of communal responsibility was evident in his decision that failing to stand for the flag is not appropriate "because it shows a lack of respect ('derech

eretz') for the flag . . . ; you shame the flag." This particular response was offered by many of the children who never heard of the custom of standing for the flag (as noted, an explanation of the custom was required before they could respond).

Thus, many of the children elevated to an issue of respect what was a social convention in the population at large but not in their community. Such an anthropomorphization of the flag was not an uncommon reaction. Few of the children were capable of recognizing what one Chassidic youngster understood, that the flag is only "a piece of cloth and wood" and if no such rule existed then it would be okay to sit. Most of the youngsters, however, chose to rely on their basic instinct which was to defend the sanctity of rules and the flag or the community which it symbolized for them. Thus even in an instance when a particular custom was not theirs, they defended its sanctity in theory. Youngster after youngster blurred the distinction between what Turiel designed as moral "harm to others" as opposed to the social conventional "maintenance of the social order."

Another often made distinction was between in- and outgroup membership and the nature of the society in which the particular rule was absent. For example, children inquired whether or not the Torah existed in the particular society where "no such rule existed." Yet the children's question implied that in their system there could be two sets of values, that of the mother country and that of the Torah, one being changeable and one being eternal. The later system of values was

applicable to only one group, further complicating the matter. One particular bright youngster recognized that the nonexistence of the Torah could lead to the negation of a particular social conventional rule, but a similar absence of the Torah could not persuade him that a particular moral rule could be changed. Thus this particular youngster understood that since the "president" made the rule regarding standing for the flag, the custom could be negated when no rule existed, yet allowing another to take the blame for one's wrongful act could not be permitted even without the existence of the Torah.

In contrast, another youngster who recognized the cultural specificity implicit in standing for the flag could not make an appropriate distinction and decided that the rule regarding wrongful blame could also be changed "if the president says." At times even the brightest and seemingly most moral of these children appeared to be almost overwhelmed by the force and power of authority even if they disclaimed it as their own. They appeared to understand what was right and what was wrong, at times offering strong condemnation of acts involving harm to others (to a much greater extent than the other two groups). Yet often the moral rules became tinged with what Turiel claimed were social conventional implications regarding the social order. In turn, other children deemed social conventional issues as having a more moral quality so that a teacher being called by the first name was a "sin" and went on to say "he's a teacher, you have to respect him." As noted earlier, however, the youngsters from the high

ethnocentric group who placed a heavier emphasis on the existence and power of the authority were much more vocal and clear in regard to condemning harming or shaming another person. As one boy exclaimed, "embarrassing another person is like killing him."

In both the high and middle ethnocentric groups, distinctions were frequently made between Jews ("Yiddin") and non-Jews ("goyim") in regard to their obligations. Thus a particular rule might still exist even if the torah did not exist because "it would be allowed but it wouldn't be right." Such moral exactitude was often expected only from the Jew "who would know" whereas "the goyim would not know about it." Other children gave responses that indirectly were consistent with the above distinction since they saw rules as relevant because they were from the "One Above" ("Aibeshta"). It was clear that the children felt that only ingroup members having this direct link to God were obligated. The fact that children perceived ingroup members as knowing instinctively and outgroup members as not knowing implied that the ingroup members had internalized the teachings of the Torah such that even without its existence they would still recognize its eternal truths accepting the obligations, rules, etc. "Goyim," on the other hand, "can do what they want." Thus, even though the children understood that certain rules were universal and unchangeable and severely condemned even the thought of a violation, they did not expect as much from the outsider. Such a distinction between in- and outgroup and conflict over the existence or nonexistence of the Torah was made by a large percentage of the children

with no regard to any particular rule. The general impression was that these feelings and attitudes were pervasive throughout the entire high ethnocentric group. Questions which the children posed to the investigator regarding the nature of the person (i.e., his ethnicity) and the society (i.e., were they in possession of the Torah?) which were given in response to whether a particular rule did or did not apply, demonstrated their perception of the cultural specificity of rules in general. Thus rules can be both universal, i.e., they will always exist and be culturally specific because they apply only for one group. A clear-cut distinction between moral and social conventional rules, however, did not appear to exist. It appeared that for many of the high ethnocentric children, a rule of a moral nature was perceived differently when the actor belonged to an outgroup. Thus the violation of a particular rule would be judged as legitimate or open to question if the person did not belong to the child's ethnic group. In their questions to the investigator it was evident that the children distinguished between in- and outgroup members and between cultures. A high percentage of high ethnocentric children, in response to the cultural specificity of a particular moral rule, inquired as to whether the Torah existed in that particular culture.

Because so many of the children inquired regarding the ethnic ties of the actor (i.e., "is he Jewish or not?"), the question posed by Turiel (1980), "Suppose in another country, there is no rule, would it be all right? (e.g., to break a promise to a friend)," often had to be

addended to read "Would it be all right for you? (to break a promise to a friend)." This was done because it was found that many children would ask "For me, or somebody else . . . is it for a Jew or a goy?" Even here, the children from the high ethnocentric group persisted in complicating the issue with their social contextual problems ("did the Torah exist there?").

The children from the low ethnocentric group, as noted, generally viewed all rules as less important than did the other two groups but the strength of their convictions was often quite dramatic. One bright six year old, who saw all the moral rules as unchangeable and culturally universal and viewed social conventional rules as changeable and culturally specific, responded to the question about allowing another to accept blame for one's wrongful actions as wrong because "If you would know you should always do the right thing." Yet even a youngster who could adamantly state, "You still know it's right" faltered when tested further after the formal exam had been completed. Asked "what if your parents said it was O.K.?" he gave the response, "Then it is O.K. because parents are the boss of you." Thus, even when, on the surface, a child seemed to grasp the notion of the unchangeability of a specific moral rule, testing the limits by pressing the child further showed the lack of clarity in the child's distinction between moral and social conventional rules.

In contrast to the position stated above (that of a transitional youngster), his older sibling argued in a more consistent and inflexible fashion that all five social conventional rules were changeable and culturally specific, whereas all five moral rules were unchangeable and culturally universal. This boy understood that sitting for the Pledge of Allegiance was okay because "then it would become a custom to sit," and that eating with your hands in a country where no custom existed to eat with knives and forks was O.K. because "How else would you eat?," a response that is starkly realistic and yet almost totally lacking from other children's protocols. This same youngster also understood something that Turiel's findings suggested would be a popular response, namely, that in some cultures "they go outside without clothes." In the present study this was a very atypical response.

Another low ethnocentric youngster showed that he understood the notion of custom and social convention when he responded regarding the question of sitting for the Pledge of Allegiance--"I'd feel a little weird standing, where no one else was standing." Yet even though he said he would feel "weird" being the only one standing, he felt he would still wear clothes where no rule existed. However, pressed further regarding the acceptability of going without clothes where no rule existed, he responded, "Yeah, it's O.K., I guess."

On the other hand, such flexibility was clearly unacceptable to the same youngster in regard to breaking a promise ("would it be okay where no rule existed?"). In this case he responded, "No, people here

also break promises to a friend. That doesn't make it right!" In regard to shaming another person in a place where no rule existed he responded, "I'm not used to doing it. I do what I believe in doing." This same youngster understood that a particular rule regarding hurting another's feelings could not be changed because "People's feelings can't be changed." Similarly, regarding the rule's universality, he argued "because it's nice to do it. First of all it's hard to find a place where the rule isn't there--it's just not right."

Such strongly felt and well-defined attitudes about morality were not necessarily typical of the low ethnocentric group. These attitudes, however, were often representative of the low ethnocentric group's greater ability as opposed to the high ethnocentric group to distinguish between the changeability and cultural specificity of a social conventional rule as opposed to a moral rule.

Finally, it is worth noting that in not even a single instance did a child from the low ethnocentric group make reference to the ethnicity of actors involved in any of the dilemmas. Either an act was right or wrong, acceptable or unacceptable, and the obligations and/or expectations were similar in regard to all groups. Certainly the children did not verbalize the fact that one expected more from one group as opposed to another. This is noteworthy because both the high and middle ethnocentric groups frequently made reference to the fact that a particular rule was unchangeable and universal, specifically because the child himself was Jewish and consequently it would not be okay for him

to violate the particular rule. Recall, it was because so many highly ethnocentric children asked the question "Is it okay for me, or the goyim?," "Was there a Torah," etc., that the original question "Is it okay to not have such a rule?" often had to be rephrased to add "Would it be okay for you?" The low ethnocentric children had no such problem in understanding the question. For them, the question as originally presented by Turiel was perfectly acceptable. The world, for them, was not as dramatically polarized. To these children it was clear that the problem of whether it was legitimate not to have such a rule in another country had to be resolved in regard to the particular rule irrespective of the affiliations of the actors or the nature of the society. If they, in fact, struggled with the question, it was in regard to the nature of the rule and to its degree of severity (how serious an infraction was involved). The difference between these groups of children in regard to their differential understanding and reasoning about moral and social conventional rules raises serious questions regarding the validity of a universal application of Turiel's separate domains hypothesis.

Possibilities for Future Research and Educational Implications

Future research should focus on the differences between the results of Turiel's study on the importance, changeability and cultural specificity of moral and social conventional rules and the present findings. A closer examination of Turiel's more extensive interview

should attempt to determine whether the interview itself may have inadvertently directed children toward the understanding and conceptualization of a distinction that they originally, in fact, may have been incapable of making or verbalizing. The present population of children in a very specific but limited interview (compared to Turiel's), showed no clear ability to distinguish between domains, often citing moral rules as open to being changed and social conventional rules as being unchangeable. Similarly, on numerous occasions, children from all of the sample populations viewed a particular immoral action as permissible if no rule regarding the action existed and at the same time viewed a conventional action where no rule existed as still being inappropriate. Often a particular rule was deemed to be changeable in a specific instance, yet no understanding existed that a rule might be open to change for all. These results are difficult to integrate into Turiel's separate domains hypothesis. On the other hand, children sampled in this study generally viewed moral rules as more important and frequently chose a moral violation as more serious a transgression than a social conventional violation in a forced-choice situation. These latter findings tend to give support to Turiel's hypothesis. As noted, a possible explanation for these conflicting findings is that Turiel's extensive interview may have directed children toward a distinction that they did not truly grasp. The manipulation of interview variables might provide evidence which would help clarify questions raised by the present research.

Another possible area of research might include a comparison between children whose educational setting focuses on moral development, values, etc., and children from an educational setting where there is no such structured focus on moral teachings. It is possible that the present sample of children, although providing us with valuable cross-cultural data, might also reflect the thinking of an atypical group of children. The children used in the present study attended classes where teaching was directed toward the development of a higher sense of duty. Whether or not this training has been effective in changing attitudes and behavior is difficult to put to an experimental test. Earlier child studies by Hartshorne and May (1928) and followup studies by Burton (1963), Sears, Rau, and Alpert (1965), and Nelson, Grinder, and Mutterer (1969) on the relation of education to character development, moral knowledge, and moral behavior (e.g., cheating) were inconclusive (Hoffman, 1970). If such training, in fact, leads these children to function in society in a more humane and socially conscious fashion, particularly in regard to respect for other's rights and feelings, then educators in the public sector might be wise to follow this example.

"In our own societies," wrote Piaget (1932),

the child, as he grows up, frees himself more and more from adult authority; whereas in the lower grades of civilization puberty marks the beginning of an increasingly marked subjection of the individual to the elders and the traditions of his tribe. (p. 251)

This greater involvement in the group and its traditions fosters a more communal attitude and spirit. Piaget concluded from the above that in modern society "collective responsibility seems . . . to be missing from the moral makeup of the child, whereas it is a notion that it is fundamental in the code of primitive ethics" (p. 251). The notion of collective responsibility bears a much greater role, however, in a high ethnocentric, homogeneous society which places such great emphasis on authority. It is a traditional notion in Judaism that an individual is forewarned to consider each act as if the entire world's fate hinges on his performance.¹

Intrinsic to the high ethnocentric group's attitude toward authority is the concept of punishment. A closer study of the high ethnocentric group's attitudes toward punishment might provide a rich source of material relevant to the testing of Piaget's hypothesis that a correlative relationship exists between punishment as expiation and a morality of heteronomy.

¹"Our rabbis taught: Ever let a man see himself as though he were half-guilty and half-innocent. Happy is he if he does one good deed, for he tips the balance in his favor. Woe is him if he commits one transgression, for he tips the balance against himself, as it is said, 'But one sinner destroyeth much good' (Eccles, 9:18). Because of a single sin committed, he loses much that is good.

"Rabbi Eleazar ben Rabbi Simeon says: Because the world is judged by its majority, and the individual judged by the majority of his deeds, happy is the man who does a single good deed, for he tips the balance in his favor and that of the world. Woe is him, if he commits one transgression, for he tips the balance against himself and the world. For it is said, 'But one sinner destroyeth much good' (Eccles. 9:18). Because of a single sin, he and all the world would have lost much that is good" (Tractate Kiddushin 40b)."

For Piaget, the expectation of punishment was a crucial element in understanding a child's conception of justice and morality. The child, in Piaget's view, first manifests a morality where his reaction to dealing with transgressions is that of revenge and expiation via punishment. Piaget found that younger children, when given a choice, demanded more severe punishment for transgressions, whereas older children felt that punishment should fit the crime and be preventive and not "expiatory." Expiation, for Piaget, was related to a morality of heteronomy and duty. The high ethnocentric group of children tended to place great emphasis on authority and collective responsibility as well as accept the idea of reward and punishment in a much more concrete fashion than did the other two groups.

Following directly from the above, another important area of research which is allied to the issue of punishment and authority is the concomitant greater respect for one's elders and their views which these children evidenced. In a society where age has become a major handicap and where the popular culture esteems youth and acting young, the study of this small isolated segment of society can afford us an opportunity to investigate how ethnic values and ideas persist to contradict those of the popular culture in regard to the attitudes of youth toward their elders.

The issue of what constitutes a moral question and whether it can be restricted, as Turiel does, to the case of concrete harm to another person needs further clarification. Even within so-called Western

society, this study has shown that differences exist among differing social contexts. Saxe (1981) wrote that the study of concept development within the framework of a single western cultural context blinds us "to the way in which culture may influence an individual's formation of number concepts" (p. 1). Similarly, in regard to the development of the individual's understanding of social conventional and moral rules, the study of these concepts within different cultural contexts is an important research tool in the investigation of the relation of culture to the development of the conceptualization and understanding of moral and social conventional rules.

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APPENDIX A
TEST PROTOCOL

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164-180

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Instructions for Coding Subtest

See WISC-R Manual (Wechsler, 1974)

Coding A--For children under 8 .

Coding B--For children 8 and older

APPENDIX B
PHOTOGRAPHS





Appendix C

NAMES OF ACTORS IN STORY COUPLETS

Treatment 1--well intentioned child is member of one's own group

Treatment 2--well intentioned child is member of outgroup

Middle group--treatment groups are eliminated

<u>Names</u>				
<u>Middle</u>	<u>High</u>		<u>Low</u>	
	<u>In</u>	<u>Out</u>	<u>In</u>	<u>Out</u>
Ari	Chaim Dovid	Billy	Alan	Use names from high ingroup
David	Schmuel Yosef	Paul	Michael	
Moshe	Avrom Yitzchok	Tommy	Steven	
Shalom	Yehuda Tzvi	Matthew	Jonathan	
Mordechai	Moshe Chaim	William	David	
Yosef	Baruch	Donald	Jeffrey	
Shmuel	Benyamin	Calvin	Gary	
Dov	Yaakov	Peter	Stuart	
Eliezer	Nachum	Rickie	Barry	
Avi	Menachem		Neil	
Joshua	Reuven		Howie	
Yaakov	Nissen		Mark	
Yossie	Nechemiah		Eric	
Uri	Gedaliah		Danny	
Akivah	Shloimie		Seth	
Aaron	Luzer		Robert	
Chaim	Pinchus		Kenny	
	Yerachmiel		Matthew	
	Hanoch		Brian	
	Yecheskiel		Jeremy	
	Aaron		Philip	
			Jason	
			Paul	
			Gordon	

APPENDIX D
COUNTER ARGUMENTS

APPENDIX E
MORAL DILEMMAS: SCORING CRITERIA

In story item 1-4, each response was scored 2 points, 1 point, or 0 points. Sample responses to the counter arguments are given below for each item. Responses are illustrative, not exhaustive.

Items and Sample Responses

Story 1. Streets

2 points. I think I'm right because he tried to trick, he tried to help. . . . He was smart (boy who found way), that doesn't make him (the one who tricked) less naughty (mean, etc.). . . . At least this guy tried to help the boy. . . . The other boy said "I think." He gave a hint, he didn't know. . . . He knew the right way but he wasted the other guy's time. He (other boy) gave a hint that he might be wrong. . . . You're talking about which boy was naughtier, not which one lost the way.

1 point.¹ I still think he's worse, I don't know why. . . . He's badder.

0 points. He's worse because he got the man lost. . . . They're both the same. . . . the boy who asked could've asked someone else just to make sure.

¹One point responses were generally adequate 2 point responses where the child wavered in response to the counter argument saying, "I don't know," "I'm not sure," or "they're both the same."

Story 2. Bread-Candy

2 points. No, because he did it for a reason, his friend was poor. He (other boy) did it for himself. . . . He tried to help a friend, he (other boy) took. . . . He stole, he (other boy) tried to help. . . . He's giving to a friend, he's (other boy) just taking.

1 point. Yes, he's worse. . . . I don't know. . . .they're both the same.

0 points. He got the candy back, he (baker) didn't get it back.He stole something and didn't pay. . . . He stole the bread. . . .The bread is worse. . . . He stole something, his friend got the candy back. . . . You're not supposed to steal. . . . Maybe the boy who said he was poor really wasn't. . . . He had to pay (baker), other boy didn't.

Story 3. Fire/Ballgame--Fire/Tripped

2 points. That the house was saved doesn't have to do with the two boys. He thought the game was more important than the house and the people in it. He tried. It doesn't make him (other boy) less naughty that house was saved. . . .We're talking about him and not another person. Another person saw the fire (and put it out), he didn't! . . . He tried to help. . . . Not his fault. Other boy thought game was more important. . . . A life is more important than a game. He thought saving a game is more important than saving a house.

1 point. I don't know. . . . they're both the same.

0 points. Even if he pretended and went to the game, but someone pulled alarm. House was saved so he's better.

Story 4. Bird-Pencil

2 points. No, I don't think so because birds are supposed to be free but you're not supposed to lie The bird was sad and didn't want to stay in cage. He could have told the friend, but still was nice to the bird A little pencil can turn into a big lie. Other boy didn't lie He broke pencil, but he let bird free to fly. Anyway he lied! He let the bird free. It was like it had been kidnapped He stole but it was as if it (bird) was kept hostage.

1 point. You should be honest. I think both boys are not right. The cage cost him money and he hid the cage I don't know They're both the same.

0 points. He sort of stole it (bird). He really didn't know if the bird was unhappy. He only thought it was He let the bird out when his friend wasn't there. His friend really might have wanted the bird He shouldn't have stolen it (bird). (Q)² He probably has another pencil at home. (Q) Pencil is not so valuable.

²When the notation "(Q)" appears in the scoring rules, this indicates that the response preceding the (Q) was queried by the examiner.

APPENDIX F
PRETEST OF SOCIAL CONVENTIONAL RULES TO BE USED WITH
TYPE 2 DILEMMAS

APPENDIX G
PRETEST MEANS

Item	High				Mid				Low			
	Gr 1	Gr 2	Total	SD	Gr 1	Gr 2	Total	SD	Gr 1	Gr 2	Total	SD
1. first name- teacher	$\frac{n=25}{1.64}$	$\frac{n=27}{2.40}$	2.04	1.33	$\frac{n=17}{3.70}$	$\frac{n=21}{2.52}$	3.05	1.47	$\frac{n=21}{3.43}$	$\frac{n=17}{3.23}$	3.34	1.58
2. raising hand	$\frac{n=26}{2.65}$	$\frac{n=27}{2.52}$	2.58	1.34	$\frac{n=17}{2.29}$	$\frac{n=21}{2.19}$	2.26	1.07	$\frac{n=19}{1.16}$	$\frac{n=17}{1.94}$	1.56	0.80
3. walk in line	$\frac{n=26}{3.15}$	$\frac{n=27}{3.89}$	3.53	1.25	$\frac{n=17}{2.82}$	$\frac{n=21}{3.05}$	3.00	1.23	$\frac{n=18}{1.67}$	$\frac{n=17}{1.88}$	1.80	1.01
4. stand--Pledge of Allegiance	$\frac{n=26}{3.38}$	$\frac{n=27}{2.93}$	3.15	1.50	$\frac{n=17}{1.35}$	$\frac{n=21}{2.19}$	1.82	1.27	$\frac{n=19}{1.53}$	$\frac{n=17}{1.88}$	1.69	1.20
5. barefoot--shorts in school	$\frac{n=24}{2.20}$	$\frac{n=27}{3.81}$	3.06	1.70	$\frac{n=17}{2.35}$	$\frac{n=21}{1.95}$	2.13	1.54	$\frac{n=20}{3.75}$	$\frac{n=17}{3.18}$	3.49	1.64
6. sit in father's chair	$\frac{n=25}{1.60}$	$\frac{n=27}{1.63}$	1.62	1.06	$\frac{n=17}{4.00}$	$\frac{n=20}{4.30}$	4.16	1.15	$\frac{n=2}{4.05}$	$\frac{n=17}{4.06}$	4.05	1.41
7. eating with hands	$\frac{n=24}{2.58}$	$\frac{n=26}{2.65}$	2.62	1.41	$\frac{n=17}{2.41}$	$\frac{n=20}{2.75}$	2.59	1.32	$\frac{n=20}{1.75}$	$\frac{n=17}{1.59}$	1.67	1.12
8. father--first name	$\frac{n=25}{1.48}$	$\frac{n=26}{1.42}$	1.47	0.99	$\frac{n=17}{3.40}$	$\frac{n=20}{4.1}$	3.65	1.40	$\frac{n=20}{3.20}$	$\frac{n=17}{2.47}$	2.86	1.58
9. no clothes in street	$\frac{n=26}{1.46}$	$\frac{n=27}{1.26}$	1.36	1.07	$\frac{n=17}{1.53}$	$\frac{n=20}{1.60}$	1.57	1.17	$\frac{n=20}{2.85}$	$\frac{n=17}{1.76}$	2.35	1.77
10. eating only in kitchen	$\frac{n=26}{3.50}$	$\frac{n=27}{3.63}$	3.57	1.58	$\frac{n=17}{2.82}$	$\frac{n=20}{2.85}$	2.84	1.46	$\frac{n=20}{3.00}$	$\frac{n=17}{3.17}$	3.11	1.43

Item	High				Mid				Low			
	Gr 1	Gr 2	Total	<u>SD</u>	Gr 1	Gr 2	Total	<u>SD</u>	Gr 1	Gr 2	Total	<u>SD</u>
11. wearing shirt-tie at work	<u>n=26</u> 3.50	<u>n=27</u> 3.81	3.66	1.50	<u>n=17</u> 2.47	<u>n=20</u> 3.70	3.14	1.35	<u>n=20</u> 3.25	<u>n=17</u> 2.71	3.00	1.59
12. game of baseball	<u>n=26</u> 3.04	<u>n=27</u> 2.67	2.85	1.73	<u>n=16</u> 2.56	<u>n=20</u> 3.00	2.81	1.29	<u>n=20</u> 1.95	<u>n=17</u> 2.29	2.11	1.39
13. moving pawn backwards in chess	<u>n=26</u> 3.12	<u>n=27</u> 3.11	3.11	1.64	<u>n=16</u> 3.19	<u>n=20</u> 2.35	2.72	1.48	<u>n=19</u> 2.32	<u>n=16</u> 2.75	2.51	1.42
14. checkers--red/black pieces	<u>n=26</u> 3.46	<u>n=27</u> 3.22	3.34	1.72	<u>n=16</u> 3.13	<u>n=20</u> 2.90	3.00	1.43	<u>n=20</u> 3.00	<u>n=16</u> 2.94	2.97	1.64
15. boy playing with dolls	<u>n=26</u> 2.88	<u>n=27</u> 3.41	3.15	1.77	<u>n=16</u> 3.56	<u>n=20</u> 4.34	3.94	1.47	<u>n=20</u> 2.85	<u>n=16</u> 3.13	2.97	1.66
16. girls play baseball	3.61	3.74	3.68	1.63	3.18	4.10	3.65	1.44	3.60	2.94	3.30	1.72
17. woman bus driver	3.31	3.93	3.62	1.61	3.53	3.70	3.62	1.48	3.65	3.29	3.49	1.78
18. man nurse	3.27	2.96	3.11	1.81	2.65	3.75	3.24	1.75	2.20	2.59	2.38	1.73