The Relationship of Family Processes and Adolescent Moral Thought and Behavior

by

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Abstract

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The influence of family process variables (cohesion, flexibility, and communication) on ascribed sources of influence on adolescent thought was investigated using White's Family Socialization Model of Adolescent Moral Development. In addition, the relationship between sources of influence and school- related behaviors such as disciplinary referrals, unexcused absences, and participation in extra-curricular activities was examined. Participants included 82 public high school students from grades 9 through 12. Students completed Olson et al.'s (2006) Family Adaptability and Cohesion Evaluation Scale (FACES IV) to measure family process variables, and White's (1997) revised Moral Authority Scale (MAS-R) to measure ascribed sources of influence. Students recorded information regarding school- related behaviors on a demographic questionnaire. Information pertaining to absences and disciplinary referrals came from students records. Results indicate some significant relationships between family cohesion, flexibility, and communication, and the Family and Equality sources of the MAS-R. In addition the probability of participation in extra-curricular activities was related to Society's Welfare and

Self- Interest sources of moral authority. In conclusion, family process variables have predictive value for ascribed sources of influence on adolescent thought. In turn, ascribed sources of influence such as Society's Welfare and Self-Interest have predictive value for school- related behaviors such as participation in extracurricular activities.

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CHAPTER I

Introduction

The study of adolescent moral development continues to be a central concern to researchers examining issues pertaining to human development (Lerner, 2002). There are a number of reasons, both political as well as theoretical, for this interest in adolescent moral development. From a political perspective, results of a federally funded national poll indicate that the majority of adults surveyed described adolescents in less than positive terms (Duffet, Johnson, & Farkas, 1999). For example, almost three quarters of American adults used words suggesting moral shortcomings, such as "rude" and "irresponsible", when asked to describe today's teens. Additionally, when asked to identify the most serious problem confronting youth, American adults answered that it is the failure of adolescents to learn moral values. Finally, most adults did not believe that the next generation would make America a better place (Duffet et al.). Given the perception that American youth are morally deficient and that this shortcoming threatens their ability to make society a better place for the next generation, it is not surprising that policy makers and researchers have focused attention on adolescents' moral development.

While some recent research on adolescent moral development has been driven in part by a belief that today's youth lack morals, other research recognizes the genuine theoretical opportunities offered by focusing on adolescent moral development. In an introductory article to a special issue of the *Journal of Research on Adolescence* relating to moral development, Hart and Carlo (2005) identified themes in recent research that relate to theoretical conceptualizations of adolescent moral development. One important

theme that exists in the literature is that adolescence is the foundation of adulthood and that adolescent development provides some shape for adult moral character. In other words, by understanding and possibly controlling influences acting on the adolescent, those who work with adolescents can enhance their later adult moral development. For example, Lawford, Pratt, Hunsberger, and Pancer (2005) found that adult generativity has its roots in adolescent experience. The results of their work (Lawford et al.) suggest that young adults who are more committed to caring for others are more likely than those who are less committed to have had good relationships with their parents as well as to have participated in community service during adolescence. In addition, others (Smetana & Metzger, 2005) have found that civic engagement, which reflects adults' moral obligations to their communities, is vitally connected to adolescent experiences within the family and church. The research seems to indicate that adult moral functioning is clearly linked to the adolescent experience within the family and community.

Hart and Carlo (2005) further supported the specific focus on adolescence within the realm of moral development research since adolescence has qualities that make it developmentally distinct from childhood. For example, adolescents spend more time with peers than children do and as a result, are more influenced by peers than are children (Hart & Carlo). In addition, age-related changes such as the transition into larger schools, the world of work (for some), and the possibility for romantic relationships distinguish the context of adolescent lives from those of children. Furthermore, as research indicates, (Eisenberg, Cumberland, Guthrie, Murphy, & Shepard, 2005) a variety of skills and types of experiences related to moral life are more developed in adolescence than they are in childhood. For example, improvements in the ability to infer the perspectives of others,

understand the self, and solve social problems increase with age (Eisenberg et al.). As a result, the refinement of these skills allows adolescents to navigate the moral domain more effectively than is typically possible for children.

Together, the variety of experiences in the adolescents' lives as well as their emerging skills make adolescence an interesting period in which to investigate influences on moral development. In particular, it is because adolescents are both open to a rich variety of influences and change as a result of these influences that makes them suitable for in depth study of factors influencing moral development (White, 2000). In fact, according to White, understanding the perceived sources of influence pertaining to adolescent moral development is an area well worth investigating. Having such an understanding may provide insight into factors influencing adolescent behavior as well. As school psychologists working with adolescents, understanding the sources of influence on thoughts and behaviors is critical for intervening and facilitating behavior change.

What Constitutes Adolescent Moral Development?

Before discussing moral development, it is important to understand what the word "moral" means. The American Heritage Dictionary (1994) provides the following definitions:

1. Of or concerned with the judgment or instruction of goodness or badness of character and behavior
2. Conforming to established standards of good behavior
3. Arising from conscience
4. Having psychological rather than tangible effects (p. 541)

From these definitions it is apparent that there are two essential aspects to morality, or being moral. There is the behavioral aspect to morality (definitions 1 and 2 above) as well as the non-tangible, arising from conscience aspect to morality (definitions 3 and 4). Behaviors that are involuntary that occur without thought (e.g., a knee jerk) are not part of the moral realm even though they might inflict harm on others. Also, "pure" thought that has no consequent behavior (e.g., a day dream) is not considered morally relevant (Walker, 1988). It seems that thoughts and behavior, or at least thoughts relating to potential behavior, are inherent elements of morality.

The literature pertaining to adolescent moral development encompasses and reflects both elements of the definition of "moral", namely, moral thoughts (Gilligan, 1982; Kohlberg, 1994; Walker & Taylor, 1991) as well as moral behaviors (Lawford et al., 2005; Smetana & Metzger, 2005). Even though both elements are essential aspects to the definition, it is important to distinguish between moral thought and moral behavior when discussing moral development. Lerner (2002) suggested the following reason. First, it is important to understand that two people may be *behaving* in an identical manner; however, the *reason* for each individual's behavior may be different. For example, two students may resist the temptation to glance at a copy of an upcoming final exam that a teacher inadvertently left behind on a desk. One student may refrain from looking at the test out of a fear of getting caught, while the other student may be striving to uphold the principle of honesty. The behavioral outcome is the same; the reasoning behind the behavior is different. Second, it is important to note that at least one author (Blasi, 1980) described the relationship between moral reasoning and moral behavior as

weak. Even if an individual is capable of advanced moral reasoning, it does not guarantee that moral behavior will follow.

Moral Development in the Literature

The dichotomy found in the definition of "moral" translated into differences among researchers as to the appropriate method of investigation. Historically, the study of moral development was based on Kohlberg's (1969/1994) theory of the development of moral reasoning that focused almost exclusively on the reasons individuals provided for a decided course of action, rather than the actual behaviors in which individuals engaged. Researchers categorized individuals as being at a particular stage along the moral development continuum based on reasons individuals provided in response to a hypothetical moral dilemma (Colby & Kohlberg, 1987; Lerner, 2002).

Gilligan (1982) defined morality as an ethic of care, and expanded the view of moral judgment to include a commitment to relationships. She suggested that the moral dilemma is contextual. In making judgments, the decision maker brings past and personal experience to the situation and chooses a course of action that does the least harm as a means to preserving an existing relationship. Additionally, according to Gilligan, this description of morality refers to the moral developmental pathway associated with females.

Eisenberg and her colleagues (2005) examined moral development in terms of both behaviors as well the reasons for the behaviors. She studied age- related changes in pro-social behaviors (voluntary behaviors intended to benefit another) as well as the motivation for such behaviors (such as empathy and sympathy).

In an effort to broaden the realm of moral development research, studies have examined moral behaviors such as charity, caring for others (Smetana & Metzger, 2005), and caring for the next generation (Lawford et al., 2005). In these studies, participants completed rating scales indicating the frequency of specific behaviors that the authors believed to reflect a high degree of morality such as charity, volunteering, and community service. These studies focused on the actual behavior, the reasons for engaging in such behaviors were not in question.

The concern for practical morality (moral behaviors) is more relevant to policy makers and to the general public as well, more so than moral development research that focuses on moral judgment sophistication (Blatt & Kohlberg, 1975; Walker & Taylor, 1991). However, the cost of this increased relevance is that it is difficult to abstract clear boundaries for the moral domain. Even though measuring moral judgment sophistication may seem abstract in terms of understanding daily life, it offers clear criteria for demarcating its subject matter (Hart & Carlo, 2005).

In an effort to define the scope of the present research, all discussions pertaining to Kohlberg's (1969/1994) formulation of moral development will focus on the realm of moral thought as opposed to moral behaviors. Kohlberg examined moral thinking and reasoning in the context of moral judgments. According to Power (1991), Kohlberg maintained that moral reasoning and moral judgment had their own integrity as psychological processes. Kohlberg did not deny the importance of exploring the moral judgment/ moral action relationship but wanted to postpone its investigation until he could satisfactorily describe moral judgment. Second, moral thinking, moral reasoning, and moral judgments all refer to the aspect of moral development that is cognitive. Even

critics of the cognitive bias of Kohlberg's theory describe that "morality is constituted, considered, and decided in the minds of people…Morality is based on reason" (Hans, Aerts, & Cooper, 1985, p. 54; as cited in Walker, 1988). However, regardless of what it is called and how it is examined, it seems logical to me to assert (especially regarding moral development) that the thoughts are as important as the behaviors.

Ultimately though, I believe that one possible goal of moral development research is to somehow alter or influence the behavior of others. Understanding an individual's thoughts might be a useful starting point as indeed, cognitive behavioral therapy, which provides highly efficacious treatments for many adolescent disorders, focuses on modification of adolescents' thoughts and reasoning (Reinecke, Dattilio, & Freeman, 2006). However, the results of significant research findings may not yield something practical for school psychologists. Therefore, this study focused on moral thinking and reasoning as well as moral behaviors in an effort to contribute meaningful work to the growing body of literature pertaining to adolescent moral development.

What Influences Moral Reasoning?

According to Kohlberg (1984), the natural process of physical growth and cognitive development within the individual allows for advancement and development in moral reasoning capabilities. The general consensus within the developmental psychology literature indicates that cognitive development entails a shift in the capacity to reason. Young adolescents begin to be able to think and reason abstractly and to think through problems in a systematic way. Adolescents are able to reason about hypothetical situations and find fault or inconsistencies in others' thinking (Berger, 2008). However, cognitive development alone will not lead to moral development. Kohlberg described that

role taking opportunities that occur within one's general social experience are important factors in moral development as they entail understanding the attitude of others, becoming aware of their thoughts and feelings, and putting oneself in their place. To illustrate the impact of role taking opportunities within the environment on moral development, Kohlberg contrasted the moral development of children in an American orphanage with children living on an Israeli *kibbutz* (Snarey, Reimer, & Kohlberg, 1984) and reported the following. The children at the American orphanage had the lowest levels of moral development, even through adolescence, while children at the Israeli k*ibbutz* had the highest levels. The environment at the orphanage involved little communication and role-taking between staff adults and children and, in addition, the staff did little to stimulate or supervise peer interaction. In contrast, children at the *kibbutz* engaged in intense peer interaction supervised by a group leader who was concerned about imparting the ideals of the *kibbutz* onto its young members. Discussing, reasoning, communicating feelings, and making group decisions were central everyday activities. Research such as this lends support for the centrality of role- taking opportunities in moral judgment development.

What environments are best suited for role playing opportunities in support of moral judgment development? Kohlberg (1984) specifically de-emphasized the importance of the family in the development of moral reasoning and focused on the peer group and the schools. He indicated that the family is one of a number of social institutions that promote moral development through the creation of role playing opportunities and exposure to cognitive conflict. Kohlberg held that family participation, as well as family warmth, was "not unique or critically necessary for moral development"

(Kohlberg, 1984, p. 75). As a result, research exploring the contribution of family factors to the development of moral judgment, using Kohlberg's formulation of moral development, has been limited (Speicher, 1992).

The few studies that have investigated the family, including parents, as a source of influence on adolescent moral reasoning provide interesting insight. Findings indicate that parental influence on moral judgment development is greater than Kohlberg assumed, and that positive relationships between parents and children promote moral development (Speicher, 1992). In addition, others (Walker & Taylor, 1991) found that parents who use higher levels of moral reasoning than their offspring enhanced the moral development of their children. Furthermore, children modeled their responses to moral questioning after those of other adults after exposure via narrative, to a moral response style of an adult (Walker & Richards, 1976). Each of these studies examined the influence of parent or parent- like figures on the moral reasoning of children using Kohlberg's model (and measurement) of moral reasoning development and found significant relationships.

The literature mentions others sources of influences as well. Religiousness in youth is associated with specific moral behaviors and attitudes. Donahue and Benson (1995) identified a positive relationship between adolescent religiosity and the presence of prosocial values and behaviors. The adolescents in their study were more likely to value helping others and volunteering than were their less religious peers. Additionally, King and Furrow (2004) found that adolescent religious practices, in the context of supportive and trusting relationships with adults, friends, and parents, influence moral outcomes, such as altruism, empathy, and perspective taking. In addition to the already

named influences, Hart and Carlo (2005) indicate that media (internet, magazines, film) access provides additional opportunities for adolescents to be exposed to moral beliefs and actions of others.

Given that Kohlberg's (1969) theory of the development of moral reasoning minimizes parental and familial relationships as important influences on moral development, and that his theory does not take into account the potential influence that other aspects of adolescent life can have on moral reasoning, other researchers (Henry, 1983; White, 1996a) have proposed an alternative context for understanding and studying adolescent moral reasoning.

Moral Reasoning: A Contextual Approach

Henry (1983) proposed that one's moral thought can be characterized by the extent to which various sources of moral authority are ascribed influence. In contrast to Kohlberg's classification of people in terms of the cognitive sophistication of their reasoning, Henry identified five sources of moral authority (Family, Educators, Self-Interest, Society's Welfare, and Equality) that are foundations of influence on adolescent moral reasoning. Each source is different from, not more or less morally adequate or mature than, each other source. In addition, several sources can be ascribed to concurrently, depending on one's family socialization experience. This perspective is in contrast to Kohlberg's (1969) formulation that classifies reasoning according to an invariant sequence of stages, as well as Kohlberg's (1969; Colby & Kohlberg, 1987) position that one cannot be in more than one stage at a time.

White (1996, 2000) theorized that the sources of moral authority to which adolescents ascribe are associated with family processes. White proposed that moral

development is not simply age dependent, but family system dependent. The content of adolescent moral thought, among those of similar levels of cognitive development (using the description of cognitive development presented on p. 8) would differ due to differences in family socialization experiences. In addition, the sources of moral authority to which adolescents ascribe are associated with family processes in which parents provide (or fail to provide) opportunities to experience moral viewpoints both inside and outside the family. White, Howie, and Perz (2000) found that family process variables such as family cohesion and adaptability, were significantly better predictors of adolescent moral thought than socio-cultural variables such as religious affiliation and political affiliation. White's study was done in Australia and the results may not be applicable to adolescents from the United States. The goal of the present study was to investigate the consistency of the finding that family process variables such as cohesion and adaptability are significant predictors of adolescent moral thought using a sample of adolescents from the United States. The study examined family communication, a third family process variable as well. In addition, this study investigated the role of gender, SES, race/ethnicity, and level of religious attendance and their connection to the relationship between family factors and adolescent moral thought. Finally, this study related moral thought to student behaviors such as attendance, disciplinary referrals, and participation in school leadership or community service activities.

The results of the study may provide valuable insight and information to school psychologists and other professionals working with adolescents. As stated previously, the context of adolescents' lives are distinct from those of children. Adolescents are exposed to a wider variety of influence through peer interaction, media, school, and employment

opportunities (Hart & Carlo, 2005). In addition, adolescents may display behavior change or change in thinking as a result of these influences. Using White's (1997) formulation and measurement of adolescent moral reasoning provides a measure of the relative importance of different sources of influence on moral issues, which may impact student behavior. If school psychologists have an understanding of sources of influences on adolescent moral reasoning they can use this information while counseling individual students who are struggling with particular decisions. Furthermore, with insight into family process variables that may support or detract from these sources of influence, school psychologists can use this information in their work with families and parents. School psychologists can develop workshops and parenting groups that focus on parenting behaviors and family process variables that enhance and support optimal adolescent moral thought development. Additionally, if particular sources of influence relate to particular adolescent behaviors, this is vital information to all those working with adolescents.

CHAPTER II

Literature Review

The purpose of the following chapter is two-fold. The initial goal is to present some of the pertinent literature regarding adolescent moral development. In particular, the discussion will include Kohlberg's theoretical conceptualizations as well as relevant research. Additionally, the chapter will present an alternative approach to understanding adolescent moral development based on White's (2000) Family Socialization Model. The second goal of the literature review chapter is to synthesize the current understanding of adolescent moral development research and propose a research study that will further develop White's theoretical conceptualization.

Morality has been a difficult concept for psychology. The study of its development has been marked by disagreements regarding its definition and appropriate method of investigation. For example, one description of morality states that it refers to voluntary actions that are governed by some internal mechanism and thus entails behavior, attitude, intentions, and emotions, although it is not exclusively behavioral or contemplative (Walker, 1988). Based on this all encompassing definition of morality, it seems that morality research should include all of the above mentioned components such as behavior, attitudes, intention, and emotions. However, as described previously, research exists that focuses on thoughts exclusively (Gilligan, 1982; Kohlberg, 1994; Walker & Taylor, 1991), behaviors exclusively (Lawford et al., 2005; Smetana & Metzger, 2005), and both thoughts and behaviors (Eisenberg et al, 2005). On the other hand, some believe that morality is a part of the philosophical or religious domain. During the early Middle Ages, psychological questions were often the province of

religion, and understanding human behavior and human reasoning complemented religious faith in the search for the truth (Hothersall, 1995). Based on this approach, morality would not fall within the realm of social science and it seems unclear as to how one might go about investigating the concept. Despite the vastness of the concept, morality is a fundamental and pervasive aspect of human functioning as it refers to one's basic goals and way of life, and many people believe that its development in children (and adults) should be stimulated (Walker, 1988).

Piaget's Theory of Moral Development: The Basis for Kohlberg's Theory

Jean Piaget's (1932/1965) early work on children's moral judgments was the original inspiration for the cognitive-developmental approach to understanding and studying moral development. To study children's ideas about morality, Piaget relied on open-ended clinical interviews, questioning Swiss children between ages 5 and 13 about their understanding of rules in the game of marbles. In addition, he gave children stories in which characters' intentions to engage in right or wrong action and the consequences of their behavior varied. In the best known of these stories, he asked children which of two boys - well intentioned John, who breaks 15 cups on his way to dinner, or ill - intentioned Henry who breaks one cup while stealing some jam - is naughtier and why.

> Story A: A little boy who is called John is in his room. He is called to dinner. He goes into the dining room. But behind the door there was a chair, and on the chair was a tray with fifteen cups on it. John could not have known that all of this was behind the door. He goes in, the door knocks against the tray, bang go the fifteen cups and they all get broken!

> Story B: Once there was a little boy whose name was Henry. One day when his mother was out he tried to get some jam out of the cupboard. He climbed up onto a chair and stretched out his arm. But the jam was too high up and he could not reach it and have any. But while he was trying to get it he knocked over a cup. The cup fell down and broke. (Piaget, 1932/1965, p.122)

From the children's responses, Piaget identified two broad stages of moral understanding: heteronomous and autonomous morality. At around the age of 5, (and until age 10), children enter the age of heteronomous morality; they start to show great concern with and respect for rules. Children of this stage view rules as handed down by authority, as having permanent existence, as unchangeable. For example, at this stage, children state that the rules of the game of marbles cannot be changed. In addition, when judging an action, younger children focus on objective consequences rather than intent to do harm. For example, in the stories of John and Henry, John is regarded as naughtier because he broke more cups, despite his innocent intentions.

Children, from about the age of 10 and older make the transition to autonomous morality. In this second stage of moral development, children view rules as flexible, socially agreed upon principles that can be revised to suit the will of the majority. For example, in a game of marbles, the children playing the game may decide to change a rule temporarily. Children no longer regard obedience to adults as the basis for moral action. They realize that at times there may be a reason to change or even break a rule. Piaget (1932/1965) attributed arguments, discussions and interactions between peers as an important factor in facilitating the transition to autonomous morality. He argued that through these interactions, children become aware that people can have different

perspectives about moral actions and intentions. This notion of peer interactions facilitating moral growth became a cornerstone of Kohlberg's theory of moral development.

Kohlberg's Theory of Moral Development

In 1958, Lawrence Kohlberg completed his doctoral dissertation relating to children's moral development. Working with a sample of 84 boys aged 10 to 16, Kohlberg demonstrated that the reasoning used to justify their moral positions in response to moral dilemmas fit six distinct patterns of moral judgment (Reimer, 1989). To further test the validity of these stages, Kohlberg initiated a longitudinal study with 58 out of 84 of his original subjects, interviewing them every 4 years to test their level of moral judgment. By the late 1970's, Kohlberg and his colleagues (Colby & Kohlberg, 1987; Colby, Kohlberg, Gibbs, & Lieberman, 1983) had completed a 20-year study that culminated with clearly delineated stages of moral development as well as an extensive manual for scoring moral judgment interviews. He was later criticized for only including males in his investigation (Gilligan 1982). Kohlberg did not include girls in his original sample for practical rather than theoretical purposes, that is adding gender as a variable would have required doubling the sample size. Given the laboriousness of the interviewing and scoring procedure, such a large sample would not have been feasible. In retrospect, Gibbs and Lieberman (1987) described that the omission of girls was regrettable.

To study moral reasoning, Kohlberg presented children with a moral dilemma (i.e., a situation that pits one moral value against another) and asked them to decide both what the main character should do and why. The recommended procedure utilized the

Moral Judgment Interview (MJI; Colby & Kohlberg, 1987), an oral interview involving the presentation of a series of hypothetical dilemmas, and its corresponding scoring system (Colby et al., 1987). One famous dilemma, the "Heinz dilemma," asks children to choose between the value of obeying the law (not stealing) and the value of human life (saving a dying person):

> In Europe, a woman was near death from cancer. There was one drug the doctors thought might save her. A druggist in the same town had discovered it, but he was charging ten times what the drug cost him to make. The sick woman's husband, Heinz, went to everyone he knew to borrow the money, but he could only get together half of what it cost. The druggist refused to sell it for less money or let Heinz pay later. So Heinz got desperate and broke into the man's store to steal the drug for his wife. Should Heinz have done that? Why or why not? (paraphrased from Colby et al., 1987, p. 3)

Following the dilemma, the interviewer presented a set of standard questions and probes to elicit the participant's best reasoning for passing judgment on those in the dilemma.

Based on the structure of the reasons provided (the way individuals reasoned about the dilemma), and not the content of the response (whether to steal or not to steal), Kohlberg (1969; Colby et al., 1987) inferred moral maturity and classified individuals into different reasoning categories. There are six different categories corresponding to six stages of moral development. At the pre-conventional level, morality is externally controlled. At this level, children accept the rules of authority figures, and judge actions by their consequence. Within this level there are two stages. In the first stage, Punishment and Obedience Orientation, children find it difficult to consider two points of view and

they ignore the intentions of a given action. Instead, they focus on fear of authority and avoidance of punishment as reasons for behaving morally. For example, a child at this stage may reason that Heinz should not steal the drug since there is a chance he will get caught and go to jail. In the second stage, Instrumental Purpose Orientation, children can understand that people have different perspectives. However, they view right action as what satisfies their personal needs, and they believe that others act out of self interest. A child at this stage may reason that Heinz should steal the drug to save his wife, but he must be aware that he is taking a risk about getting caught and going to jail.

The next level of moral reasoning is the conventional level in which individuals regard conformity to social rules as important, but not for reasons of self- interest (Kohlberg, 1969; Colby & Kohlberg, 1987). Again there are two stages within this level. At the third stage, the Good-Boy-Good-Girl Orientation, individuals strive to obey rules because they promote social harmony. Individuals want to maintain the approval of friends by being a "good person" (i.e., trustworthy, loyal, respectful, helpful, and nice). For example, one might reason at this stage in favor of stealing the drug because people in the family will think of Heinz as an inhuman husband if he does not steal the drug.

Within the fourth stage, moral choices no longer depend on close ties to others, (Colby & Kohlberg, 1987; Kohlberg, 1969). Instead, rules must be enforced in an evenhanded manner, and each member of society has a duty to uphold them. At stage four, Social Order-Maintaining Orientation, individuals believe that laws cannot be disobeyed under any circumstances because they are vital for ensuring societal order. An individual may reason that Heinz should not steal the drug because it is always wrong to steal and it his duty as a citizen to obey the law.

The final two stages fall within the post-conventional level in which individuals move beyond unquestioning support for the rules and laws of society Colby & Kohlberg, 1987; Kohlberg, 1969). Rather, individuals define morality in terms of abstract principles and values that apply to all situations and societies. At the fifth stage, Social Contract Orientation, individuals regard laws and rules as flexible for furthering human purposes. At this stage, an individual may argue in favor of stealing the drug since the law was not meant to violate a person's right to life. At the final stage, Universal Ethical Principle Orientation, self-chosen ethical principles of conscience that are valid for all humanity regardless of law and social agreement, define right action. An individual may be in favor of Heinz stealing the drug because if Heinz does not do everything he can to save his wife, then he is putting some value higher than the value of life (Kohlberg, 1994).

Kohlberg's research led him, as well as others, to believe that there exists a sequence for the reasons that people provide as part of their responses to moral dilemmas and that the moral reasoning that people use passes through a series of qualitatively different stages. Kohlberg considered each stage to be more advanced than the previous stage and believed that an individual cannot be in more than one stage at a time. According to Kohlberg (1976) and Colby et al.(1983), there is a universal, invariant sequence to moral development, and one's developmental level is indicated by moral reasoning sophistication. Moral development proceeds from one stage to the next as perspective- taking ability develops and individuals are able to identify deficiencies in their current moral thinking (Walker, 1988). More specifically, social experiences that provide the child with the opportunity to understand the perspective of others and reason about the situations, creates cognitive conflict. This cognitive conflict and its resolution

(when the individual incorporates others' views into their own) are responsible for advancing moral reasoning from one stage to the next stage (Kohlberg, 1976, 1994; Kruger & Tomasello, 1986; Walker, 1988; Walker & Taylor, 1991).

Data collected by Kohlberg and his colleagues provide support for the view that from late childhood to the early part of the middle adult years, people progress through the stages of moral reasoning in the manner that Kohlberg specified (Colby & Kohlberg, 1987; Colby et al., 1983; Nisan & Kohlberg, 1982).

Environmental Influences on Moral Reasoning

Kohlberg (1969) presented an elaborate cognitive-developmental theory of moral development in an attempt to explain how individuals progress from one stage to the next. Research conducted by Kohlberg and his colleagues (Colby et al., 1983) led them to conclude that there exists a universal and invariant sequence to moral development that social experiences promote. The following discussion will address experiences or contexts believed to stimulate higher stages of reasoning according to Kohlberg's theory of moral development, including schooling, peer interactions, and parent-child interactions.

The school environment. Years of school completed is one of the most powerful predictors of moral development. Rest and colleagues (Deemer & Rest, 1986; Rest & Narvaez, 1991) reported the results of a study in which they followed 102 adolescents who graduated from high school over a 10-year period. Some did not go to college, others went for a short time, and still others graduated from college. Participants completed the Defining Issues Test (DIT; Rest, 1979), a pencil and paper measure of moral judgment, upon high school graduation, and at 2, 4, and 10 years post high school.

College graduates continued to gain in moral maturity, even post college. The moral maturity of those with some college leveled off after they left college, and the moral maturity of those with no college education declined. The results indicate that moral reasoning seems to advance regularly as long as a person remains in school.

Similarly, Speicher (1994) found that level of education limited the moral stage attained by adult offspring, more so than parental level of moral development. In this study, Speicher reanalyzed cross-sectional parent-offspring moral judgment data previously reported by Haan, Langer, and Kohlberg (1976) and by a longitudinal sample from Colby and Kohlberg's (1987) study of moral judgment development, in order to examine family patterns of moral judgment during adolescence and early adulthood. The ages of the 221 participants ranged from 10 to 33 years. Speicher obtained participant and parental level of moral judgment based on responses to the semi-structured Kohlberg Moral Judgment Interview (Colby & Kohlberg). Speicher analyzed parent–offspring moral judgment correlations separately for each gender (male/female) and age group (adolescence: 10 - 18/early adulthood: 19-33). Results indicated that parent moral judgment level did not limit the stage attained by adult offspring, as approximately 35% of the participants exceeded the moral stage of their parents. Graduation from college was a critical factor in determining which participants achieved more advanced moral reasoning than their parents. All of the participants who exceeded the moral stage of both of their parents had graduated from college. The results of this study highlight the importance of education in promoting advanced level moral development. In addition to this study, other studies provided support for the influence of education on moral development, and reported moderately strong relationships between moral development

and level of education (Boldizar, Wilson, & Deemer, 1989; Buck, Walsh, & Rothman, 1981; Walker, 1986).

Why does schooling make such a difference in moral maturity? In a summary statement relating to Kohlberg's research on the impact of the school setting on moral development, Powers (1988) described that school environments stimulate moral development when they encourage participation in the social governance and decision making structures of the school. Although not directly related to the school environment, but comparable in the type of experiences they provided, other studies found positive relationships between moral development and participation in political and social activities (Fontana & Noel, 1973; Keasy, 1971). Participating in school policy formation provides students with the opportunities to consider the role of all individuals as they are impacted by school policies and decisions. In addition, educators, and possibly peers, present different levels of moral reasoning through class lessons and discussion, and this in turn creates cognitive conflict (Berkowitz, Gibbs, & Broughton, 1980; Powers, 1988) that, according to Kohlberg (1969/1994), is the key factor in stimulating moral development.

Consistent with this idea, college students who reported more academic perspective taking opportunities (for example, classes that emphasized open discussion of opinions) and who indicated that they had become more aware of social diversity tended to be more advanced in moral reasoning (Mason & Gibbs, 1993). In this particular study, Mason and Gibbs assessed 153 undergraduates (freshman and seniors) on a measure of moral judgment, the Sociomoral Reflection Measure-Short Form (SRM-SF; Gibbs et al., 1992) as well as on measures of opportunities for role-taking during childhood and post

childhood. Questionnaires asked participants to rate frequency of childhood opportunities for role taking within the family, among peers, and within the school setting. The authors separated post childhood opportunities for role taking into four categories. They examined Academic Perspective Taking (exposure through academic classes to broad perspectives concerning intellectual and social issues), Peer Perspective Taking (diversity and openness of college peer relationships), Scope of Social Diversity (awareness of scope of social diversity in the world), and Employment Perspective Taking (interaction with peers/coworkers and superiors in the work setting).

Results indicated that post childhood, but not childhood, role-taking opportunities were related to advances in moral judgment (Mason & Gibbs, 1993). Academic perspective taking accounted for more of the moral judgment variance than any other factor, although employment related, campus peer, and socially diverse perspective taking were also significant contributors. These results supported Kohlberg's (1984) claim that role taking opportunities in the context of higher education were relevant to the attainment of advanced moral judgment.

Similarly, the school environment can influence moral judgment, even at the high school level. In a 4-year study of an experimental moral education program, researchers (Power, Higgins, & Kohlberg, 1989) implemented the *just community* (a term coined by Kohlberg), in three different high schools (located in Cambridge, MA; Brookline, MA; Scarsdale, NY). The *just community* is a small society within a school in which teachers and students practice a democratic way of life. Each of the three high schools that participated in the study housed within it an alternative high school. Kohlberg and colleagues created these alternative schools in the 1970's because of teacher and parental

dissatisfaction with the rigid and competitive nature within the traditional high school. The alternative high schools emphasized students' responsibility in directing and evaluating their own learning, offered alternatives to classroom instruction, and relaxed formalities like scheduling and disciplinary practices. Teachers from these alternative high schools had attended workshops and had become familiar with Kohlberg's work regarding moral education and requested his role as a consultant to these alternative schools. Thus, the schools were transformed from an alternative high school program to a *just community,* under Kohlberg's direction. Student enrollment in the alternative high school was voluntary. Participation in the *just community* was an integral aspect of the alternative high school. All three schools were small in size (60 to 100 students) and had direct participatory democracy, consultation from university professors and graduate students, and a concern shared by the staff for promoting moral development among the students.

A central feature of the *just community* was the weekly community meeting, in which the entire group gathered to create and refine school policy (Power et al., 1989). Once the school group created the rules, teachers helped students build a commitment to them through discussion of community and responsibility (Higgins, 1991). For example, in one school, all of the students democratically (through a discussion of pros and cons followed by a student vote) agreed not to use drugs or alcohol on a school retreat (Codding, 1989). Following the decision, a discussion continued concerning the issue of who was going to enforce the rule. Many students could not conceive of turning in a friend who broke the rule, yet other students were concerned with maintaining the integrity of the community. Teachers put the issue to a vote and asked each student if he

or she personally would abide by the agreed upon rule. Only one student indicated that he would not abide by the drug rule on the retreat, and the community decided that he could not go on the retreat unless he agreed to abide by the rule. Thus the meeting established a collectively shared norm against drug use on a school retreat.

The *just community* also fostered morality through the teaching of subject matter (Power et al., 1989). Students identified moral dilemmas in literature, considered questions of human rights and good citizenship in social studies, and addressed moral problems such as environmental pollution in science. The researchers assessed moral judgment development using the MJI (Colby & Kohlberg, 1987) among students in the alternative high schools that adopted the *just community* approach, and in the traditional high schools associated with them. Preliminary research indicated that when implemented correctly, advances in moral maturity from one year to the next were much greater in *just community* settings than in traditional or other alternative high schools (Power et al.,1989). Additionally, high school students participating in the *just community* reported greater ability to listen to others as well as take the perspective of others into consideration (Higgins, 1991).

Consistent with these findings, research (Kuther & Higgins-D'Alessandro, 2000) continues to demonstrate impact of the *just community* on moral development. The study examined a number of factors, but relevant to the present discussion, researchers compared moral development among a group of 68 students from grades 10 - 12, who, by choice, enrolled in the Just Community education setting (Scarsdale, NY) and a group of 122 students, grades 10 - 12, attending the "regular" high school affiliated with this program. Students enrolled in the *Just Community* moral education program

demonstrated higher levels of moral reasoning than the comparison group as measured by the Defining Issues Test (DIT; Rest, 1986). These findings from the high school level are consistent with those described previously at the college level (Mason & Gibbs, 1993), namely that school-based perspective taking opportunities enhanced moral development.

Peer interaction. Peer interactions also provide a framework for understanding and improving moral judgments among adolescents (Kohlberg, 1984). Research indicates that maturity of moral reasoning is correlated positively with popularity among peers, participation in social organizations, and service in leadership roles (Harris, Mussen, & Rutherford, 1976). What specific attributes of the peer group are important for moral development? Studies conducted in Africa underlie the importance of exposure to a diverse peer value system for stimulating moral thought (Edwards, 1978; Maqsud, 1977). Kenyan and Nigerian students enrolled in ethnically and racially mixed high schools and colleges were advanced in moral development compared to those enrolled in homogeneous settings.

Blatt and Kohlberg (1975) described that a major feature of peer interactions is discussion and role playing of moral problems. In their study, 132 students from sixth and tenth grade participated in a semester long discussion of moral dilemmas. The authors assigned students to either a teacher led discussion group, a student led discussion group, or a control group. During the first session, the experimenters administered a pretest of moral judgment and interviewed each child individually using four of Kohlberg's moral dilemmas. Following the intervention, the experimenters conducted a post-test of moral judgment, consisting of the four original dilemmas plus an additional two new situations. One year following the post-test, they interviewed the children again, using the four

pretest situations. Many participants, both sixth and tenth graders (from both of the treatment groups), moved partially or totally to the next moral stage, as indicated by the post- test measure of moral judgment. Although students in the teacher led discussion group scored significantly higher than students in the other groups at post- test, the students in the student lead discussion group scored higher than the students in the control group (i.e., students who did not receive the intervention). The differences were still evident one year later. These findings supported the developmental viewpoint that sees the natural process of peer discussion of moral conflicts as stimulating moral change (Blatt & Kohlberg, 1975).

Recent research continues to highlight the significance of peer interaction in moral development. Kruger (1992) found that young girls (ages 7 - 10) discussing moral dilemmas with a peer (peer dyad) evidenced higher moral reasoning on a post- test than did girls engaged in discussions of moral dilemmas with their mothers (mother/child dyad). Additionally Walker, Henning, and Krettenauer (2000) found that peer interactions predicted children's moral development over a four-year longitudinal interval. The goal of their study was to compare parent and peer contexts for children's moral reasoning development. One hundred twenty children (60 target children and their 60 friends) from Grade 5 and Grade 10 and 60 parents (one parent for each target child) participated in parent/child and friend/child dyadic discussions of moral dilemmas.

Researchers (Walker et al., 2000) interviewed each participant individually using Kohlberg's Moral Judgment Interview (MJI; Colby & Kohlberg, 1987) to determine participants' stage of moral reasoning development. Following the individual interview, participants participated in the dyadic discussion session involving one of Kohlberg's

hypothetical moral dilemmas and two actual moral conflicts from the lives of the members of the dyad (one from each member). The authors audio and video recorded these sessions for later transcription and coding of participants' moral reasoning and verbal discussion behavior. The researchers scored participants' stage of moral development based on the MJI standard scoring procedure and scored participants' verbal interactions using Powers (1988) Developmental Environmental Coding System (DECS). This coding system calculated the percentage of each of the following categories of verbal interactions used during the discussion: (a) *operational*- critique, concession, clarification; (b) *representational*- paraphrase, comprehension check; (c) *informative* – sharing opinion, agreement, disagreement; (d)*supportive* encouragement, humor; (e) *interfering*- distracting, refusal, hostility; (f) *miscellaneous*-unclear, incomplete statements. Walker et al.(2000) obtained longitudinal data on moral reasoning development for the sub-sample of 60 target children whom they interviewed with the MJI four times over the subsequent 4-year interval.

The researchers used quality of parents' and friends' verbal interactions as well as level of moral reasoning in the discussions to predict the rate of children's moral reasoning development four years later (Walker et al., 2000). In peer contexts, discussions that involved high powered cognitive challenges to another's reasoning were associated with minimal moral development while discussions that gently elicited the other's opinion, and involved checking for understanding were predictive of high rates of development. In both parent and peer contexts, highly informative interactions were associated with slow rates of moral growth. Although information sharing may be considered neutral, children and adolescents may perceive excessive information sharing

as lecturing. The DECS yielded less consistent findings in two other categories. For example, within the peer context, friends' supportive interactions in conjunction with paraphrasing and comprehension checks with friends were associated with considerable moral growth, while supportive interactions in conjunction with informative interactions were not associated with such growth. (This difference may be attributed to the hypothesis raised earlier that children and adolescents perceive information sharing as lecturing). The other inconsistency involved the interfering category in that such interactions were associated with minimal growth in the parent context (as also reported by Walker & Taylor, 1991) whereas in the peer context interfering interactions were associated with more rapid rates of moral development.

In addition to parent and peer contexts, the moral dilemma context predicted moral development (Walker et al., 2000). When the discussion involved the target child's moral dilemma, the partner's interactions predicted the child's rate of moral growth, whereas when the discussion involved the partner's conflict, interactions were unrelated to moral development. This finding implies the importance of dealing with moral issues that are of direct consequence to the child in an attempt to promote moral development. The peer/child discussion of a hypothetical moral dilemma was also predictive of children's moral development, consistent with others (Kohlberg & Blatt, 1975) who found that among peers, discussions of hypothetical issues are conducive to moral thinking and development.

Taken together, results from the school and peer environments indicate that understanding the perspective of others, and being exposed to diverse viewpoints are integral elements of moral development. In addition, the work of Walker et al. (2000)

supports the notion that the quality of verbal interactions during these exchanges of ideas and perspectives are significant factors in contributing to moral development. This notion is relevant to the peer as well as the family contexts.

Family environment. According to Kohlberg (1969/1984), however, the family environment was not the critical determinant of moral development. He held that the family is one of many contexts that encourage participation in decision making as well as introduce situations that stimulate internal cognitive conflict. On the other hand, other researchers (Powers, 1988; Speicher, 1992, 1994; Walker et al., 2000; Walker & Taylor, 1991) believed that the family was an important context for understanding moral development in children.

Powers (1988), in particular, believed that the family is not simply a small part of the general social environment that provides role taking opportunities; rather the family makes a *unique* contribution to moral development. Certainly the same internal cognitive processes (i.e., cognitive conflict) must take place for changes to occur in moral judgment, regardless of whether these processes are stimulated by a school or home environment. However, the actual environmental factors that facilitate the process may differ in families and in schools. Powers described that the family context of social interaction is different from the school context, and therefore, researchers should consider additional factors when evaluating how the family environment stimulates moral growth. For example, in a family, social relationships are permanent and carry a much more complicated history than school relationships. The same interactions assumed to stimulate moral development in a classroom may have a different meaning within the family, and therefore, may not facilitate development. Research demonstrates that the

same behavior (interfering interactions during discussion of moral dilemmas) in the parent and peer contexts had different effects on the child/adolescent moral development (Walker, Henning, & Krettenauer, 2000). In the parent context, moral development stagnated, while in the peer context moral development progressed.

Powers (1998) theorized that in order for children to attend to the cognitively stimulating behaviors of parents, those behaviors must occur in the context of behaviors that signify positive affect or support. Cognitive challenges given in non-supportive contexts may be interpreted as criticism and arouse defensiveness, thereby discouraging exploration necessary for new understanding and growth. It seems then, according to Powers, that parental behavior within the family is critical for creating a home environment that promotes moral development.

Powers (1988) initially investigated *parental behaviors* in the family and related them to *parental moral judgment* since she [as well as Speicher (1994)] speculated that parental levels of moral judgment may influence their interactions with family members. Powers described the results of her unpublished doctoral dissertation involving 59 high school students and their families (Powers, 1982, 1988), and reported that mothers with high levels of moral judgment were more supportive of other family members within a moral discussion and were more able to tolerate situations that required sharing a difference of opinion. For fathers, high levels of moral judgment were associated with more focusing behavior within a family discussion. This initial research study provided preliminary support for the notion that parental moral development level influenced parental behavior in the family. No other studies addressed parental moral judgment as it

relates to parental behavior within the family. Most studies examined parental behavior as it related to adolescent moral development.

For example, one study indicated that a positive parent-child relationship supported moral judgment development in children (Parikh, 1980). In this particular study, 40 mother-father-child triads (children's ages ranged from 12 to 16) participated in two moral judgment discussions. In the first discussion, researchers interviewed participants individually to determine moral judgment level using four of Kohlberg's dilemmas. The subsequent moral discussion involved the family as a group, and researchers conducted the discussion in order to determine the amount of encouragement parents provided for the child to participate in the discussion. Researchers assigned parents a score of low or high encouragement and examined the children's moral judgment scores based on parental level of encouragement. Results revealed that the mean moral maturity score of the children of parents using high encouragement was significantly higher than the mean moral maturity score of the children whose parents used low encouragement.

In another study, Hoffman and Saltzstein (1967) found a positive relationship between children's moral reasoning and parental discipline style. A sample of 444 seventh graders (237 boys, 207 girls) participated and responded to a moral judgment interview based on Kohlberg's dilemmas adapted for this study. Additionally, the researchers categorized 204 parents into three groups based on the following parent-reported discipline techniques: (a) use of power assertion (physical punishment and material deprivation), (b) withdrawal of love (direct but nonphysical expression of anger), and (c) induction (parents' use of explanation for consequence of behavior).

Advanced moral development was associated with frequent use of induction, and infrequent use of power assertion.

Similarly, Boyes and Allen (1993) reported that styles of parent-child interaction related to moral reasoning in adolescence. In this study, 74 students in grades 10 and 12, and 67 first- year university students completed Rest's DIT as well as a modified version of Schaefer's Child Report of Behavior Inventory (Schaefer, 1965). Based on the responses, the authors classified parents as authoritarian (low acceptance and high in parental control), authoritative (high on acceptance and moderate levels of parental control), or permissive (high on acceptance and low levels of control). Results indicated that adolescents of authoritative parents used more of the highest level of moral reasoning (post conventional) than adolescents of permissive and authoritarian parents.

Powers (1988) described the results of unpublished research (Powers & Speicher, 1985, as cited in Powers, 1988) and reported that mothers' lovingness and responsiveness to the adolescents' needs, as well as high emotional cohesiveness and concern among family members was associated with advanced adolescent moral judgment. Conflict and tension with the father was associated with lower levels of adolescent moral development. It seems that parental level of moral judgment impacts parental behavior within the family (Powers, 1982; Powers, 1988) and that parental behavior in the family impacts adolescent moral development (Boyes & Allen, 1993; Hoffman & Saltzstein, 1967; Parikh, 1980; Powers & Speicher, 1985, as cited in Powers, 1988). Thus, parental moral development as it related to adolescent moral development required investigation.

Walker and Taylor (1991) described that earlier research in this domain compared a parent's level of moral development to a child's level of moral development to

determine if parental level correlated with child's level of development (Buck, Walsh, & Rothman, 1981; Haan, Langer, & Kohlberg, 1976; Holstein, 1972; Speicher, 1994). Results failed to reveal consistent relationships regarding interfamilial patterns of moral reasoning. For example, Holstein (1972) hypothesized that a child's moral judgment level would be positively related to parental moral judgment. Holstein interviewed 53 mother-father-child triads (children were all eighth grade students) and based on the interview, designated each of them as using a particular level of moral reasoning. Correlations did not yield significant relationships between combined parents' and children's level of moral reasoning, although the relationships were in the expected direction. When examined individually, mother and child relationships were significant while father-child relationships were not. Haan et al. (1976) reported parents' level of moral development to be correlated significantly with sons', but not daughters', level of moral judgment. More recently, Speicher (1994) examined developmental patterns of moral development during adolescence and young adulthood and found that during adolescence, parent moral judgment related to offspring moral judgment but was a stronger predictor of moral judgment among girls than boys.

Walker and Taylor (1991) criticized this research approach since it simply assessed whether the moral reasoning competence of parents related to that of their children. Alternatively, they hypothesized that it is the parents' moral reasoning *performance*, not their competence that may be crucial in their children's development. Similar to Powers' (1988), Walker and Taylor were trying to identify or understand the unique process of parental influence on their child's moral development. In addition to correlating parental and child level of moral reasoning, Walker and Taylor examined the

parent-child interactions during the discussion of moral dilemmas to determine if parents accommodated their level of moral reasoning to that of their child when discussing different types of moral issues (hypothetical moral dilemma *vs*. real life dilemma from the child's personal experiences). Furthermore, their study examined family interaction patterns during the discussion of the moral dilemma, and finally, the study used these variables to predict a child's level of moral reasoning at a 2-year follow up.

Walker and Taylor (1991) observed and coded interactions of 63 family triads (mother, father, and child) with children drawn from grades 1, 4, 7, and 10. They all individually responded to a moral reasoning interview (MJI; Colby & Kohlberg, 1987) to determine level of moral reasoning, and then, as a family discussed both a hypothetical and a real-life moral dilemma. The authors interviewed the children again 2 years later to determine changes in level of moral reasoning capabilities.

Consistent with previous research, Walker and Taylor (1991) found no relation between parents' and children's level of moral reasoning competence. In other words, the ability of parents to use sophisticated moral reasoning does not ensure that their children will develop similarly. No one had previously studied parents' moral reasoning while interacting in actual dialogue with their child. Results indicated that parents did indeed use a lower level of moral reasoning than they were capable of (as measured on the MJI) in a family discussion session. It seems that they lowered their own level of moral reasoning to accommodate to the level of their child. At the same time, this adjusted level exposed the child to a higher level of moral reasoning than the child was capable of at that time. Additionally, during the discussion of the real-life moral dilemma, parents questioned and paraphrased more and were more supportive overall than when discussing

the hypothetical dilemma. Perhaps the most important finding was that parental discussion style and level of moral reasoning predicted children's moral reasoning development at the 2-year follow up interview. A parental discussion style that involved supportive interactions, the eliciting and paraphrasing of children's opinions, and the presentation of higher level moral reasoning predicted children's moral development (Walker & Taylor).

Similarly, in the study described earlier, Walker et al. (2000) found that highly representational interactions in the parent discussion (parents gently elicited their child's opinion and checked for understanding) predicted high rates of child moral development. It is clear from these studies that the process of family interactions influenced moral development both at the time of initial assessment and at the follow up assessment.

Speicher (1992) summarized the literature regarding parental and familial influence on adolescent moral development and concluded that there is increasing empirical evidence that parental influence on their children's moral behavior is greater than Kohlberg originally assumed and that positive relations between parent and child may promote moral development. Speicher's study assessed parent and child level of moral development, using the MJI, and related those factors to family interaction. However, this study measured "perceived" family interactions using a lengthy interview with parents and children as opposed to direct observation of family interactions. The sample included 47 two-parent families and 3 one-parent families, for a total of 51 families. Speicher interviewed all adolescent children in each family, totaling 98 adolescents, ages 10 to 18. In the interview, she included family interaction variables consistent with Kohlberg's conception of role- taking opportunities and advanced moral

judgment. Some of the variables were (a) freedom to discuss politics or controversial issues at home; (b) resolution of family disagreements by argument, discussion, and negotiated compromise; (c) method of arriving at rules that include the child in the rule making process; (d) the extent to which family talks together; (e) openness of relationship; (f) ease of communication with parents.

Results indicated that more mature adolescent moral judgment related to adolescent perceptions of qualities in the parent-adolescent relationship, namely positive affective relationships, parent-child and family communication, and parental understanding and support (Speicher, 1992). Additionally, results of the study lend support for the role of family interaction in influencing adolescent moral development.

Walker et al. (2000), Walker and Taylor (1991), and Powers (1988) assessed family interaction through direct observation and coding of parent-child interactions, while Speicher (1992) assessed family interaction via interviews. Nevertheless, they all reached similar conclusions in that adolescent moral judgment most consistently related to positive intra-familial relationships. These findings lend support to Powers' argument that there is a unique aspect of the family environment, different from the school or social context, as it relates to moral development. The internal cognitive mechanism that advances moral development is the same across all environments; namely individuals' increased perspective taking abilities as well as ability to identify deficiencies in their current moral thinking. However, among family members, the context of supportive interactions seems to promote adolescent moral development.

The methodological distinction between Powers (1988), Walker and Taylor (1991), and Speicher (1992) (i.e., direct observation of parent-adolescent interaction *vs.*

adolescents' perceptions of their interactions with parents) may represent an initial exploration into some newer conceptions of adolescent moral development. Namely, the way in which adolescents *perceive* their relationship and interactions with parents and other family members may relate to the amount of influence parents may have on their children's moral development. Schaefer (1965) argued that a child's perceptions of parental behavior may be more important in adjustment and development than the actual behaviors of the parents. Epstein and Schlesinger (2003) discussed the significance of *perception* of events that occur during family interaction as it relates to cognitive behavior therapy for treating family problems. Therefore, the proposed study for this dissertation entailed understanding adolescents' perceptions of family processes as well as their perceptions of factors that influenced their own moral thoughts.

Another important finding from Walker and Taylor's (1991) and Walker et al.'s (2000) studies related to context. Parents and children discussed two moral dilemmas, a hypothetical situation and a real- life moral dilemma from the children's own experience. It is noteworthy that the context that better predicted moral growth was the discussion involving the children's moral dilemma, not the hypothetical discussion. Gilligan (1982) suggested the importance of context when she proposed her ideas relating to moral development. She argued that moral judgment and decisions occur in a context, and it is very difficult to define moral judgment in terms of ability to reason along complex and objective lines. Similarly, Hart and Carlo (2005) explained that there are many important contexts in the lives of adolescence. Therefore, the results of the aforementioned study are not surprising and highlight the importance of context with regard to moral reasoning development.

Summary

The literature discussed in the previous section represents a small aspect of the vast body of literature relating to Kohlberg's theory of moral development. One unique aspect of Kohlberg's stage theory is that it produced a research paradigm that operationalized the dependent variable, moral judgment level, into a measurable construct. Stage attainment indicated level of moral judgment; stage advancement indicated moral judgment growth. Researchers applied this paradigm as they examined a number of contexts such as the school environment (Mason & Gibbs, 1993; Power et al., 1989; Rest & Narvaez, 1991) and peer groups (Blatt & Kohlberg, 1975; Edwards, 1978; Harris et al., 1976; Walker et al., 2000) as contexts with the potential to stimulate moral development. These studies demonstrated that the school environment, as well as peer groups, are indeed contexts with the potential to stimulate moral growth. More recently, researchers examined the family environment as well (Powers, 1988; Speicher, 1992; Walker, Henning, & Krettenauer, 2000; Walker& Taylor, 1991). Insights from the family studies highlighted the importance of family process variables as they relate to adolescent moral development.

Although the nearly four decades of research supporting Kohlberg's theory is quite robust, other theorists have raised some criticism. White (2000) argued that Kohlberg's theory and related research does not address all aspects of moral reasoning. Gilligan (1982) stressed the importance of context when making moral judgments. She argued that determining moral judgment level based on ability to reason along complex objective lines ignores the context of the judgment under consideration. In addition, Gilligan criticized Kohlberg's theory since it does not adequately represent the morality

of females, as his initial research and follow up studies included only males in the sample.

Kohlberg's theory does identify the school and peer groups as contexts with the potential to influence or stimulate moral judgment, however, the research relating to these contexts followed the paradigm described above that quantifies and classifies moral judgment development. Similarly, White, Howie, and Perz (2000) argued that the line of research emphasizing how cognitively mature one's reasoning is does not identify whom or what one is reasoning about. White, Howie, and Perz were critical of the rigid stage approach to moral reasoning development, that de-emphasized the context of adolescent life.

Additionally, Kohlberg (1969) initially minimized the influence of family on moral development, yet, later research deemed familial influence as uniquely important (Powers, 1988; Speicher, 1992/1994; Walker et al., 2000; Walker & Taylor, 1991). In light of the above limitations in Kohlberg' theory and given the importance of understanding other factors that researchers have identified as influencing adolescent moral development, such as religion (Donahue & Benson, 1995; King & Furow, 2004), and possibly media (Hart & Carlo, 2005), it stands to reason that the perceived sources of moral authority are important components to consider in understanding and investigating adolescent moral reasoning (White et al., 2000).

White's (1997) model represents a shift in the focus of moral development research. This new formulation and measurement provides a measure of the relative importance of sources of influence on adolescent moral thought as opposed to an actual measurement of moral development. Kohlberg studied moral reasoning with much less

attention to the outside world as influencing the process, while White and colleagues are specifically interested in the impact of the outside world on the moral reasoning. It is important to keep this in mind as the discussion now turns to sources of influence on adolescent moral reasoning.

Moral Reasoning: A Contextual Approach

The notion of sources of moral authority is derived from Henry's (1983) content reformulation of Kohlberg's (1969/1994) stage theory of moral development. In this reformulation, the influence ascribed to various sources of moral authority characterizes one's moral thought. The five sources that Henry identified as influencing moral thought are Family, Educators, Self-Interest, Society's Welfare, and Equality. White (2000) indicated that each source is different from, not more or less morally mature or adequate than, another source. To illustrate Henry's reformulation, let us take Kohlberg's "conventional level" as an example. Individuals at this stage regard conformity to societal rules as important. In addition, individuals also want to maintain the approval of friends and family. According to Henry, if the reason for upholding right and condemning wrong at this level includes approval and general social opinion, loyalty to people and groups, the welfare of others and society, then the *source* of moral authority is ascribed to various legitimate authorities, namely the individual's family, group, or social network. The extent to which those *authorities* have influence serves as the basis for solutions to moral dilemmas, and as a result, the ascribed sources of moral authority, not the structure or form as Kohlberg posited, facilitate understanding of moral development. Furthermore, a person may ascribe to several sources concurrently depending on one's family

socialization experience (White, 1996a), in contrast to the universal invariant sequence of Kohlberg's stage approach.

White's Family Socialization Model of Adolescent Moral Thought

Building upon the conclusions of others (Powers, 1988; Speicher 1992; Speicher, 1994; Walker, Henning, & Krettenauer, 2000; Walker & Taylor, 1991) who reported the consistent relationship between adolescent moral judgment and positive intra-family relationships, as well as those (Gilligan, 1982; Walker et al., 2000; Walker & Taylor, 1991) who identified the importance of context when examining moral development, White (1996, 2000) explored parental influence on adolescent moral development from a different perspective. Keeping in mind the rich context of adolescent life that includes family, peers, educators, and employment opportunities with potential to impact on adolescent moral development, White's model assumes that parents regulate their child's or adolescent's exposure to these contexts as well as regulate the influence of ideas learned from these experiences. In particular, the following section that discusses White's research adopts the approach that the sources of moral authority to which adolescents ascribe are associated with family processes.

Parents at times provide, provide in a limited way, or fail to provide, opportunities for children and adolescents to experience different moral viewpoints both inside and outside the family. According to Kohlberg's (1984) formulation, those opportunities promote moral reasoning development. According to White's (2000) theory, those opportunities impact the sources of moral authority to which adolescents ascribe (White et al., 2000). White's Family Socialization Model proposes that moral judgment development is not simply age or developmentally dependent but rather, family system

dependent. This means that, among a group of adolescents at a similar level of cognitive development, differences in the content of moral thought would depend on each one's earlier family socialization experience (White et al.).

Family processes hypothesized to account for such differences are cohesion, adaptability, and communication. Olson's Circumplex Model of Marital and Family Systems (Olson et al., 1983) presents these processes.(Appendix G presents a diagram of the Circumplex model.) First, *family cohesion* is the emotional bonding that family members have with one another. Some of the specific behaviors used to measure this dimension are warmth, decision making, boundaries, and forming coalitions. In addition, *family adaptability (or flexibility)* refers to the ability of a family system to change its power structure, negotiation style, and relationship rules in response to situational and environmental stress. Finally, *communication* is a facilitating dimension as it allows couples and families to alter their levels of cohesion and flexibility. Positive communication involves open dialogue and problem solving communication strategies that enable families to meet the demands of change. Olson et al. (1992) found that the balanced type of couples and families (those with higher levels of cohesion and adaptability, along with positive communication) have better family functioning.

A variety of other theorists and therapists focused independently on variables relating to cohesion, flexibility, and communication in understanding and working with families. Walsh (2003) discussed factors such as flexibility, communication belief systems, and connectedness in her discussions of family resilience. Beavers and Hampson (2003) described adaptability, affective aspects of communication, as well as dimensions of cohesion in their formulation of factors critical to assess in working with

families. Epstein and Bishop (2003) described communication, problem solving (flexibility), and affective involvement (cohesion) as dimensions in their model of family functioning. Their place in the work and research of others indicates the importance of cohesion, flexibility, and communication in family processes.

The Circumplex Model (Olsen et al., 1983) formulates and explains the dynamics of the family, with particular reference to the structures of adaptability, cohesion, and communication, all of which regulate the amount and quality of interaction that adolescents experience with family members, peers, and society (White, 1996). The Circumplex Model provides the theoretical framework for the Family Adaptability and Cohesion Evaluation Scale (FACES II; Olson & Tiesel, 1991) and its most recent version, FACES IV(Olson, Gorall, & Tiesel, 2006), an assessment tool that measures adaptability and cohesion among families (FACES IV measures communication as well) and interprets the relationship among these dimensions as a means of understanding general family functioning.

With regard to her Family Socialization Model, White (1996a) suggested that the Circumplex Model be used to classify family members along the dimensions of family cohesion, family adaptability, and family communication. She also suggested that researchers examine each dimension separately. The perceived levels of cohesion, adaptability, and communication among family members can be used to predict adolescents' preference for a source of moral authority (White, 1996a).

White developed a scale, the Moral Authority Scale (MAS; 1996b) and subsequently provided an updated version, the Revised Moral Authority Scale (MAS-R; 1997), to measure the perceived degree of influence of different sources of moral

authority in adolescent moral decision making. One assumption in the development of the scale was that distinctive sources of moral authority influence decisions individuals make concerning moral dilemmas. The aim in constructing the MAS/MAS-R was to obtain information on "who or what" has influenced an individual's moral judgment. Henry's (1983) sources of moral authority formed the basis of the MAS/MAS-R, and it includes the following five subscales: Self- Interest, Family Expectations, Educator Expectations, Society's Welfare, and Equality for Individuals, in addition to a Total Score. The MAS-R consists of six moral issues, each of which requires a moral decision followed by five statements designed to exemplify different sources of moral authority. On a Likert- type scale, individuals rate the amount of influence each source contributes to thinking and deciding about a particular moral situation. Based on the ratings, examiners calculate scores for each individual source of influence, and then sum these for a total score.

White's research (2000) proposed that the content of adolescent moral thought is associated with family processes, where parents provide opportunities for their children to participate openly and freely in society. White (1996a) argued that it is possible to generate specific predictions concerning the role of family cohesion, family adaptability, and family communication as the mechanism for parents to provide direction and influence for their children's moral thought.

Family cohesion. Olson et al. (1983) defined family cohesion as the emotional bonding among family members. Measures of cohesion include emotional bonding, boundaries, time, friends, interests, and recreation. Research (Rodick, Heggeler, & Hanson, 1986) showed that higher functioning families tended to possess moderate degrees of cohesion and adaptability, whereas more poorly functioning families tend to

present to the extreme degrees on these dimension. As cited previously, Powers (1988) reported that emotional cohesiveness among family members related positively to advanced moral judgment. The mechanism underlying these findings may be explained using the concept of family boundaries (White, 2000). Adolescents who perceive their family boundaries as moderately cohesive have opportunities to both spend time with the family and spend time interacting in the larger social environment. Adolescents in such families would be expected to give equal weight to parents and others as sources of moral authority. In contrast, adolescents in very connected family systems have little opportunity for direct experience with and feedback from the wider social environment. As a result, the family is the major source of moral authority. Conversely, adolescents in disengaged family systems have more outside interactions with exposure to different points of view, and might attribute influence to sources of moral authority outside the family.

White (2000) found some preliminary confirmatory support for the hypotheses relating to family cohesion. She assessed 271 Australian adolescents (age range, 14-19 years) and their parents on four measures: The Family Information Questionnaire (FIQ; White, 1997) contained items relating to family demographic variables (country of birth, years of residence in Australia, religion, religious attendance, and political affiliation). FACES II (Olson & Tiesel, 1991) assessed both family adaptability and family cohesion. The Parent-Adolescent- Communication Scale (PACS; Barnes & Olson, 1982) assessed both open communication and problem communication. Finally, the MAS-R (White, 1997) measured the influence of sources of moral authority.

White (2000) found that adolescents who perceived their family systems as very connected attributed greater influence to the Family as a source of moral authority than did adolescents who perceived their family systems as less connected. Adolescents in disengaged families attributed less influence to all sources of moral authority than the adolescents who perceived their families as connected. Although White expected that adolescents from disengaged or disconnected families would attribute greater influence to a source outside the family, in this case, no source was greater than the Family source. In addition, White posited that their overall low ratings of family cohesion may have lead this group of adolescents from disengaged families to perceive themselves as independent moral thinkers, rarely influenced by outside sources in their decision making.

Family adaptability. Olson et al. (1983) defined family adaptability as the ability of a family system to change its power structure (assertiveness, control, discipline), negotiation style, role relationships, and relationship rules in response to situational and developmental stress. Both Olsen (1983) and Kohlberg (1994) emphasized the importance of opportunities to assume new or different roles or perspectives. Kohlberg's position described such opportunities as critical in the development of moral judgment. Olson viewed flexibility and adaptability as essential to family functioning. White (2000) hypothesized that adolescents from flexible family systems would have opportunity to experience a variety of viewpoints, such as approaches to cooperation and fairness in social relations, and as a result encounter many influential sources of moral authority. Adolescents from rigid family systems would experience limited change in their roles and as a result, encounter fewer experiences in which they could be influenced by different sources of moral authority. Previous research (Brown & Mann, 1990) indicated that

adolescents from flexible families reported more involvement in family decisions than adolescents from rigid families. According to White (2000), this type of involvement may influence adolescents' exposure to the perspective and opinions of others as well as sources of moral authority.

White (2000) reported preliminary support for the hypothesis relating to family adaptability in the study described above. The adolescents who perceived their families as higher in adaptability attributed significantly more influence to all sources of moral authority than did the adolescents who perceived their families as lower in adaptability. It seems that flexible family systems allowed adolescents to experience a variety of roles and relationships and, in turn, adolescents in these families encountered a variety of influential sources of moral authority.

White (2000) conducted supplementary analyses to provide a stronger case for the relative importance of family cohesion and adaptability. She carried out five separate stepwise multiple regression analyses, one for each of the MAS-R subscales, on the adolescent sample. On the basis of previous research (White, 1996a, 1996b, 1997), White entered into the regression equation 20 demographic and family-process predictor variables (e.g., family cohesion, adaptability, communication, age, gender, place of birth, religious affiliation, religious attendance, and political affiliation). The level of influence attributed to the relevant source of moral authority was the criterion variable. White reported that at least family cohesion, or adaptability, significantly predicted each of the sources of moral authority. Not only did the family process variables influence sources of moral authority in the adolescent sample, they were predictive of sources of moral authority as well.

Family communication. Olson (1983) suggested that positive communication skills (e.g., empathy, reflective listening, supportive comments) facilitate awareness among family members of each other's needs and preferences. Additionally, as cited previously, Walker and Taylor (1991) found that parental discussion styles that involved supportive interactions along with the presentation of higher level moral reasoning predicted children's level of moral judgment. Olson et al.'s (1983) model predicts that supportive interactions are more likely to occur in situations of open and positive communication. Barnes and Olson (1985) found that balanced families (change levels of cohesion and adaptability to meet family needs) have more open and problem- free communication than families at the extremes (extremely high or low levels on both cohesion and adaptability). Kouneski (2001) reviewed 20 studies of families and found that balanced families had more positive communication than unbalanced families.

In terms of content of moral judgment, White (1996c) hypothesized that more frequent open and positive communication makes it more likely that parents and adolescents have a good relationship and will be aware of each other's moral judgments (sources influencing moral decisions). Conversely, adolescents who experience negative communication patterns (hostility and criticism) within their family system will be reluctant to accept parental moral views. Preliminary research by White suggested the presence of parental influence on adolescent decision making when adolescents perceive positive communication with their parents. In this particular study, White examined parent–adolescent communication in a study of 76 parent-child systems and found that adolescents who rated the frequency of positive parent-adolescent communication as

High indicated more parental influence when making decisions regarding financial matters, personal matters, social activities, choosing a spouse, and future issues. In contrast, adolescents who rated the frequency of positive parent-adolescent communication as *Low* nominated siblings, friends, self, or other as the source of influence regarding the above mentioned decisions. These results supported the hypothesis regarding positive communication between parents and children in that positive communication allows for children to understand and accept their parents' views.

With regard to moral decision making, results from White's (2000) study supported the prediction that the perceived level of positive family communication is significantly associated with level of agreement between parent and child on the amount of influence attributed to different sources of moral authority in moral decision making. White analyzed the data in the following manner. Based on the adolescents' reports, White categorized adolescent-parent dyads into high- and low- positive communication groups as measured by the PACS (Barnes & Olson, 1982). Using these separate categories of communication, White correlated each adolescent's rating of sources of influence with his or her parent's rating of influence for each source of moral authority as measured by the subscales of the MAS-R. The adolescents who perceived high positive communication with their parents showed significant levels of agreement with their parents on the attributed levels of influence across most sources of the MAS-R. In contrast, adolescents who perceived low positive communication with their parents showed little agreement; most correlations were not significantly greater than zero.

White (2000) repeated the analysis described in the preceding paragraph, this time, however, she used parents' perceptions of communication with their child, as the

criteria for dividing the group between high- and low-communication. She again found support for the hypothesis. Parents who perceived high positive communication with their children showed significant levels of agreement on attributed level of influence across most sources of moral authority, while parents who perceived low-positive communication with their children showed little agreement. The results reported thus far continued to support the notion of family factors, such as positive communication between parent and child, and their influence on adolescent moral judgment.

Socio-cultural variables. White's (2000) study demonstrated that predictions regarding family process variables, such as cohesion, adaptability, and communication, as they related to the content of adolescent moral thought have empirical support and in turn lend support for the Family Socialization Model of Adolescent Moral Thought. In addition to family process variables, White (1997) identified socio-cultural variables, such as political and religious beliefs, that related significantly to adolescent moral thought. For example, White (1997) found that adolescents who identified their political affiliation as either right wing or left wing attributed significantly more influence to the Society source in their moral decision making than did adolescents claiming no political affiliation. Furthermore, left-wing respondents attributed significantly more influence to the Equality source than did respondents claiming no political affiliation. In the same study, White also found that adolescents claiming Catholic religious affiliation reported a significantly greater influence of the Family and Educator sources than did respondents claiming no religious affiliation.

White's (2000) study also identified demographic/socio-cultural variables that

predicted ascribed sources of moral authority. Religious affiliation and time spent talking to parents were the first and second most significant predictors of scores on the Educator subscale. Gender was the most significant predictor of scores on the Equality subscale. The findings regarding the demographic variables require further testing in light of the relative predictive strength of the family process variables.

The goal of the follow-up study (White et al., 2000) was to determine if White's (1996, 2000) Family Socialization Model could be replicated using school age adolescents (ages 14-17). White based her initial study on a sample with a larger age range (14-19 years). Additionally, the follow up study investigated if any of the above mentioned socio-cultural variables predicted ascribed sources of moral authority. Communication was not a significant predictor of any sources of moral authority (White, 2000) and as a result was not used in the follow- up study.

Two groups of Australian adolescents participated in the follow-up study (White et al., 2000). In the first group, 175 students ages 14-17 years from the Sydney metropolitan region completed the Family Information Questionnaire (White, 1997), FACES II (Olson & Tiesel, 1991), and the MAS-R (White, 1997). The second sample consisted of 142 students, ages 14-17 years from an urban fringe region (i.e., small towns that are at least 120 kilometer from Sydney, Australia).

The two samples differed with regard to salient religious and political variables. For example, the distribution of religious affiliations differed significantly between groups, with more Catholics than Anglicans in Sample 1 and with very few Sample 1 adolescents reporting no religion. Additionally, participants in Sample 2 reported a lower frequency of attending religious services than did participants in Sample 1. Similarly, the

proportions of reported political affiliations of adolescents differed with a higher proportion of Labor affiliation (left-wing Australian political party) in Sample 1 and a higher proportion of Green (environmentalist Australian political party) in Sample 2. Sample 2 was also more homogeneous with regard to place of birth than Sample 1. Most parents in Sample 2 were born in Australia, whereas the Sample 1 parents were more heterogeneous with regard to place of birth. Additionally, the level of education of the parents was higher overall in Sample 2 than in Sample 1. Regarding family process variables, the samples did not differ with regard to ratings of family cohesion, however regarding family adaptability, Sample 1 contained slightly more rigid families than Sample 2.

Results from both samples were consistent with one another and supported the hypothesis that the influence of the Family source on moral decision making would increase with increasing family cohesion. In addition, the influence of the Equality source on moral decision making increased with higher ratings of family cohesion in both samples. With regard to family adaptability, there were significant differences between the two groups. In Sample 1, there was a significant association between adaptability and higher range of influence scores for all sources of moral authority (Total score on MAS-R). Sample 2 data did not show this relation. One explanation for the difference in the adaptability results might be attributed to the socio-cultural differences between the samples. For example, the finding that the expected trend of the increasing range of influence score with increasing family adaptability was present in the Catholic subgroup in Sample 1 but not in Sample 2. This may suggest that religious affiliation might

mediate the relation between family adaptability and the range of influence scores in different ways.

The results of this study (White et al., 2000) supported the prediction of White's (2000) Family Socialization Model concerning family process variables and the content of adolescent moral thought in two socio-culturally different samples of school-age adolescents. In general, it appeared that when the distribution of family cohesion types is similar across socio-culturally different samples, the relationship of its influence on adolescent moral development was the same across samples. In the case of family adaptability, the pattern of results was not consistent across the two samples. The prediction regarding adaptability being significantly related to the range of influence of moral authority was supported only in Sample 1 and not in Sample 2. White had proposed that religious affiliation might mediate the relation between family adaptability and the content of adolescent moral thought. This issue might be clarified further in a follow-up study with a more diverse adolescent sample with a particular focus on age and socio-cultural characteristics. Furthermore, with regard to the Family Socialization Model, it would be interesting to see if the findings regarding adaptability and cohesion as predictors of adolescent moral thought generalize to other metropolitan and urban fringe locations.

Pilot Study Results

In a small scale pilot study completed in 2005, I attempted to replicate White et al.'s (2000) study. Ten adolescents from an outer borough of New York City completed the MAS-R, FACES-II, and questions relating to SES and other demographic variables (gender, race, religion, religious attendance, grade in school). Consistent with previous

research there was a significant correlation between the family cohesion score on the FACES II and the Family Source score from the MAS-R. The adolescents who rated their families higher on family cohesion had a higher degree of influence for the family as an ascribed source of influence on adolescent moral thought. In terms of demographic variables, none correlated with subscales or total score on the MAS-R. However, when collapsing the original four categories of religious attendance (weekly, monthly, yearly, never) into two categories (weekly/monthly and yearly/never) some trends emerged, although they were not significant. Those who attended religious services less frequently had a higher mean on the Self-Interest source on the MAS-R than those who attended more frequently. It is possible that frequency of attendance at religious services influences the Self-Interest source of moral reasoning. Maybe attending organized religious services exposes adolescents to viewpoints that emphasize other sources of moral authority, over self-interest. Clearly a larger scale study is necessary to clarify these issues and further develop White's socialization model.

Summary

In recent years there has been increasing interest in the role that the family plays in adolescent moral thought development (White et al., 2000). For example, Walker and Taylor (1991) found that parental discussion style related significantly to adolescent moral development, as indicated by higher levels of moral reasoning. In addition, Powers (1988) reported that mothers' lovingness and responsiveness to adolescents' needs, as well as high emotional concern and cohesiveness among family members, was associated with advanced moral judgment. In these studies as well as others, the researchers adopted Kohlberg's (1994) stage approach to moral development. This approach emphasizes the

cognitive maturity of one's reasoning, rather than trying to identify the content of the moral thought. This approach also fails to take into account whom or what one is reasoning about, as well as the sources of influence that contribute to the moral reasoning. According to White (2000), the perceived sources of moral authority are important components that add to the understanding of moral reasoning and thus warrant further study.

Henry (1983) proposed that one's moral thought can be characterized by the extent that various sources of moral authority are ascribed influence. In contrast to Kohlberg's classification of people in terms of the cognitive sophistication of their reasoning, Henry identified five sources of moral authority (Family, Educators, Self-Interest, Society's Welfare, and Equality) that in turn are the basis of White's (1997) Revised Moral Authority Scale. This scale identifies that each source is different from, not more or less morally adequate or mature than, any other source. In addition, several sources can be ascribed to concurrently depending on one's family socialization experience. This is in contrast to Kohlberg's formulation that classifies reasoning according to stages and posits one cannot be in more than one stage at a time. In addition, according to Kohlberg's (1994) formulation there is an invariant sequence to development as it occurs in a sequential manner while White's (1996, 2000) view emphasizes the context of adolescent life .

White's (1996, 2000) research is based on the premise that the sources of moral authority to which adolescents ascribe are associated with family processes. White proposed that moral development is not simply age dependent, but family system dependent. The content of adolescent moral thought would differ due to differences in

family socialization experiences. In addition, the sources of moral authority to which adolescents ascribe are associated with family processes in which parents provide (or fail to provide) opportunities to experience moral viewpoints both inside and outside the family. White et al. (2000) found that family process variables such as family cohesion and adaptability were significantly better predictors of adolescent moral thought than socio-cultural variables such as religious affiliation and political affiliation. White's studies were conducted in Australia and the results may not be applicable to adolescents from the United States. In addition, White's studies focused on moral thought and did not address behaviors.

Therefore, this study investigated the consistency of the findings that family cohesion and adaptability are significant predictors of adolescent moral thought using a sample of adolescents from the United States. Even though it was not significant in predicting sources of moral authority in White's (2000) study, this study investigated communication, the third family process variable identified by Olsen et al. (1983) as it may contribute to moral thought among adolescents from United States. In addition, this study investigated the role of gender, SES, race/ethnicity, and level of religious attendance, in examining relationship between family factors and adolescent moral thought. Furthermore, this study also examined adolescent moral thought and its impact on school-related behavior such as school attendance, disciplinary referrals, and involvement in extra-curricular or community-based activities.

The following discussion provides a brief rationale for the choice of participant descriptor variables used in the analyses. Gilligan (1982), one of Kohlberg's early critics argued that Kohlberg's formulation (which emphasizes rights and justice) does not

adequately represent the morality of females (that emphasizes care and empathy) and that Kohlberg's theory and scoring system denigrates females' thoughts to lower stages. Many studies have tested Gilligan's claims and most do not support it (Berk, 1994). Regarding the morality of females (care and empathy), Forsyth, Nye, and Kelley (1988) found no gender differences in university students' endorsement on questionnaire items reflecting an ethic of care. Additionally, themes of justice and care appear in the responses of males and females to moral dilemmas, and when females raise interpersonal concerns, they do not receive a lower score in Kohlberg's system (Kahan, 1992; Thoma, 1986; Walker, 1989). Regarding gender differences in moral development, Walker's (1991) meta-analysis of sex differences in the development of moral reasoning, reviewed 80 studies with a total of 152 samples and reported the following results. For the vast majority of the samples (130, or 85.5%), there was no significant gender difference. Females had higher scores in 9 samples (5.9%) whereas males had higher scores in 13 samples (8.6%). Meta-analytic techniques testing the hypothesis that males are more advanced in moral reasoning than females revealed no significant difference between the groups, and in addition, the calculated effect size was very small. Taken together, these findings suggest that females do not fall behind males in moral development and that Kohlberg's theory does include both sets of values.

Although White's (1996, 2000) formulation is different from Kohlberg's theory, I wanted to investigate the universality of White's approach as it relates to gender; in particular, I wanted to know if there were gender differences among adolescents in ascribing source of moral authority.

Similarly, there has been cross cultural research with regard to Kohlberg's theory that reveals differences in how quickly individuals from different cultures or societies (ex., urban *vs*. village societies) move through his developmental stages (Berk,1994). While research conducted in India (a country as structurally complex as most Western societies) demonstrated similar patterns of moral development and stage attainment as with other Western groups (Vasudev & Hummel, 1987), research from a village in New Guinea (Tietjen & Walker, 1985) revealed a different moral focus. In this particular group, moral statements made by the villagers portrayed the individual as vitally connected to the group through a deep sense of community responsibility. The village leader of the group remarked to the researchers that if he were a judge, he would give Heinz a light sentence, since Heinz asked others for help and nobody provided enough help. The responses given by the villagers did not fit in with Kohlberg's stages and raised the question of its cross cultural adequacy in describing moral development in other cultures.

Will there be similar differences among adolescents from diverse cultures with regard to White's model and ascribed sources of influence? Because at this point in the development of White's model, cross-cultural research might be premature, including adolescents with diverse racial or ethnic background may provide preliminary evidence in support of such research.

Additionally, although no significant relationship was reported, White et al.'s (2000) study examined differences between her two samples with regard to religious affiliation and religious attendance as potential moderator variables for family adaptability and its influence on sources of moral authority. Given that studies have

found a relationship between religion and prosocial behaviors and attitudes among adolescents (Donahue & Benson, 1995) as well as altruism, empathy, and perspective taking (King & Furrow, 2004), it is possible that among adolescents from the United States, religious affiliation and religious attendance relate to sources of influence on moral development.

Furthermore, studies implicate the importance of school attendance (Rest & Narvaez, 1991) and participation in school activities (Powers, 1988) as important to moral development. However, an important question to consider relates to moral development and its influence on school-related behaviors. Therefore, this study examined school attendance, participation in extracurricular activities, and disciplinary referrals as behaviors that would be predicted from moral development.

Rationale and Hypotheses

Given the preliminary support for White's Family Socialization Model (White, 2000; White et al., 2000) that adolescent moral thought is related to family processes such as cohesion [defined by Olson & Gorall, (2006) as bonding and connectedness between family members], flexibility (previously called adaptability) [defined as the quality and expression of leadership and organization, role relationships, and relationship rules and negotiations (Olson & Gorall, 2006)], and communication [defined by Olson & Gorall (2006) as positive communication skills used in the family system, and is viewed as a facilitating dimension allowing for families to alter levels of cohesion and flexibility], it was expected that ratings of family cohesion, flexibility, and communication as measured by FACES IV (Olson et al., 2006) would be predictive of

scores on the MAS-R that measures the ascribed sources of influence of adolescent thought. More specifically, I investigated the following research hypotheses:

H01: Individuals who demonstrate higher scores on the cohesion, flexibility, and communication scales of the FACES IV will exhibit higher scores on the Family source scale of the MAS-R.

H02: Individuals who demonstrate higher scores on the cohesion, flexibility, and communication scales of the FACES IV will exhibit higher scores on the Educator source scale of the MAS-R.

H03: Individuals who demonstrate higher scores on the cohesion, flexibility, and communication scales of the FACES IV will exhibit higher scores on the Self-Interest source scale of the MAS-R.

H04: Individuals who demonstrate higher scores on the cohesion, flexibility, and communication scales of the FACES IV will exhibit higher scores on the Society Welfare's source scale of the MAS-R.

H05: Individuals who demonstrate higher scores on the cohesion, flexibility, and communication scales of the FACES IV will exhibit higher scores on the Equality source scale of the MAS-R.

Finally, based on the research cited above that indicates a relationship between school-related variables such as school attendance, disciplinary referrals, community service /extracurricular activities, and moral development, I examined the following hypotheses.

H06: Individuals who indicate higher ratings on the Family, Educators, Self -Interest, Society's Welfare, and Equality source scales of the MAS-R will have a lower probability of reported unexcused absences.

H07: Individuals who indicate higher ratings on the Family, Educators, Self -Interest, Society's Welfare, and Equality source scales of the MAS-R will have a lower probability of reported disciplinary referrals.

H08: Individuals who indicate higher ratings on the Family, Educators, Self -Interest, Society's Welfare, and Equality source scales of the MAS-R will have a higher probability of being involved in extra-curricular activities than those with lower ratings.

CHAPTER III

Methodology

This chapter provides a description of procedural issues, including participants and their selection, instruments, and research design. The chapter describes in full the measures that the study utilized.

Participants and Their Selection

As principal investigator for this study, I sought approval for this study from the Institutional Review Board of the City University of New York Graduate School and University Center. Once I obtained this approval, I contacted six officials from six different suburban public school districts in the Northeastern U.S. to ask permission to recruit participants from their student body. See Appendix A for the letter sent to each school superintendent or principal.

The school. The superintendent from one of these school districts as well as the principal of the district high school consented to allow me to conduct the study there. The high school was located in a middle class suburban neighborhood located in northern New Jersey. According to the student enrollment data available on New Jersey's Department of Education website (www.state.nj.us/education), there were 1353 high school students enrolled for the 2008-2009 school year. The ethnicities of the students were categorized as follows: there were 362 White students (26.7%), 115 Black students (8.5%), 515 Hispanic students (38.1%), 359 Asian students (26.5%), 1 Native American (.07%), and 2 Hawaiian students(15%). Additionally, 177 students qualified for free lunch and 86 qualified for reduced fee lunched for a total of 263 students (19.4%) categorized as economically disadvantaged. The director of special services at the high

school provided information relating to special education services and indicated that 12% of the population received some type of school-based support such as resource room, inclusion, teacher consultation, and the like (A. Frieman, personal communication, April 29, 2010).

Participant solicitation. Once I obtained written approval from the principal of the high school, I began recruiting participants. The school's guidance department helped prepare a list of potential participants, students between the ages of 14 and 17 with a minimum 7th grade reading level. Of the approximately 1200 students in the school, 750 were eligible to participate. I recruited students between the ages of 14 and 17 to make the age of the sample comparable to follow the sample White's study (2000), with a minimum 7th grade reading level (to ensure similar cognitive development among participants. In addition, the FACES IV manual (Olson et al., 2006) recommends the scale for individuals ages 12 and older). Consent forms were mailed home to parents (see Appendix B). Parents who agreed to let their children participate sent back the signed consent forms to the school. Eligible students signed assent forms (Appendix D) before completing the questionnaires.

The mailing described above contained the letter of introduction and explanation of the study along with two copies of the parental consent form (one for parent's records) in English and Spanish. I offered a $10 gift card to a local store to students who participated in the study. Included in the mailing was an envelope to be used for returning the consent form to the supervisor of guidance at the high school. Approximately 50 parents signed and returned consent forms to the high school. Students whose parents signed the consent forms were invited to attend a meeting on a designated day after

school to learn about the study and what participation would entail if they indeed agreed to volunteer (Appendix C represents the Script for recruitment of subjects). At the conclusion of the meeting, Assent Forms (Appendix D) were distributed to all those in attendance. Students were asked to return the signed forms to the supervisor of guidance before the end of the week. Forty students attended the meeting and those 40 students returned the assent forms (80% of those whose parents gave permission). Those students received notices to complete questionnaires one day after school. Thirty students came to complete the questionnaires (just 60% of those whose parents gave permission and only 4% of those whose parents were solicited).

Because the turnout from the initial mailing was not adequate to complete data collection, I solicited participation in another manner. Two months after the initial data collection, the school principal allowed me to visit eight classes in order to solicit student participation. The classes were chosen for a variety of reasons. I was allowed to visit a number of AP classes whose students had already completed the AP exam. My presentation in class would not detract from learning curricular material. I was also allowed to visit classes where my presentation might seem relevant to the class subject matter. For example, I was allowed to visit two introductory to psychology courses. The class sizes ranged from 15 to 30 students, overall though, I spoke to approximately 200 students. At that time I presented the Script for Recruitment of Subjects and handed out a packet containing consent forms and assent forms to be returned to the school's Guidance Office by the end of that week. Twenty students (10% of those who were in class) returned the consent and assent forms and were sent notices to come after school on a

designated day to complete the surveys. Sixteen students completed surveys (about 80% of those who returned the consent forms and 8% of those in classes I visited).

In order to encourage student participation, I (with IRB approval) increased compensation to students from a $10 gift card to a $20 gift. With permission from the principal, I visited another eight classes with packets containing the consent and assent forms, described the study to about 150 students in total (class size ranged from 15-20 students), and asked them to return the forms to the Guidance Office by the end of the week. Forty students returned the forms and were asked to come on a designated day after school to complete the surveys. Thirty six of these 40 students arrived on the designated day and completed surveys.

The sample. Thus of the 750 students recruited, the final sample consisted of 82 participants (11%). Students ages ranged between 14 and 17 years (M = 16.04, SD = 1.04). The sample consisted of 34 males (41.5%) and 48 females (58.5%). Students from four grade levels were included in the sample: 17 (20.7%) were in the ninth grade, 12 (14.6%) were in the tenth, 21 (25.6%) were in eleventh and 32 (39%) were in the twelfth. None of the students received any type of special education services within the school. Clearly the sample was different from the school population in this regard. With regard to socioeconomic status (SES), 23 students (28% of the sample) were from low SES background, as indicated by their receipt of free or reduced fee lunches at school. The sample was ethnically diverse with 19 students (22.9%) self-described as Caucasian, 21 (25.3%) Asian, 26 (31.3%) Hispanic, and 17 students (20.5%) were combined into a category entitled “other,” that included 5(6%)African American, 8 (9.6%) multi-racial, and 4 (4.8%) students self described as "other". The ethnic and socioeconomic

composition of the sample resembled that of the school district's enrollment population as described above.

One of the questionnaires administered, asked participants about the frequency of attending religious services. Thirty six students (43.9%) reported attending religious services on a weekly basis, 11(13.4%) monthly, 20 (24.4%) yearly, and 14 (17.1%) indicated no attendance.

Based on school records, 71 students (86.6%) had no record of disciplinary referrals and 6 students (7.3%) had one referral, 2 (2.4%) students had two referrals, 2 (2.4%) students had 3 referrals, and one (1.2%) student had 5 referrals. Similarly, 47 students (57.3%) had no record of unexcused absences while, 21 students (25.6%) had one unexcused absence, 10 (12.2%) students had 2 unexcused absences, one student (1.2%) had three unexcused absences, two students (2.4%) had 5 unexcused absences, and one student (1.2%) had 8 unexcused absences. Finally, 27 students (32.9%) spent between 1-5 hours involved in extracurricular activities, 16 students (19.5%) students spent between 6-10 hours, 10 students (12.2%) spent between 11-15 hours, and 8 students (9.8%) spent 16-20 hours a week involved in extracurricular activities.

Instruments

Participants completed the following questionnaires, with the order of completion counterbalanced across participants:

The Family Adaptability and Cohesion Evaluation Scale-Fourth Edition (FACES-IV, Olson, Gorall, & Tiesel, 2006). The FACES-IV is the latest version of a self report measure designed to assess family cohesion and flexibility, which are the two central dimensions of the Circumplex Model of Marital and Family Systems (Olson et al., 2007).

Anyone over the age of 12 can complete the FACES-IV. The FACES-IV Package contains six FACES-IV scales as well as a scale for Family Communication and one for Family Satisfaction. FACES-IV provides a comprehensive assessment of family cohesion and flexibility dimensions using six scales, each with 7 items, for a total of 42 items. The items representing the six FACES-IV scales are integrated throughout the scale, while the Family Communication and Family Satisfaction scales are grouped separately. The Family Communication scale contains 10 items as does the Family Satisfaction scale. In total, the FACES-IV Package contains 62 items, all of which must be administered in a study using FACES-IV. Family Satisfaction questions will be administered as they are part of the FACES IV packet but will not be scored or analyzed as part of the study.

Designed as a self-report measure for the Circumplex Model of Couple and Family Systems, FACES-IV taps both balanced (healthy) and unbalanced (problematic) aspects of family functioning. The two balanced FACES-IV scales are Balanced Cohesion and Balanced Flexibility. (These balanced scales are similar to cohesion and flexibility as measured by FACES-II and FACES-III.) The new unbalanced scales are Enmeshed and Disengaged (problematic ranges of cohesion) as well as Chaotic and Rigid (problematic ranges of flexibility). Scoring procedures allows researchers and clinicians to integrate scores from the balanced and unbalanced scales to create a more complete picture of family functioning with regard to cohesion, flexibility, and the combination of the two (Olson & Gorall, 2006). I will discuss details pertaining to specific scoring procedures as well as types of scores provided later in this section.

The FACES-IV Package uses a 5- point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) to assess family cohesion, flexibility, communication, and

family satisfaction. (Family satisfaction data will be collected as it is part of the questionnaire but will not be used in hypothesis testing.) The Balanced Cohesion scale includes 7 items such as “Family members feel very close to each other” (item 7) and “Family members like to spend some of their free time with each other” (item 25). The unbalanced scales relating to family cohesion are the Disengaged and Enmeshed scales. The Disengaged scale contains 7 items such as “Family members get along better with people outside our family than inside” (item 3) and “Our family seldom does things together” (item 27). The Enmeshed scale contains 7 items such as “We spend too much time together” (item 4) and “Family members have little need for friends outside the family” (item 22).

The Balanced Flexibility scale includes 7 items such as, “We shift household responsibility from person to person” (item 26) and “We have clear rules and roles in our family” (item 32). The unbalanced scales that relate to family flexibility are the Rigid and Chaotic scales. The Rigid scale contains 7 items such as, “Our family is highly organized” (item 23) and “It is important to follow the rules in our family” (item 35). The Chaotic scale includes 7 items such as “We never seem to get disorganized in our family” (item 6), and "It is unclear who is responsible for things (chores, activities) in our family” (item 24).

For each of the six scales described above, one calculates a raw score by adding the ratings (1-5) for each of the seven items in the scale. For each scale, the raw scores can range from 7 to 35. Raw scores can be converted to percentile scores that range from the 10^{th} percentile to the 99^{th} percentile. As mentioned previously, scores from the balanced and unbalanced scales can be integrated to yield one score that represents

family functioning in that area. For example, using the raw scores one may calculate a Cohesion Ratio by dividing the Balanced Cohesion raw score by the average of the Disengaged and Enmeshed Scores [Cohesion Ratio = Balanced Cohesion/(Disengaged +Enmeshed /2)]. Similarly, one may calculate a Flexibility Ratio by dividing the Balanced Flexibility raw score by the average of the Rigid and Chaotic scores [Flexibility Ratio = Balanced Flexibility/(Rigid+ Chaotic/2)]. The higher the ratio above 1, the more healthy the family system and the lower the ratio below 1, the more unhealthy the family system.

One may calculate a Dimension score in addition to the Cohesion and Flexibility ratio scores. Dimension scores are based on percentile scores for each scale and are calculated in the following manner: Cohesion Dimension score = Balanced Cohesion + (Enmeshed –Disengaged/4); Flexibility Dimension score = Balanced Flexibility+ (Chaotic-Rigid/4). Dimension Scores were created in order to plot respondents' scores onto a graphic representation of the Circumplex model.

The authors have studied the psychometric properties of the FACES-IV (Olson et al., 2007). Alpha reliability analysis revealed that the internal consistency of the six scales range from .77 to .89 with only one scale below .80 (Enmeshed scale of the Cohesion Dimension). Test–retest reliability of the six FACES-IV scales is as follows: Enmeshed = .77, Disengaged = .87, Balanced Cohesion = .89, Chaotic = .86, Balanced Flexibility = .84, Rigid = .82. In terms of test validity, the authors examined correlations between scores on the various scales with other scales that measure family functioning. The general trend between the FACES-IV scales and the validation scales is that the FACES-IV scales designed to measure the balanced regions of cohesion and flexibility

had large positive correlations with the validation scales (range = .89 to .99), while the FACES-IV scales designed to measure the low extreme of cohesion and the high extreme of flexibility (Disengaged and Chaotic) had large negative correlations with the validation scales (range = -.67 to -.93). The Enmeshed and Rigid scales had relatively low correlation with the validating scales (range = -.11 to -.31). Discriminant analysis of the FACES-IV scales revealed the ability to distinguish between problematic and non-problematic family functioning as measured and determined by validation scales.

The Communication scale contains ten items such as "Family members can calmly discuss problems with each other" (item 47) and "Family members discuss their ideas and beliefs with each other" (item 48). Scoring procedures for the communication scales are similar to the other six scales of the FACES-IV in that participants rate each item on the 5-point Likert scale, and one adds item ratings together for a raw score. Raw scores can range from 10-50 and can be converted to percentile scores ranging from 10 to 99. The mean Family Communication score is 36.2 with a standard deviation of 9.0. The administration manual lists the alpha reliability of .90 and test-retest reliability of .86.

Scoring is effected via an Excel (Microsoft) spreadsheet created by the authors, and available (on the FACES IV website www.facesiv.com) to registered users of the instrument. However, for this study I did not use the scoring outlined in the manual. At the time that I prepared this section of the proposal, the representatives of the FACES IV had changed the formula for calculating the Dimension scores and were considering changing that formula again. The statistician on the dissertation committee suggested that the following calculation better meets the needs of this study (D. Rindskopf, personal communication, April 9, 2008). For each scale I used the following scores in the

analyses: For the Cohesion scale I created a difference score based on the actual rating of each item and calculated in the following manner. I summed all of the ratings on the Balanced Cohesion scale and divided by 7 (number of items in the scale) to create the average. I subtracted from that the average of the scores on the Disengaged and Enmeshed Scales, the sum of all of the item ratings divided by 14 (number of items in the scales). For the Flexibility scale, I also created a difference score in a similar manner. I summed all of the ratings on the Balanced Flexibility scale and divide by 7 (number of items in that scale) to create the average. I subtracted from that the average of the scores on the Rigid and Chaotic Scales, the sum of all of the item ratings divided by 14 (number of items in those scales). For the Communication scale I calculated the average rating from the 10 items on that scale. Negative values on the Cohesion and Flexibility scales of the FACES-IV represent poor family functioning, a zero score indicates mixed functioning, while positive values indicate balanced or positive functioning. For the Communication Scale of the FACES IV, a lower score indicates poor family communication while a higher score indicates better family communication.

The Revised Moral Authority Scale (MAS-R; White, 1997). White designed the MAS-R to measure the attributed level of influence of different sources of moral authority in moral decision making. The scale consists of six brief moral questions, such as "Should people who break the law be punished?" After each question the respondent circles one of the following answer choices: Yes, No, or Cannot Decide. In addition the MAS-R asks respondents why they answered in the way that they did and encourages them to provide a short written response. Each of the six stimulus questions are followed by five statements designed to exemplify a different source of moral authority: Family,

Educators, Self-Interest, Society's Welfare (Society), or Equality. An example of statements relating to the Family source is as follows, “My family’s beliefs and expectations about certain laws have ___ on my opinion.” For each moral issue, after respondents write down their decisions, they rate the level of influence each of five source statements has on their moral decision on an 11-point scale ranging from 0 (no influence) to 10 (powerful influence). Each source represents its own subscale. One calculates a subscale score for each source by summing the rating on that source from each of the six moral issues. Subscale scores can range from 0 to 60. For the data analysis, I found the mean of each subscale/source score and used that in the analysis. The MAS-R was administered to determine sources of influence on adolescent moral thought. The rating for each of its scales indicates level of influence ascribed to that source/scale. A lower score represents less influence ascribed to that source while a higher score indicates greater influence ascribed to that source.

According to White (1997), the five subscales of the MAS-R have internal consistency ranging from .95 to .98 and test- retest reliability ranging from .75 to .93. She established convergent validity through the use of other measures of moral judgment. While the significant (although not strong) correlations between two of the MAS-R subscale scores and Rest’s (1979) Defining Issues Test(DIT) stage scores suggest some common variance, the majority of the MAS-R subscales did not correlate with the DIT scores, indicating that the two tests are measuring two related yet distinct moral constructs. Discriminant validity of the MAS-R was strongly supported by its ability to distinguish individuals claiming Right wing, Left wing, or none, with regard to political affiliation. In addition, the MAS-R discriminated between respondents with different

religious affiliations. The analyses in the current study used the mean of each subscale score. Appendix E gives the MAS-R.

Adolescent Questionnaire. The Adolescent Questionnaire (see Appendix F), a self-report questionnaire developed for this study, was used to gather demographic information, estimate the socioeconomic status (SES) of the participants, as well as to collect other information relevant to the research. The questions pertaining to demographic information required the respondents to answer questions about their own age, gender, grade in school, ethnicity, religious affiliation, level of religious participation, as well as special education services. I used responses to these questions in the analyses to determine if any of these characteristics correlated with family process variables, as measured by the FACES IV on adolescent moral development as measured by the MAS-R. In addition, responses determined the demographic characteristics of the sample as well. There is one question that asked the participants if they qualified for free or reduced price meals at school. If participants indicated that they indeed qualified for either free or reduced meals at school, then they were considered low SES. Although this is an unrefined measure of SES, others (Espelage, Bosworth, & Simon, 2001) have used such measures when estimating SES in school populations. [In addition, The Hollingshead Index (1975), a measure of socioeconomic status that researchers have widely used in the past, and according to Gottfried (1985), is a highly reliable and valid measure of socioeconomic status, is somewhat outdated. Professions have come into existence since its initial use and their status cannot be estimated based on the categories established by the Hollingshead. Thus, I chose to look at school lunch as a socioeconomic indicator.] One more question asked students to indicate the number of hours per week

involved in extracurricular activities at school or in the community. I used the response to this question along with other information from school records to determine the influence of ascribed sources of moral authority on student behavior.

Records review. In order to obtain participants' record of attendance and record of discipline, a school staff member retrieved the information from student records and recorded the following: the total number of unexcused absences, and the total number of discipline referrals for the semester in which the student completed the survey. I used attendance and discipline information as outcome variables when examining the influence of the various sources of moral authority.

General Procedure

After students returned parent consent forms and student assent forms to the Guidance Office, I sent notes to those students indicating the time and place to complete the questionnaires. Groups of 20 students completed the surveys in the Main Cafeteria at 3 p.m., at the conclusion of the school day. As students arrived on the designated days, they signed their names on a roster with designated numbers. The number next to each name was the same number on the packet of questionnaires that the participant completed. Students received the questionnaires in booklet form with the order of instruments counterbalanced. The instruments took between 20 and 40 minutes to complete. When students completed and returned the instruments, I gave them a $10 gift-card to a local store. The last group of participants, 26 students, received a $20 gift card to a local store. Students who received the $20 gift card responded similarly on the inventories to the students who received the $10 gift card with the exception of the Family Source scale of the MAS-R. Students who received the larger gift ascribed more

influence to the Family Source than students who received a smaller gift. (See Appendix H for means and standard deviations).

Research Design and Analysis

According to Cohen's (1992) recommendation, assuming a medium effect size and power of .8, a minimum of 76 subjects are required to achieve significance at the $p < .05$ level, with three predictor variables, and 91 participants are required to achieve a medium effect size at the $p < .05$ level with five predictor variables. This sample consists of 82 participants. For the linear regression analyses, there were three predictor variables. For the logistic regression, there were five predictor variables. The sample size obtained was sufficient for the linear regression analyses and close to sufficient for the logistic regression analyses.

Analysis plan. Descriptive statistics in forms of means and standard deviations were computed for continuous variables such as ratings from FACES IV and MAS-R. Frequencies were computed for all categorical variables such as gender, grade in school, SES, special education classification, ethnicity, religious attendance, participation in extracurricular activities, disciplinary referrals, and unexcused absences.

I explored distributions of all major study variables using graphical summaries (histograms and box-and-whisker plots) as well as measures of normality such as skewness and kurtosis. Next, I calculated bi-variate Pearson correlations and Point biserial correlations for the study variables. To assess whether outcome variables differed across baseline covariates, I ran multivariate analyses of variance (MANOVAs) for the 5 continuous outcome variables, and Chi square tests for the binary outcome variables. Variables that significantly contributed to differences in outcome variables were used as

covariates in the regression analyses. To address Hypotheses 1-5, I used a multivariate multiple linear regression analysis, to adjust for five repeated comparisons, where the MAS-R subscale scores were regressed on three measures of family functioning controlling for demographic variables such as ethnicity, SES, and religious attendance.

To address hypotheses 6-8, three logistic regressions were performed to predict school attendance, disciplinary referrals and participation in extracurricular activities from the MAS-R scales controlling for demographic variables such as ethnicity, SES, and religious attendance.

Chapter IV

Results

This chapter provides the study results beginning with a presentation of descriptive statistics, intercorrelations among variables, and effects of the baseline covariates on the outcome variables. Following this is a presentation of hypotheses testing using multivariate multiple linear regression and Logistic regression analyses.

Descriptive Statistics

The study's main variables were family process variables, namely cohesion, flexibility, and communication as measured by the FACES IV, the MAS-R ascribed sources of influence, and school-related behaviors. For hypotheses 1-5, the dependent variable in these analyses were ratings on the five MAS-R Source scales, while the independent variable was the scores on the three scale of the FACES IV. Table 1 summarizes descriptive statistics for the FACES IV and MAS-R study measures. In this sample, it appears that based on the scoring employed for the analysis, on average participants' families were well functioning as indicated by the positive mean values on the Cohesion (M = 1.27, SD = 1.16) and Flexibility (M = .69, SD = 1.04) Scales. Families also had positive communication, with the mean of 3.37 (SD = .79). Distributions of Cohesion, Flexibility, and Communication were normal, which is indicated by their corresponding skewness and kurtosis statistics (see Table 1).

In this sample, all of the MAS-R ascribed sources had moderate to strong influence on adolescent moral thought as indicated by the means of each source's scale(relative to the range of possible scores, 0-10): the mean was 6.01(SD = 2.19) for

the Family Source, 5.55 (*SD* = 1.84) for Educator, 7.58 (*SD* = 1.00) for Society's Welfare, 8.67 (*SD*= 1.42) for Equality Source, and 7.53 (*SD*= 1.77) for the Self- Interest Source.

Using the *Z* scores to evaluate normality, the values of skewness and kurtosis statistics showed that two MAS-R variables (Society's Welfare and Equality Sources) were not normally distributed (Table 1). Based on the recommendations for dealing with negatively skewed distributions (Glass & Hopkins, 1996), the following transformations were applied to achieve normality in these two distributions. Specifically, the value of the MAS-R Society's Welfare scale were squared, yielding the value = -0.44(SE = .27) for skewness, and -.042(SE =.53)for kurtosis statistics. The MAS- R Equality Source scores were exponentiated with the resulting values of 0.36 (SE = .266) for skewness and -1.08 (SE = .53) for kurtosis. Subsequent regression analyses were run on both transformed and not transformed Society's Welfare and Equality Source scores.

For hypotheses 6-8 (Logistic regressions), the following school related behaviors were the dependent variable: disciplinary referrals, unexcused absences, and participation in extra-curricular activities, while ratings on the MAS-R scales were the independent variables. Given the limited range for the outcomes of the dependent variable, it was suggested (personal communication, D. Rindskopf, April 9, 2008) that these variables be dichotomized. As such, the following were analyzed. For disciplinary referrals, 71 students (86.6%) had no disciplinary referrals recorded in their file, while 11 students (13.4%) did. For unexcused absences, 47 students (57.3%) had no unexcused absences in their record while 35 students (42.7%) did, and for participation in extra -curricular activities, 61 students (74.4%) participated in such activities, 21 (25.6%) did not.

Table 1

Summary of Means, Standard Deviations, Ranges, Skewness and Kurtosis for FACES IV and MAS-R Scores

Variable	Mean	Standard Deviation	Range	Skewness[a] (Z)	Kurtosis[b] (Z)
Cohesion (FACES IV)	1.27	1.16	-1.00 - 3.43	-.07(-.26)	-1.05(-1.98)
Flexibility (FACES IV)	.69	1.04	-3.00 - 3.21	-.46(-1.70)	-1.15(-2.17)
Communication (FACES IV)	3.37	.79	1.50 - 5.00	-.36(-1.33)	-.30(.57)
Family Source (MAS-R)	6.01	2.19	0.00 - 10.00	-.64(2.37)	.22(.41)
Educator Source (MAS-R)	5.55	1.84	0.33 - 10.00	-.16(-.59)	-.11(-.21)
Society's Welfare Source (MAS-R)	7.58	1.74	1.00 - 10.00	-1.25(-4.63)	2.01(3.79)
Equality Source (MAS-R)	8.67	1.42	2.80 - 10.00	-2.13(-7.89)	5.36(10.11)

Table 1 (continued)

Summary of Means, Standard Deviations, Ranges, Skewness and Kurtosis for FACES IV and MAS-R Scores

Variable	Mean	Standard Deviation	Range	Skewness[a] (*Z*)	Kurtosis[b] (*Z*)
Self Interest Source (MAS-R)	7.53	1.77	2.67 - 10.00	-.69(-2.55)	.06(.11)

Note. $N = 83$

[a]*SE* for Skewness = .27, [b]*SE* for Kurtosis = .53 *Z* scores exceeding 1.96 for both values were significant.

Correlations

Table 2 summarizes pair-wise Pearson correlations between the three FACES IV scales and the five ascribed sources of moral authority of the MAS-R. The MAS-R Family Source scale was correlated significantly with the Cohesion, Flexibility, and Communication Scales of the FACES IV. The Educator Source was correlated significantly with Flexibility and Communication scales; Society's Welfare was correlated significantly with Cohesion and Flexibility; Equality Source was correlated significantly with Cohesion, Flexibility, and Communication; and the Self Interest Source was correlated significantly with Cohesion.

Table 2

Summary of Pearson Correlations for Continuous Outcome Variables

	Comm FACES IV	Cohesion FACES IV	Flex. FACES IV	Family MAS-R	Educ MAS-R	Soc Wlf MAS-R	Equ MAS-R
Cohesion FACES IV	.741**						
Flexibility FACES IV	.735**	.760**					
Family Source MAS-R	.508**	.434**	.515**				
Educator Source MAS-R	.309**	.190	.311**	.723**			
Society's Welfare Source MAS-R	.192	.294**	.217*	.360**	.462**		
Equality Source MAS-R	.220*	.379**	.233*	.320**	.329**	.609**	
Self Interest Source MAS-R	.158	.248*	.152	.331**	.505**	.780**	.606**

*p< 0.05 level, 2-tailed. **p< 0.01 level, 2-tailed.

Table 3 presents point biserial correlations between the MAS-R subscales and the dichotomized outcome variables: disciplinary referrals, unexcused absences, and participation in extra-curricular activities. The Society's Welfare source was weakly but significantly correlated with disciplinary referrals in the expected negative direction. Similarly, the Self-Interest source was weakly and significantly correlated with disciplinary referrals in the negative direction.

Table 3

Summary of Point Biserial Correlations for Study Outcome Variables: Disciplinary Referrals, Unexcused Absences, Participation in Extra Curricular Activities, and MAS-R Scores

	Disciplinary Referrals[a]	Unexcused Absences[a]	Extra Curricular Participation[a]
Unexcused Absences	.160		
Extra Curricular	.064	-.162	
Family Source MAS-R	-.099	.170	.189
Educator Source MAS-R	-.177	.056	.098
Society's Welfare Source MAS-R	-.340**	-.133	.197
Equality Source MAS-R	-.197	-.056	.195
Self Interest Source MAS-R	-.275*	-.117	.031

Scored as yes/no (1/0)

*p< 0.05 level, 2-tailed. **p< 0.01 level, 2-tailed.

Effects of Baseline Covariates on Outcomes

I examined possible differences in outcomes variables (MAS-R, unexcused absences, disciplinary referrals, and participation in extra-curricular activities) across different levels of baseline covariates such as gender (male/female), SES (low and high), ethnicity, (Caucasian, Asian, Hispanic, and Other), grade level (9, 10, 11, 12), and level of religious attendance (weekly, monthly, yearly, and never).

A series of multivariate analyses of variance (MANOVAs) found no statistically significant differences were found on any of the MAS-R scales for gender (Wilk's Lambda = .973, $F(5,76) = 1.03$, $p = .406$) and grade level (Wilk's Lambda = .806, F (15, 204.683) = 1.108, $p = .351$). For ethnicity, there was marginal significance for the MAS-R Society's Welfare Source scale (F (3,78) = 2.165; $p = .099$). Post -hoc Tukey comparisons demonstrated that means for Caucasian and Hispanic ($p = .110$) and Asian and Hispanic ($p = .198$) were the most pronounced. Table 4 presents means of subscales for each ethnic group. To control for the possible effects of ethnicity, a binary variable (Hispanic vs. not Hispanic) was created.

Table 4

Means and Standard Deviations of MAS-R Scales Across Ethnic Groups

Ethnicity	Family	Educator	Society's Welfare	Equality	Self Interest
	MAS-R	MAS-R	MAS-R	MAS-R	MAS-R
	M(SD)	*M(SD)*	*M(SD)*	*M(SD)*	*M(SD)*
Caucasian	6.00	5.36	8.12	9.21	8.00
n=18	(2.36)	(1.95)	(1.33)	(0.84)	(1.60)
Asian	5.95	5.43	7.93	8.90	7.86
n= 21	(1.87)	(1.51)	(1.31)	(1.09)	(1.38)
Hispanic	6.26	5.70	6.93	8.32	7.20
n =26	(2.17)	(1.85)	(2.00)	(1.74)	(2.05)
Other	5.71	5.67	7.55	8.36	7.13
n = 17	(2.55)	(2.19)	(1.98)	(1.59)	(1.85)

Statistical differences were also found between low SES and high SES groups on the MAS-R Society's Welfare Source scores. (F (1,79) = 6.506, p = .013; See Table 5 for means and standard deviations).

Table 5

Means and Standard Deviations MAS-R Scales Across SES

SES	Family MAS-R *M*(*SD*)	Educator MAS-R *M*(*SD*)	Society's Welfare MAS-R *M*(*SD*)	Equality MAS-R *M*(*SD*)	Self Interest MAS-R *M*(*SD*)
High $n = 58$	6.03 (2.14)	5.46(1.81)	7.87(1.52)	8.82(1.28)	7.70(1.51)
Low $n = 23$	5.89(2.38)	5.67(1.92)	6.80(2.07)	8.29(1.72)	7.05(2.28)

With regard to the effect of religious attendance on MAS-R scales, statistical differences were found for three MAS-R scales: Family Source (F (3,77) = 3.041, p =.03), Society's Welfare (F(3,77) = 3.418, p =.02), and Self Interest (F (3,77) = 3.131, p =.03; See Table 6 for means). Post- hoc Tukey comparisons yielded several following pair-wise differences. Specifically, on the Family Source scale, weekly attendees indicated higher ratings than those who never attended religious services (p = .02). On the Social Welfare Source, monthly attendees indicated lower ratings than all other groups (weekly, p = .04; yearly, p = .02; and never, p = .05). On the Self Interest Source, those who attended services on a monthly basis indicated lower ratings than those who never attended religious services (p = .02). Subsequently, religious attendance was controlled for in the regression models.

Table 6

Means and Standard Deviations for MAS-R Scales across Levels of Religious Attendance

	Family Source *M*(*SD*)	Educator Source *M*(*SD*)	Society's Welfare Source *M*(*SD*)	Equality Source *M*(*SD*)	Self Interest Source *M*(*SD*)
Weekly (*n* = 36)	6.49(1.87)	5.69 (1.81)	7.65(1.51)	8.74 (1.36)	7.44(1.56)
Monthly (*n*=11)	5.80(2.47)	5.29(0.66)	6.11(2.42)	8.38 (1.80)	6.35 (2.25)
Yearly (*n*=20)	6.24(2.09)	2.05(0.46)	8.00 (1.54)	8.75 (1.61)	7.66(1.77)
Never (*n*=14)	4.52(2.47)	4.80(1.20)	7.87(1.58)	8.53 (1.02)	8.44 (1.50)

Chi square and Fisher exact tests were computed to determine if there are any associations between demographic variables and the three categorical outcome variables: Unexcused Absences, Disciplinary Referrals, and Participation in Extra Curricular Activities. There were no differences for gender (for disciplinary referral χ^2 (1) = .896, *p*= .34; for unexcused absences χ^2 (1) = .455, *p* = .50; for participation in extracurricular activity χ^2 (1) = .132, *p* = .72), ethnicity (for disciplinary referrals, Fisher exact test *p* = .27; for unexcused absences χ^2 (3) = 2.876, *p* = .42; for participation in extra-curricular activities χ^2 (3) = .548, *p* = .91) and grade level (for disciplinary referrals χ^2 (3) = 1.172 ,

p = .76; for unexcused absences χ^2 (3) = .431, p =.93; for participation in extracurricular activities χ^2 (3) = 2.462, p = .48). Differences were found between low SES and high SES groups on the frequencies of Disciplinary Referrals (χ^2 (1) = 4.281, p = .04, but not for unexcused absences χ^2 (1) = 1.052, p = .31) and participation in extra -curricular activities (χ^2 (1) = 1.312, p =.25; see Table 7).

Table 7

Distribution of Disciplinary Referral across Low and High SES Groups

	Number of High SES	Number of Low SES
Disciplinary Referrals No	53 (91.4%)	17 (73.9%)
Disciplinary Referrals Yes	5 (8.6%)	6 (26.1%)

Similarly, there were differences in rates of disciplinary referrals across different levels of religious attendance (χ^2 (3) = 7.565, p = .06) Specifically, there were differences between those who attended services on a weekly basis and everyone else (χ^2 (1) = 6.251, p = .01), with the weekly attendees reporting fewer disciplinary referrals (Table 8). No differences were found with regard to unexcused absences (χ^2 (3) = 1.003, p = .80) and participation in extra-curricular activities (χ^2 (3) = 1.472, p = .70).

Table 8

Distribution of Disciplinary Referrals Across Weekly Religious Attendance and Non Weekly Attendance Groups

	Weekly Attendance No	Weekly Attendance Yes
Disciplinary Referral No	36 (78.3%)	35 (97.2%)
Disciplinary Referral Yes	10 (21.7%)	1 (2.8%)

To control for the effects of SES, ethnicity (Hispanic/ non Hispanic), and religious attendance, these variables were included as covariates in the linear regression models for Hypotheses 1 through 5 and in the binary logistic regression models for hypotheses 6 through 8.

Hypothesis 1

To evaluate whether individuals with higher FACES IV Cohesion, Flexibility, and Communication scores exhibited higher scores on the Family Source scale of the MAS-R, multiple linear regression was performed. Based on regression parameters summarized in Table 9, individuals with higher values on the Flexibility (p = .02) and Communication Scales (p = .04) exhibited significantly higher scores on the Family Source scale of the MAS-R, while controlling for the effects of SES, ethnicity, religious attendance, gift received.

Table 9

Results of Multiple Linear Regression Analysis for the MAS-R Family Source

Predictors	Parameters	Standard Error	*t*-value	*p*-value
Intercept	2.843	1.272	2.235	.029
Cohesion	-.289	.313	-.923	.359
Flexibility	.782	.341	2.295	.025
Communication	.877	.435	2.017	.048
Hispanic	.078	.483	.161	.872
SES low	-.054	.505	-.107	.915
Monthly religious attendance	-.495	.647	-.765	.447
Yearly Religious Attendance	.584	.537	1.089	.280
Religious Attendance Never	-1.439	.587	-2.451	.017
Gift $20	.576	.463	1.243	.218

Hypothesis 2

To evaluate whether individuals with higher FACES IV Cohesion, Flexibility, and Communication scores exhibited higher scores on the Educator Source scale of the MAS-R, multiple linear regression was performed. The second hypothesis addressing the relationship between the Cohesion, Flexibility, and Communication scales of the FACES

IV and the Educator Source scale of the MAS-R was not supported. No significant relationship was detected in the regression model. (see Table 10)

Table 10

Results of Multiple Linear Regression Analysis for the MAS-R Educator Source

Predictors	Parameters	Standard Error	*t*-value	*p*-value
Intercept	3.351	1.178	2.844	.0006
Cohesion	-.362	.292	-1.238	.219
Flexibility	.472	.320	1.474	.145
Communication	.672	.409	1.645	.104
Hispanic	-.024	.453	-.054	.957
SES low	.154	.466	.330	.742

Hypothesis 3

To evaluate whether individuals with higher FACES IV Cohesion, Flexibility, and Communication scores exhibited higher scores on the Self- Interest Source scale of the MAS-R, multiple linear regression was performed. The third hypothesis addressing the relationship between the Cohesion, Flexibility, and Communication scales of the FACES IV and the Self Interest scale of the MAS-R was not supported. No significant relationship was detected in the regression model. (see Table 11)

Table 11

Results of Multiple Linear Regression Analysis for the MAS-R Self-Interest Source

Predictors	Parameters	Standard Error	*t*-value	*p*-value
Intercept	6.413	1.166	5.499	.000
Cohesion	-.386	.287	1.344	.183
Flexibility	-.124	.312	-.396	.693
Communication	.220	.397	.554	.581
Hispanic	-.498	.437	-1.138	.259
SES low	-.317	.461	-.687	.494
Monthly religious attendance	-.899	.592	-1.519	.133
Yearly Religious Attendance	.309	.492	.628	.532
Religious Attendance Never	1.397	.538	2.598	.011

Hypothesis 4

To evaluate whether individuals with higher FACES IV Cohesion, Flexibility, and Communication scores exhibited higher scores on the Society's Welfare Source scale of the MAS-R, multiple linear regression was performed. The fourth hypothesis addressing the relationship between the Cohesion, Flexibility, and Communication scales of the FACES IV and the Society's Welfare Source scale of the MAS-R was not

supported. No significant relationship was detected in the regression model. (see Table 12)

Table 12

Results of Multiple Linear Regression Analysis for the MAS-R Society's Welfare Source

Predictors	Parameters	Standard Error	*t*-value	*p*-value
Intercept	6.779	1.093	6.202	.000
Cohesion	.207	.269	.770	.444
Flexibility	.1535	.293	.523	.602
Communication	.237	.410	.638	.526
Hispanic	-.939	.432	-2.290	.025
SES low	-.491	.505	-1.134	.260
Monthly religious attendance	-1.357	.555	-2.444	.017
Yearly Religious Attendance	.527	.461	1.143	.257
Religious Attendance Never	.665	.504	1.319	.191

Hypothesis 5

The fifth hypothesis addressing the relationship between the Cohesion, Flexibility, and Communication scales of the FACES IV and the Equality Source scale of the MAS-R was indeed supported. Based on the regression parameters summarized in Table 13, individuals with higher values on the Cohesion (p=.01) scale exhibited

significantly higher scores on the MAS-R Equality Source while controlling for the effects of SES, and ethnicity. Testing the hypothesis with a transformed outcome yielded identical results. (The *t*-value for cohesion was 2.903, $p < .05$).

Table 13

Results of Multiple Linear Regression Analysis for the MAS-R Equality Source

Predictors	Parameters	Standard Error	t-value	p-value
Intercept	8.670	.887	9.778	.000
Cohesion	.569	.220	2.586	.012
Flexibility	-.067	.241	-.279	.781
Communication	-.140	.307	-.455	.650
Hispanic	-.376	.341	-1.101	.275
SES low	-.277	.351	-.788	.433

Hypothesis 6

Hypothesis 6 examined the relationship between the Family, Educators, Self Interest, Society's Welfare, and Equality Source Scales of the MAS-R and the probability of having unexcused absences. Based on the results of the logistic regression, no relationship was found between Family, Educators, Self Interest, Society's Welfare, and Equality Source scales of the MAS-R and the probability of unexcused absences.

Table 14

Results of Logistic Regression Analysis for Probability of Unexcused Absences

	B	Standard Error	p value	Exp (B)
Constant	. 660	1.854	.722	1. 208
Family Source	.189	.257	.462	1.422
Educator Source	-.283	.331	.437	.788
Society's Welfare Source	-.381	.309	.217	.683
Equality Source	.002	.267	.994	1.002
Self Interest Source	-.014	.339	.968	.986
SES low	1.048	. 768	.173	2.851

Hypothesis 7

Hypothesis 7 examined the relationship between the Family, Educators, Self Interest, Society, and Equality Source Scales of the MAS-R and the probability having reported disciplinary referrals. Based on the results of the logistic regression, no significant relationship was found between Source scales of the MAS-R and the probability of reported disciplinary referrals.

Table 15

Results of Logistic Regression Analysis for Probability of Reported Disciplinary Referrals

	B	Standard Error	p value	Exp (B)
Constant	.586	2.297	.799	1.797
Family Source	.352	.291	.227	1.422
Educator Source	-.405	.344	.239	.667
Society's Welfare Source	-.361	.354	.307	.697
Equality Source	.149	.339	.661	1.160
Self Interest Source	-.118	.352	.738	.889
SES low	1.206	.887	.174	3.340
Weekly religious attendance	-2.654	1.197	.027	.070

Hypothesis 8

Hypothesis 8 examined the relationship between the Family, Educators, Self Interest, Society, and Equality Source Scales of the MAS-R and the probability of being involved in extra-curricular activities. Based on the regression parameter summarized in Table 16 those with higher scores on the Society's Welfare Source were more likely to be

involved in extra- curricular activities (p = .07), whereas those with higher Self Interest Source Scores were less likely to be involved in the same activities (p = .05).

Table 16

Results of Logistic Regression Analysis for Probability of Participating in Extra Curricular Activities

	B	Standard Error	Sig.	Exp (B)
Constant	-1.535	1.602	.338	.216
Family Source	.151	.175	.387	1.163
Educator Source	-.030	.242	.902	.971
Society's Welfare Source	.496	.277	.074	1.643
Equality Source	.331	.245	.177	1.393
Self Interest Source	-.604	.308	.050	.547
SES low	-2.89	.619	.641	.749

Table 17

Summary of Hypothesis Testing

Hypothesis	Dependent Variable	Independent Variables	Result
1	Family Source MAS-R	FACES IV scales Cohesion, Flexibility, Communication	Supported for Flexibility and Communication
2	Educator Source MAS-R	FACES IV scales Cohesion, Flexibility, Communication	Not supported
3	Self Interest Source MAS-R	FACES IV scales Cohesion, Flexibility, Communication	Not supported
4	Society's Welfare MAS-R	FACES IV scales Cohesion, Flexibility, Communication	Not supported
5	Equality Source MAS-R	FACES IV scales Cohesion, Flexibility, Communication	Supported for Cohesion
6	Probability of Unexcused Absences	MAS-R Sources: Family, Educators, Self-Interest, Society's Welfare, and Equality	Not supported
7	Probability of Unexcused Absences	MAS-R Sources: Family, Educators, Self-Interest, Society's Welfare, and Equality	Not supported
8	Probability of participating in extra-curricular activities	MAS-R Sources: Family, Educators, Self-Interest, Society's Welfare, and Equality	Significant for Society's Welfare and Self -Interest

In summary, there were two broad questions under investigation. First, do family process variables (cohesion, flexibility, and communication) have predictive value for ascribed sources of influence on adolescent thought? In other words, does knowing about family interaction patterns as perceived by adolescents, let us know who or what influences their thinking and reasoning about moral issues? The answer to this question is

yes, but with qualifications. Based on the results discussed above, individuals who demonstrated higher scores on the flexibility and communication scales of the FACES IV exhibited higher scores on the Family Source scale of the MAS-R. In addition, individuals who demonstrated higher scores on the cohesion scale of the FACES IV exhibited higher scores on the Equality Source scale of the MAS-R. This means that adolescents who perceive their overall experience within the family as positive said that they tended to rely on their families' beliefs and values, as well as the idea that all things are created equal and should be given equal opportunities when making decisions about moral issues.

The second question asked the following. Do ascribed sources of moral influence (Family, Educators, Self-Interest, Society's Welfare, and Equality Sources) have predictive value for adolescents' school related-behavior? This means, if we know who or what influences adolescents' thinking, do we have any idea if that impacts their behavior as it relates to unexcused absences, disciplinary referrals and participation in extra-curricular activities. The answer to this question is yes as it relates to participation in extra-curricular activities. Those adolescents who indicated higher ratings on Society's Welfare source had a higher probability of being involved in extra-curricular activities, while those who indicated higher ratings on the Self-Interest Source had a lower probability of being involved in extra-curricular activities. This means that adolescents who are indicated that they are influenced by the idea that people should try to make society a better place were more likely to be involved in extracurricular activities. In addition, those adolescents who indicated that they are influenced by ideas that satisfy their own interest were less likely to be involved in extracurricular activities.

Chapter V

Discussion

This chapter discusses the implications of the results obtained from the hypotheses testing and presents potential reasons for the findings and limitations of the study as well as educational implications for those working with adolescents. Suggestions for future research are put forth.

This study examined whether family process variables such as cohesion, flexibility, and communication were associated with ascribed sources of influence on adolescent moral thought. This study also examined whether ascribed sources of influence on adolescent moral thought are associated with school-related behaviors such as unexcused absences, disciplinary referrals, and participation in extra-curricular activities. The current study supported and extended existing research on adolescent moral development by examining adolescent moral development from White's (1996a) Family Socialization Model and its relationship with adolescent behavior.

Family Process Variables and Sources of Moral Authority

White (1996a) proposed a Family Socialization Model of Adolescent Moral Development in which she speculated that parents regulate their adolescents' exposure to sources of influence outside the family and in addition provide opportunities and experiences both inside and out of the family. These opportunities and experiences would in turn influence adolescents' thoughts as they pertain to moral issues. White measured influence on moral thought using the revised Moral Authority Scale (MAS-R; White, 1997), a self-report measure that assesses five ascribed sources of influence, or moral authority. Using family process variables, cohesion, and flexibility from Olson's (1983)

Model of Marital and Family Systems to assess family functioning and predict influence on adolescent moral thought, White made the following predictions. Among adolescents who rated their families as cohesive, the Family Source on the MAS-R would be a significant source of influence. Indeed this hypothesis was supported by White et al.'s (2000) study. However, this particular finding was not supported in the current study. In this case, adolescents who endorsed higher ratings on the Flexibility and Communications scales on the FACES IV had significantly higher scores on the Family Source of the MAS-R, indicating that family process variables such as flexibility and communication were significant in terms of influence on adolescent moral thought. It is also important to keep in mind that in this sample, analyses revealed strong correlations among the FACES IV scales. Even though family Cohesion was not directly linked to influence on the Family Source, it was highly correlated with Flexibility and Communication.

It is interesting to note that Cohesion was significant in predicting ascribed influence on the Equality Source. This finding was reported by White (2000; White et al. 2000) as well. Thus adolescents who endorsed higher ratings on the family Cohesion Scale had significantly higher scores on the Equality Source of the MAS-R. This finding supports White's (1996a) notion that parents who allow their adolescents to have experiences outside the family would be influenced by the idea that "all people are born equal and should be respected" (MAS-R Equality Source; White 1997, p. 3). In this particular study, the hypotheses relating family process variables to the Educator, Self-interest, and Society's Welfare Sources, however, did not yield significant outcomes.

Overall, each family process variable was significant for at least one ascribed source of influence on adolescent moral thought, including the Family Source, however, not to the extent that was anticipated. Family cohesion had predictive value for the Equality Source of the MAS-R, and Flexibility and Communication had predictive value for the Family Source of the MAS-R. The family process variables were not predictive of the other ascribed sources of influence. In other words, this is what we know about family interaction patterns as perceived by adolescents and their influence on moral reasoning. Adolescents who perceived their family as cohesive said that they tended to rely on the idea that all things are created equal and that people should be given equal opportunities, when making decisions about moral issues. Adolescents who perceived their family as flexible with positive communication tended to rely on their families' beliefs and values when making decisions about moral issues. Relationships between family interaction patterns and other sources of moral authority were not supported in the present investigation.

Sources of Moral Authority and Student Behavior

In order to extend White et al.'s (2000) work and to find relevance for the practice of school psychology, this study examined the relationship between participants' ascribed sources of moral authority and their school-related behavior. Are sources of moral influence related to unexcused absences, disciplinary referrals, and participation in extra-curricular activities? This study found that students with higher scores on the Society's Welfare Source were more likely to be involved in extra-curricular activities, while those with higher scores on the Self-Interest Source were less likely to be involved in the same activities. Logical reasoning would support these statistically significant findings. If one's

thoughts are influenced by the importance of making society a better place (Society's Welfare Scale, White, 1997) then it should be likely that one would be involved in activities that have the potential to benefit their society. Similarly, if one's thoughts are influenced by satisfying one's own needs, it should be likely that that individual would be less likely to be involved in activities that benefit society.

In the current investigation students were not asked to differentiate or itemize types of extracurricular activities that they participated in. Among those who indeed participated, the range of activities could include playing on a sports team, being involved in the school newspaper or student council, and volunteer work. One may argue that playing on a sports team does not relate to Society's Welfare since in all likelihood, the player derives benefit (pleasure, popularity, potential college scholarships) and not Society. However, a counter-argument may be as follows. Participating in team sports may indeed relate to Society's Welfare because team members often speak about playing for others on the team as not to let team members down. Even among teams with poor performance team members display loyalty to each other and support each other regardless of the potential for any personal gain

Ascribed sources of moral authority were not related to disciplinary referrals or unexcused absences. The lack of relationship between sources of moral authority and unexcused absences and disciplinary referrals may have been due to the nature of the outcome variable rather than a true lack of relationship between ascribed sources and student behavior. One may speculate that unexcused absences and disciplinary referrals are variables that reflect a truncated range within the sample. For example, in order for a discipline referral to be recorded, a student has to both commit a particular behavior (for

example, cursing in class or dress code violation) and get caught doing so. It is plausible that many students were in violation of school rules but school personnel did not notice, or gave a verbal warning as opposed to an actual discipline referral. Similarly with unexcused absences, students may be cutting class but teachers may not be taking attendance or students may stay home from school and parents may call in to say that they are sick even if they are well. A relationship between these behaviors and sources of moral authority may actually exist, however, a different measure of these variables should be used. For example, a wider range of scores may be recorded if students were asked to estimate their own rate of unexcused absences or school rules violations as opposed to gathering this data from school records.

Group Differences

In the past, adolescent moral development research has addressed gender differences. In light of the fact that Kohlberg's (1976) research primarily included males and others have raised concern about its compatibility with female moral development (Gilligan, 1982), this dissertation also examined gender differences across MAS-R scales. Consistent with the research cited earlier (Kahan, 1992; Thoma, 1986;Walker, 1989) that suggested that females do not fall behind males in Kohlberg's theory of moral development and that Kohlberg's theory does reflect the moral development of females as well as males, there were no gender differences found for ascribed sources of moral influence.

Additionally, cross-cultural research relating to Kohlberg's theory of moral development indicated differences in reasoning among individuals from non-Western Societies (Vasudev & Hummel, 1987). While all participants in this study were from

Western societies, among Hispanic students, there was a modest but significant difference on the Society's Welfare Source. The Hispanic students tended to rate less influence for the ascribed moral source of Society's Welfare than students from Caucasian or Asian backgrounds. It is difficult to interpret this finding since at this point I do not know if these students are third generation Americans with Hispanic ancestry or recent immigrants. Did exposure to Hispanic culture have an effect on this rating or was living in a Hispanic society contributing to this finding? In either case, more research needs to be done to clarify the cultural influence on sources of moral authority.

Similarly, there was a modest, but significant difference between participants from different socio-economic backgrounds on the Society's Welfare Source. Low SES backgrounds related to less ascribed influence from Society's Welfare Source. It could be that living with the difficulty of economic neediness, or instability, makes it harder to make decisions based on society's welfare when one's own personal welfare is lacking.

Additionally with regard to religious attendance, there were some differences on ratings on Family Source, Society's Welfare Source, and the Self- Interest Source of the MAS-R. Attendance at weekly services related to more ascribed Family influence on moral reasoning. Typically attending religious services is a family activity. This suggests that adolescents who participate in this family activity on a weekly basis felt closer to or share the same values as their family and as result ascribed more influence to the family when making decision. On the Society's Welfare Source, and on the Self-Interest Source those who attended services on a monthly basis had the lowest ratings. These results are somewhat harder to interpret. It is possible that attending religious services on a monthly basis reflects ambivalence about commitment. Committed people attend services weekly,

non-committed attend yearly or never. This middle level of attendance or ambivalence may translate into ambivalence about the Society's Welfare or one's own Self-Interest and their influences on moral decisions.

At this point, we know from this study that family process variables have (limited) predictive value for ascribed sources of moral authority, and thus White's Family Socialization Model can be applied to adolescents from the United States. In terms of the relationship between ascribed sources of influence and behavior, ascribed sources of moral authority have limited predictive value for school-related behaviors addressed in this study. Group differences were examined to investigate variability in ascribed sources of influence. No differences were found for gender. Among Hispanic students, there was a tendency to rate less influence in Society's Welfare Source. Similarly, students from low SES backgrounds ascribed less influence to Society's Welfare source. Additionally, with regard to religious attendance, those attending weekly services attributed more influence to the Family Source while among students who attended services monthly, lower ratings were attributed to Society's Welfare and Self Interest Sources. More research is needed to clarify the impact of socio-cultural variables on ascribed sources of moral influence.

Limitations of the Study

There are several limitations of this study. The findings of this study are limited to the population that corresponded to the sample in terms of demographic information (e.g., age, gender, SES, ethnicity). That is, the external validity of the study will be limited to youth who have similar demographic backgrounds. A limited number of

African American youth were represented in the sample, clearly not reflecting the general population.

In addition, at times, the size of the sample was smaller than what was necessary based on Cohen's (1992) recommendations. A sample size of 76 was needed for three predictor variables in the regression equation. Ultimately though, some of the regression equations had more than three predictor variables, while others had five predictors. That many variables required 91 participants, and this sample was slightly smaller. A larger sample would have been better in order to detect relationships among the variables.

Furthermore, when comparing the family process variables (cohesion, flexibility, and communication) to the MAS-R scales, I was surprised that cohesion was not significant in predicting scores on the Family Source score of the MAS-R. Particularly because in White's (2000, White et al., 2000) studies it was significant in predicting scores on the Family source. White's studies employed the FACES II, an earlier version of the FACES IV. The test developers indicate that more items relating to negative aspects of cohesion and flexibility are included in the FACES IV (Olson et al., 2006). It is possible that the FACES II presents an overly positive (higher) measurement of family process variables than the FACES IV and thus relationships between family cohesion and the Family Source are harder to detect when using the FACES IV. Future studies may want to consider administering both the FACES II and FACES IV and compare the family process variables to the MAS- R subscales.

Finally, when looking at the relationship between ascribed sources of influence on students' school-related behavior, no relationship was detected for unexcused absences and disciplinary referrals. It is important to remember that only a few students did not

participate in extracurricular activities and only a few had disciplinary referrals and unexcused absences. I hypothesized that this lack of relationship may be due to the manner in which the data were collected, that is, student records versus student estimates. Had students been asked to estimate the frequencies of these behaviors, maybe more would have been reported. Future studies should consider asking students for this information. It is also possible that other behaviors are related to ascribed sources of moral authority, but they were not part of the present investigation. Some important topics to consider when working with adolescents involves risky behaviors such as drug and alcohol use, and risky sexual behavior. Ultimately, understanding ascribed sources of influence on risky behaviors can be useful for intervening with students engaged in such behavior.

One may also be critical of the MAS-R scale itself for the lack of relationship between school related behavior such as unexcused absences and disciplinary referrals and ascribed sources of influence. Although the MAS-R prides itself in examining the context of adolescent life in assessing sources of ascribed influence on adolescent thought, the ratings of the sources for the dilemmas posed in the scale may not reflect sources of influence as they pertain to the day-to-day decisions and choices of adolescent life. Future research may consider taking a dilemma from the context of adolescent life, asking adolescents to formulate a response, and then ask adolescents to rate the amount of influence each source of moral authority provides. Results from such an investigation may be quite useful.

Implications for School Psychologist

Results from research relating family factors to sources of influence on adolescent moral thought and behavior should be of great interest for school psychologists. From a service delivery model perspective, school psychologists can be influential and instrumental to many when they engage in primary level interventions. Understanding family factors that contribute to level of influence adolescents ascribe to when making moral decisions can be used in parenting workshops. From this study we know that family cohesion, flexibility, and communication influence to some degree adolescent moral thought. In particular we know that ascribed influence for Family Source and Equality Source can be predicted from family process variables. If school psychologists develop parenting workshops that helps families improve cohesion, flexibility, and communication among its members, it possible that other sources of influence would gain influence.

At the present time, Society's Welfare and the Self- Interest Sources predicted school related behaviors investigated in this study. In particular, those with higher scores on the Self Interest Source score were less likely to be involved in extra-curricular activities, while those with higher scores on the Society's Welfare Source were more likely to be involved in those activities. Those working with students might want to develop activities or curricula in order help students understand and evaluate things from a different perspective in the hopes of encouraging more participation in extra-curricular activities.

From a practical perspective, understanding the ascribed sources of influence on adolescents' moral reasoning can be important information when working with students.

Understanding adolescents' thoughts and reasoning about particular issues can be the first step when the behavior needs to change. For example, adolescents who view drug use as a personal decision were more likely to actually use drugs than adolescents who viewed drug use as a moral decision (Kuther & Higgins-D'Alessandro, 2000). Additionally, middle school students who viewed truancy as a personal issue had higher rates of truancy than students who viewed truancy as a moral issue (Guzman, 2007). Any intervention for these particular groups should attempt to change adolescents' perceptions of risky behaviors from matters of personal choice to matters of morality. Similarly, cognitive–behavior therapy, which provides effective treatment for many adolescent disorders, focuses on modifying adolescents' thoughts and behaviors (Reinecke et al., 2006). In addition, with insight into family process variables that support sources of influence on adolescent moral thought, school psychologists can use this information in their work with families and parents. School psychologists can develop workshops and parenting groups that focus on parenting behaviors and family processes that support optimal adolescent moral thought development. In addition, if school psychologists know which sources of moral authority impact student behavior, they can work to bolster those that have a positive impact and to diminish those that have a negative impact.

Suggestions for Future Research

Traditional adolescent moral development research adopted and implemented Kohlberg's cognitive developmental approach. The breadth and depth of its research spans decades, and continents. White's Family Socialization Model is relatively young and asks more questions than it answers. Talking about the two theories in the same breath can be compared to David facing Goliath. Fortunately, within the realm or

adolescent moral development research, there is no war. One theory is not trying to overtake the other. White's model is trying to understand moral development from the context of adolescent life. During adolescence, adolescents are typically living at home but the experiences at school, with peers, media, and educators are growing in its potential to influence adolescent thinking and decision making particularly, those relating to school behaviors. If everyone in a particular peer group decides to skip a class or skip school one day, it might be very hard for an individual in that group to make a different decision and attend school. Clearly more research with a larger sample relating family processes such as cohesion, flexibility, and communication, to ascribed sources of influence on adolescents is needed to determine if this a useful platform for intervening with families of adolescents. One possibility for future research would use the FACES II and FACES IV as measurements of family process variables. If a stronger relationship is detected between the family process variables as measured by the FACES II as compared to the FACES IV with regard to ascribed sources of moral authority, then the limited findings of this research can be attributed to a artifact of the FACES IV scale rather than a true lack of relationship.

Similarly more research is needed the determine the strength of relationships between the ascribed sources of influence and actual behavior. In particular, students can be asked to rate the frequency of unexcused absences or the frequency of school rule violations that would lead to a disciplinary referral in order to increase the range of scores indicated for this variable. Other behaviors should be examined as well, such as drug use or risky sexual behavior. In addition, one may want to understand ascribed sources of influence on dilemmas or behaviors that relate to the day to day life of

adolescents. Using dilemmas other than those presented in the MAS-R could be investigated. Overall, investigating ascribed sources of influence on adolescent thought and the relationship of those sources of influence on adolescent behavior is a new avenue of research within the realm of adolescent moral development and it should be pursued.

Appendix A

Solicitation Letter to School Superintendent or Principals

My name is Shira Zupnik Hochberg. I am a doctoral student in the Ph.D. Program in the Educational Psychology Program at the City University of New York (CUNY) Graduate School and University Center. I am interested in studying the development of adolescent moral reasoning.

I would like to have permission to ask students in your school to participate in my doctoral dissertation research study and complete questionnaires. These questionnaires will ask about family background and family functioning, demographic information such as age and gender, as well as thoughts pertaining to moral issues. The questionnaires require a 7th grade reading level and I will use that reading level as inclusion criteria into the sample pool. It should take approximately 40 minutes to complete the questionnaires. I would be glad to show you copies of the questionnaires for your review. In addition to the questionnaires, I will be seeking information from students' records regarding the number of unexcused absences and number of disciplinary referrals.

Students who participate will receive a $10 gift card to a local store. The results of my study will not benefit a particular child directly. However, the results may help people understand what different teenagers think about moral issues, and how that relates to school behaviors such as attendance and involvement in extracurricular activities. As an educator, this information may prove to be insightful and useful when working with adolescents. There are no foreseeable risks involved in this study. There will be approximately 100 adolescents participating in this study.

All information that students provide will be used only for my study. It will be kept confidential and stored in a locked file cabinet in my office. Students' responses will be anonymous since participants do not write their names on the questionnaires. Answers will not become part of any permanent record and participation or non-participation will not have any negative consequences. My advisor, Dr. Georgiana Tryon, and I will be the only people who see the responses. I may publish the results of the study in a scientific journal. No names of people or identifying characteristics will be used in what I write.

Research will only begin once I have received approval from CUNY's Institutional Review Board (IRB) as well as from your district/school.

If you might be interested in allowing students to participate or if you have any questions about this research, you can call me at (201) 385-4126 or e-mail me at szupnik@gc.cuny.edu so we can further discuss the matter.

Thank you.

Appendix B

Parental/Guardian Informed Consent for Research Participation (English)

My name is Shira Zupnik Hochberg. I am a doctoral student in the Ph.D. Program in the Educational Psychology Program at the City University of New York (CUNY) Graduate School and University Center. I am interested in studying the development of adolescent moral reasoning. I received permission from _____ (to be determined school or district) to contact you.

I would like to have permission to give your son or daughter some questionnaires to fill out. These questionnaires will ask about his or her family background and family functioning, demographic information such as age and gender, as well as thoughts pertaining to moral issues. Copies of the questionnaires are available at the principal's office if you are interested in reviewing them. It should take approximately 40 minutes to complete the questionnaires. In addition to the questionnaires, I will be seeking information regarding the number of unexcused absences and number of disciplinary referrals indicated in your child's school record. If your child participates, he or she will receive a $10 gift card to a local store. The results of my study will not benefit your child directly. However, the results may help people understand what different teenagers think about moral issues. There are no foreseeable risks involved in this study. There will be approximately 100 adolescents participating in this study. If you would like a summary of the research findings, please provide your address on the back of this page and I will send you a copy when the study is completed.

All information that your son or daughter provides will be used only for my study. It will be kept confidential and stored in a locked file cabinet in my office. Your child's responses will be anonymous since participants do not write their names on the questionnaires. His or her answers will not become part of any permanent record and participation or non-participation will not have any negative consequences. My advisor, Dr. Georgiana Tryon, and I will be the only people who see the responses. I may publish the results of the study in a scientific journal. No names of people or identifying characteristics will be used in what I write.

Your participation is entirely voluntary. Anyone who feels uncomfortable when reading and completing the items on the questionnaires may refuse to participate or withdraw at any time without any negative consequences. No one will be upset if your son or daughter does not participate in the study. Referrals for counseling will be provided if desired.

If you have any questions about this research, you can call me at (201) 244-6411 or e-mail me at szupnik@gc.cuny.edu. You can also call my advisor, Dr. Georgiana Tryon, at (212) 817-8293 or e-mail her at gtryon@gc.cuny.edu. If you any questions about your son's or daughter's rights as a participant in this study, you can contact Kay Powell, IRB Administrator, Graduate School/City University of New York, at (212) 817-7525 or kpowell@gc.cuny.edu.

Thank you for considering permitting your child to participate in this study. Please return this form in the enclosed envelope and keep the copy I have provided for your records.

[ ] I **agree** to let my child _____participate in this study.

_____	_____	_____	_____
Parent/Guardian's Signature	Date	Investigator's Signature	Date

Parental/Guardian Informed Consent for Research Participation (Spanish)

Estimado(s) padre(s) o guardian(es):

Mi nombre es Shira Zupnik Hochberg. Soy una estudiante de doctorado en el Programa de Ph.D. en el Programa de Psicología Educacional en la Escuela de Graduado y Centro Universitario de la Universidad de la Ciudad de Nueva York (CUNY). Estoy interesada en estudiar el desarrollo del razonamiento moral del adolescente. He recibido permiso del Sr. YYY ZZZ, Director del ABC High School para que le contacte.

Procedimientos:
Quisiera que me diera su permiso para darle a su hijo o hija unos cuestionarios para rellenar. Estos cuestionarios contienen preguntas sobre su el funcionamiento de su familia, información demográfica tal como edad y género, así como pensamientos acerca de asuntos morales. Copias de los cuestionarios estarán disponibles en la oficina del Director por si está interesadado/a en revisarlos. Completar los cuestionarios debería de tomarle aproximadamente 40 minutos. Además de los cuestionarios, estaré buscando información sobre el número de ausencias injustificadas y un número de notas disciplinarias que aparecen en el historial escolar de su hijo/a. Si su hijo/a participa, él o ella recibirá una tarjeta de regalo por valor de $10 para una tienda local.

Riesgos y Beneficios:
Los resultados de mi estudio no beneficiarán a su hijo/a directamente. Sin embargo, los resultados podrán ayudar a otras personas a entender la forma particular en que los adolescents piensan en cuanto a asuntos morales. No se anticipa ningún riesgo relacionado con este estudio. Habrá aproximádamente 100 adolescentes que participarán en este estudio. Si quiere recibir un resumen de los resultados de la investigación, por favor provea su dirección en la otroa cara de esta página y yo le enviaré una copia cuando el estudio haya sido completado.

Confidencialidad:
Toda la información que su hijo/a provea será utilizada solo para mi estudio.
Esta información será mantenida confidencialmente y almacenada en un archivo bajo llave, dentro de mi oficina. Las respuestas de su hijo seran anónimas, ya que los participantes no van a escribir sus nombres en los cuestionarios. Sus respuestas no serán parte de ningún historial permanente y su decisión a participar o no, no tendrá ninguna consecuencia negativa. Podría publicar los resultados del estudio en una revista académica. Ni los nombres de las personas ni sus características identificadoras serán usados en lo que escriba.

Su participación es completamente voluntaria. Cualquiera que se sienta incómodo cuando lea o complete las preguntas de los cuestionarios puede negarse a participar o interrumpir en cualquier momento, sin consecuencia alguna que le pueda perjudicar. Nadie se sentirá

molesto si su hijo/a decide no participar en el estudio. Podríamos referirle a un consejero, si así lo desea.

Información de Contacto:
Si tiene alguna pregunta acerca de este estudio, puede llamarme al (201) 244-6411 o escribirme a szupnik@gc.cuny.edu. También puede llamar a mi supervisor, Dr. Georgiana Tryon, en el (212) 817-8293 o por email a la dirección gtryon@gc.cuny.edu. Si tiene preguntas en referencia a los derechos de su hijo/a a participar en este estudio usted puede contactar Kay Powell, Administrador del IRB, Graduate School/City University of New York, en el (212) 817-7525 o kpowell@gc.cuny.edu.

Gracias por considerar darme permiso para que su hijo/a participe en este estudio. Por favor devuelva este formulario en un sobre sellado y guarde la copia que le he dado para su información.

[ ] Acepto permitir que mi hijo/a _____participe en este estudio.

_____	_____	_____	_____
Firma del Padre/Madre o Guardián	Fecha	Firma del Investigador	Fecha

Appendix C

Script for Recruitment of Subjects

My name is Shira Zupnik Hochberg, and I am a doctoral student in the Ph.D. Program in Educational Psychology at the City University of New York (CUNY) Graduate School and University Center. I am interested in studying what teenagers think about moral issues. As part of my study, I would like to ask you to fill out some short questionnaires. These questionnaires will ask about yourself, your family, and your thoughts relating to certain moral issues, and will take about 40 minutes to complete. You will not put your name on any of the questionnaires. Please try to complete all the questions. I would also like to get some information from your school record to know how many unexcused absences and disciplinary referrals you received since school started this year. I will give you a $10 gift card to a local store for participating. The results of my study will not benefit you directly, but they may broaden people's understanding of what and how teenagers think about moral issues.

All information that you give on the questionnaires will be used just for my study. It will be kept confidential, and will be stored in a locked file cabinet in my office. The answers you provide will be anonymous since your name will not be on the questionnaires. It won't become part of your school records. My dissertation adviser, Dr. Georgiana Tryon, and I will be the only ones who see your responses to the questionnaires. I may publish results of the study in a scientific journal. No names of people will be used in what I write. If you would like to read the results of the study when it is complete, I will be happy to send you a copy. If you agree to participate, there will be a place on one of the forms for you to indicate that want to read the results and there will be a place for you to provide your address so that I can mail you a copy.

Your participation is entirely voluntary. You don't have to be in the study and may withdraw from the study at any time without anything bad happening to you. No one will be upset if you withdraw from the study. If you find the questions upsetting or uncomfortable and would like to speak to someone about your discomfort, a referral for counseling will be provided.

If you would like to be part of the study, take these consent forms home for your parents to read and sign. One copy is for them to keep, and the other copy must be brought back to me. Bring one of your signed parent consent forms with you back to school before the meeting date about the study. Do you have any questions?

Appendix D
Assent for Research Participation

My name is Shira Zupnik Hochberg and I am a doctoral student in the Ph.D. program in Educational Psychology at the City University of New York (CUNY) Graduate School and University Center. I am interested in studying what teenagers think about moral issues.

I would like your permission to give you some short questionnaires to fill out. These questionnaires will ask about yourself, your family, and your thoughts relating to certain moral issues. Do not put your name on the questionnaires. They will take about forty minutes to fill out. Please try to complete all items. I would also like to get some information from your school record to know how many unexcused absences and disciplinary referrals you received since school started this year. If you participate, you will receive a $10 gift card to a local store. The results of my study will not benefit you directly, but they may help people understand what teenagers think about moral issues.

All information that you provide will be used only for my study. It will be kept confidential and stored in a locked file cabinet in my office. Your answers will be anonymous since your name will not be on your questionnaires. Your answers will not become part of your school, employment, or any permanent record. Whether you participate or not will have no effect on your schooling or any job you have. My advisor, Dr. Georgiana Tryon and I will be the only people who see your responses. I may publish the results of the study in a scientific journal. No names of people will be used in what I write. If you want to read the results of the study please put your name and address on the back of this page.

Your participation is entirely voluntary. If you experience any discomfort or embarrassment when you read and complete the questionnaire items, you may quit at any time without making anyone upset. If you want to speak to anyone about how you feel, referrals for counseling will be provided.

If you have any questions about this research, you can call me at (201) 385-4126 or e-mail me at szupnik@gc.cuny.edu. You can also call my advisor, Dr. Georgiana Tryon, at (212) 817-8293 or e-mail her at gtryon@gc.cuny.edu. If you any questions about your rights as a participant in this study, you can contact Kay Powell, IRB Administrator of the Graduate School/City University of New York, at (212) 817-7525 or kpowell@gc.cuny.edu.

Thank you for considering participating in this study. Please return this form and keep one copy for yourself.

[ ] I, _____, **agree** to participate in this study.

_____	_____	_____	_____
Participant's Signature	Date	Investigator's Signature	Date

Appendix E

MAS-R

Moral Authority Scale-Revised

1. **Should people who break the law (such as stealing, speeding etc) be punished ?**
   Yes / No / Can't decide (Please circle one)
   Why ? _____

_____

_____

Rate the amount of influence of each statement on your opinion:

0	1	2	3	4	5	6	7	8	9	10
No Influence	Almost No Influence		Little Influence		Moderate Influence	Quite a Strong Influence		AVery Strong Influence		A Powerful Influence

Rating

a) the idea that everyone should try to make society a better place has_____ on my opinion

b) the idea that all people must be treated fairly has_____ on my opinion

c) my family's beliefs and expectations about certain laws have_____ on my opinion

d) my friends', the media and/or teachers' beliefs about certain laws have_____ on my opinion

e) the idea that it satisfies my own interests has _____ my opinion

f)(other)_____has _____ on my opinion

2. **Should people of different race and color live in harmony with each other ?**
   Yes / No / Can't decide (Please circle one)
   Why ? _____

_____

_____

Rate the amount of influence of each statement on your opinion:

0	1	2	3	4	5	6	7	8	9	10
No Influence	Almost No Influence		Little Influence		Moderate Influence	Quite a Strong Influence		AVery Strong Influence		A Powerful Influence

Rating

a) my friends', the media and/or teachers' beliefs about racial harmony have_____ on my opinion

b) satisfying my own interests about racial harmony has_____ on my opinion

c) the idea that society as a whole will benefit from racial harmony has_____ on my opinion

d) the idea that all people are born equal and should be respected has _____ on my opinion

e) my family's beliefs on how different races should live has _____ on my opinion

f)(other)_____has _____ on my opinion

3. Should all people respect the natural environment in which they live ?

Yes / No / Can't decide (Please circle one)

Why ? _____

_____

_____

Rate the amount of influence of each statement on your opinion:

0	1	2	3	4	5	6	7	8	9	10
No Influence	Almost No Influence		Little Influence		Moderate Influence	Quite a Strong Influence		AVery Strong Influence		A Powerful Influence

Rating

a) my family's beliefs and expectations about the environment have_____ on my opinion

b) my friends', the media and/or teachers' beliefs about environmental issues have_____ on my opinion

c) satisfying my own environmental interests has _____ on my opinion

d) the idea that respect for the environment benefits society has_____ on my opinion

e) the belief that all living things should be given some chance for survival has _____ on my opinion

f)(other)_____has _____ on my opinion

4. Should 'freedom of speech' (ie, being able to say publicly what you believe) be allowed ?

Yes / No / Can't decide (Please circle one)

Why ? _____

_____

_____

Rate the amount of influence of each statement on your opinion:

0	1	2	3	4	5	6	7	8	9	10
No Influence	Almost No Influence		Little Influence		Moderate Influence	Quite a Strong Influence		AVery Strong Influence		A Powerful Influence

Rating

a) the belief that freedom of speech may satisfy my own interests has _____ on my opinion

b) the idea that freedom of speech makes society a better place to live has_____ on my opinion

c) the idea that every person has an equal right to freedom of speech has_____ on my opinion

d) my family's beliefs and expectations about freedom of speech have_____ on my opinion

e) my friends', the media and/or teachers' beliefs about freedom of speech have _____ on my opinion

f)(other)_____has _____ on my opinion

5. Should equal opportunities be given to people regardless of their race or gender ?

Yes / No / Can't decide (Please circle one)

Why ? _____

_____

_____

Rate the amount of influence of each statement on your opinion:

0	1	2	3	4	5	6	7	8	9	10
No Influence	Almost No Influence		Little Influence		Moderate Influence	Quite a Strong Influence		AVery Strong Influence		A Powerful Influence

Rating

a) my friends', the media and/or teachers' ideas on race and gender issues have_____ on my opinion

b) the idea that all people are born equal and should be respected has_____ on my opinion

c) my family's beliefs and expectations on race and gender issues have_____ on my opinion

d) the idea that society will benefit from addressing race and gender issues has_____ on my opinion

e) satisfying my own interests on race and gender issues has_____ on my opinion

f)(other)_____has _____ on my opinion

6. Should scientific research which harms people or the natural environment be allowed ?

Yes / No / Can't decide (Please circle one)

Why ? _____

_____

_____

Rate the amount of influence of each statement on your opinion:

0	1	2	3	4	5	6	7	8	9	10
No Influence	Almost No Influence		Little Influence		Moderate Influence	Quite a Strong Influence		AVery Strong Influence		A Powerful Influence

Rating

a) the idea that all living things are worthy of respect has_____ on my opinion

b) my family's beliefs and expectations about scientific research has_____ on my opinion

c) my friends', the media and/or teachers' ideas about scientific research have _____ on my opinion

d) the belief that scientific research may satisfy my own needs has_____ on my opinion

e) the idea that scientific research should seek to make society a better place has_____ on my opinion

f)(other)_____has _____ on my opinion

Appendix F

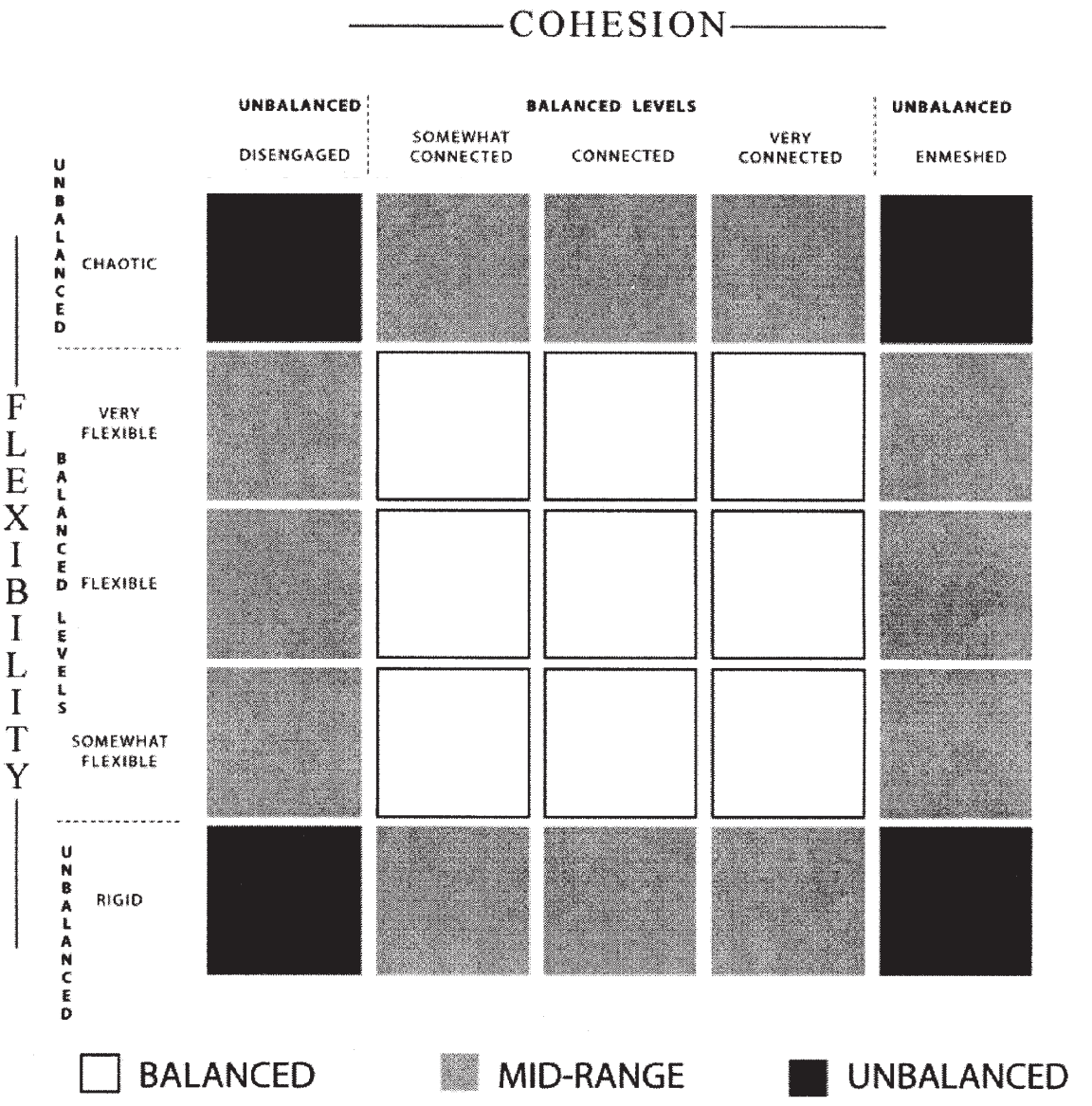
ADOLESCENT QUESTIONNAIRE

Please answer the following questions:

1.	**Age (please indicate age and birthday):** _____ Age month/day/year	
2.	**Grade in School (as of Sept. 2008):** _____	
4.	**Gender (circle one):**	1. Male 2. Female
5.	**Ethnicity (circle one):**	1. African-American 2. Asian 3. Caucasian 4. Hispanic 5. Multiracial 6. Other _____
6.	**Religious Affiliation (If not affiliated, indicate "none"):**	_____
7.	**Religious Attendance: How often do you attend organized religious services? (circle one):**	1. At least weekly 2. At least monthly 3. Yearly 4. Never
8.	**School/Community Involvement: How many hours a week do you spend in any extracurricular school activities (school government, newspaper, clubs, sports) or community based activities: (circle one)**	1. 0 2. 1-5 3. 6-10 4. 11-15 5. 16-20
9.	**Do you receive any special education services?**	1. Yes 2. No
10.	**Which meal plan do you qualify for?**	1. Free 2. Reduced fee 3. Do not qualify

Appendix G

Circumplex Model of Marital and Family Systems



Appendix H

Statistical differences were found between the group of students who received $10 gift card and those who received a $20 gift card on the Family Source of the MAS-R, ($F(1, 80) = 5.514$, $p = .021$.) The gift variable was entered in to the regression analysis for the MAS-R Family Source. See Table H-1 for means and standard deviations.

Table H-1

Means and Standard Deviations on MAS-R Across Gift Received

Gift	Family Source *M* (*SD*)	Educator Source *M* (*SD*)	Society's Welfare Source *M* (*SD*)	Equality Source *M* (*SD*)	Self-Interest Source *M* (*SD*)
$10 *n* = 56	5.64(2.32)	5.46(1.78)	7.54(1.76)	8.56(1.53)	7.42(1.80)
$20 *n* = 26	6.83(1.67)	5.73(1.99)	7.66(1.74)	8.91(1.13)	7.77(1.72)

Chi square tests were used to determine if there were differences between the outcomes on the three categorical variables. None were found for disciplinary referrals(χ^2 (1) = .115, p= .73); for unexcused absences (χ^2 (1) = .002, p = .96; for participation in extracurricular activity (χ^2 (1) = .034, p = .85).

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