

EFFECTS OF EXPERIENCE UPON ADOLESCENT DECISION
MAKING: A COMPARISON OF DELINQUENT
AND NONDELINQUENT POPULATIONS

By

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CHAPTER I

INTRODUCTION

"It was the best of times; it was the worst of times." This quote from Dickens' Tale of Two Cities could well be the introduction to a contemporary text on adolescence. Adolescence is a developmental stage marked by rapid change in all aspects of behavior. However, the rate of change in one behavioral aspect is not necessarily consistent with that in other aspects. For example, the adolescent is likely to focus upon physical growth per se yet not be aware of, or ignore, the inconsistencies of growth in different behavioral aspects such as cognitive abilities. S/he is likely to view developmental momentum positively, and as indicative of increased privileges. By way of contrast, most adults probably expect consistency in behavioral lines; adolescent behavior often runs counter to these expectations. For this reason adults often view adolescents in a negative fashion and focus upon the inconsistencies rather than growth per se.

The basis for the incongruity in the child and adult view needs further exploration. One behavioral line, physical maturation, is readily observable in early adolescence. Thus, it is likely that the adult would incorrectly use this behavior as a gauge for maturity. Along the same line, society in general seems to assume that when physical maturation occurs, the individual will begin to think and behave as "an adult." In actuality, pubescence or the beginning of the process of physical and

physiological maturation, occurs early in the sequence of adolescent developmental changes. Full adult cognitive functioning is achieved later on in adolescence, or in some cases never achieved (Piaget, 1972). Co-existing with this transition into more mature thought is a form of egocentrism, thought by some to limit the adolescent's capacity to reason in a mature fashion.

Given this developmental sequence, young adolescents often function with limited cognitive abilities which need time and experience to mature. However, rather than allowing adolescents to practice the new cognitive capacities they acquire and experience the consequences of their decisions, they are expected to have "magically" acquired the ability to make responsible decisions with little previous experience. It is no wonder that many falter when confronted with important decisions related to areas in which they lack previous experience. Such areas might include premarital sexuality, criminal activity, and substance abuse. What appears to be careless risk taking may, instead, be an inability or lack of opportunity to apply developing decision making skills in novel areas.

Because of the long lasting consequences of such adolescent risk taking, the factors involved in decision making in these areas are of major concern to society. Previous attempts by society to base expectations for decision making capacity solely upon age have proved inadequate. (A classic example would be status definitions based on age in the legal system.) An alternative is suggested by the cognitive stage model of development. An understanding of this model may help illuminate the factors necessary for mature decision making.

Cognitive Development

Formal Operational Skills

Many factors can affect an individual's level of functioning in responsible decision making. Of these factors, cognitive development, especially the characteristics of formal operational functioning, appear to be most closely related to responsible decision making abilities. It is at this stage of cognitive development that one can use hypothetical reasoning and, as a result, consider the range of possibilities/alternatives available in any situation, evaluate each one (future consequences), and select the best option. It is also during this stage that the adolescent can adopt others' points of view and judge situations objectively (Piaget, 1972). With these new abilities, the adolescent may be capable of responsible, well reasoned decisions for the first time.

If formal operational thinking is a prerequisite for mature judgment, the timing of the transition between stages (concrete to formal operations) becomes an important issue. Although the order of development appears to be regular and in stages, the speed of stage transition varies from individual to individual and is affected by his/her environment. That is, familiar areas (situations in which the individual has practiced cognitive skills) are more likely to be dealt with at a mature cognitive level than unfamiliar areas (Piaget, 1972). In addition, the presence of formal operational thinking does not guarantee maturity in decision making. Therefore, cognitive development may be a necessary but not sufficient criterion for mature reasoning abilities. Behavior such as level of egocentrism also appears to influence the adolescent's ability in this area.

Egocentrism

The cognitive ability to reflect on one's thoughts and to recognize possible outcomes (Looft, 1971), together with the adolescent's lack of experience with these abilities, lead to new expressions of egocentrism during adolescence. Several aspects of adolescent egocentrism have been identified by Elkind (1967) as important influences upon the sometimes unpredictable behavior of adolescents. Most relevant are the imaginary audience and the personal fable. First, consider the imaginary audience. During adolescence, the new ability of self-reflection (thinking about thoughts) becomes almost like a toy, something to be examined and manipulated. Due to lack of experience with this ability, adolescents often fail to differentiate between others' thoughts and their own mental preoccupations. Thus, adolescents tend to assume others are just as obsessed with their behavior/appearance as they, themselves, are. It is easy to speculate about the influence this factor has on adolescent behavior. For one, the impact of the social environment is evident. Social approval and positive feedback play an important role in the adolescent's developing identity/self-concept. Interpersonal factors, real and imagined, become an important influence upon decisions determining behavior. The adolescent's needs for acceptance and avoidance of disapproval make peer pressure an extremely influential determinant of behavior, with the greatest influence upon males in ambiguous situations (Juhasz & Sonnen-shein-Schneider, 1980; Holving, Hamm, & Galvin, 1969). Due to the important influence of external sources and the adolescents' inability to differentiate external reactions from those produced by their own thoughts, their behavior is often based on the assumption that an imaginary

audience is always present: observing, interested, and judging their actions. Many behaviors are decided upon based on the reaction calculated from the imaginary audience. One example of such behavior is vandalism, often perceived as senseless behavior with many risks attached. The adolescent's imagined reaction may be sufficient to influence judgment about such issues (Elkind, 1967). This example illustrates clearly how potent an influence the "audience" (whether real or imagined) can be upon adolescent behavior.

The basis for the imaginary audience, an inability to differentiate other's thoughts from one's own, also leads to another form of adolescent egocentrism, the personal fable. The adolescent deduces that the "audience's" preoccupation with him/her implies self-importance. This leads to the perception of self/feelings as special and unique. The adolescent's lack of experience again produces a misconception. In this case, novel experiences for the individual are generalized as being new for all people (producing the common reaction that no one else can understand their feelings). At the other end of this spectrum, the fable may result in a belief that this individual uniqueness is perceived by all. While the fable may produce the positive feelings of self-worth and uniqueness, it may also bias judgments in a negative manner. Often this belief in uniqueness leads to feelings of invulnerability (and reckless behavior). This perceived specialness somehow protects one from harm or negative consequences (Elkind, 1978; Juhasz & Sonnenshein-Schneider, 1980). Risks such as unprotected sexual activity are taken with little concern because the "protection" will not allow them to be caught.

Decision Making and Risk Taking

The apparent complexity involved in adolescent decision making and behavior warrants further exploration of the decision making literature. Adolescent judgment abilities are influenced by the many changes occurring at this developmental stage, especially cognitive level of development and egocentrism. During adolescence there is a shift in decision making abilities which may be dependent upon these and other relevant functional changes (Peel, 1981; Levine & Linn, 1977). For example, early and middle adolescent decision making features a transition from description to explanation of phenomenon (Peel, 1981). Once phenomena can be explained and understood, this knowledge may be applied to similar situations in the future. This allows the adolescent flexibility in that s/he may now predict future consequences of behavior and take these consequences into consideration when making a decision. (The intimate link with formal operational abilities is apparent.) Another element influencing the nature of judgments and the ability to make judgments appears to be previous experience. Given that adolescents are relatively inexperienced in decision making, there is little background on which to base sound judgments. Accordingly, adolescents function at a less mature level than expected when making many decisions. The importance of previous experience is supported by the Levine and Linn (1977) finding that adolescents show a higher, more mature level of judgments in familiar situations. Experience in given situations increases the likelihood of more mature functioning in similar situations in the future. Yet our culture "protects" its youth from experience in the majority of important situations involving risks. The result is little experience with

relevant decision making issues. As adolescents become more experienced, they become less egocentric and respond less to situational pressures since experience produced a more stable sense of self (Elkind, 1978). Lewis (1981) found that awareness of risks, future consequences, and implications of decisions may all increase with both age and educational level. The Lewis study raises an interesting question as to whether developmental or experiential factors have the strongest influence on the attainment of mature reasoning abilities. Other interesting elements influencing the nature of adolescent judgments and the ability to make judgments are expectancy and contextual issues (Linn, 1977; Juhasz & Sonnen-shein-Schneider, 1980; Linn & Pulos, 1981; Peel, 1981; Linn, Benedictus, & Delucchi, 1983). When confronted with an unfamiliar situation, it appears 12-18 year old adolescents rely on biased reasoning: decisions are based upon expectancies from limited information/experience and subject to situational pressures. The consistent results of these and other studies on adolescents indicate a level of reasoning not commensurate with cognitive level of functioning. In fact, little relationship is found between formal operational competence and reasoning measures (Linn et al., 1983; Linn & Swiney, 1981).

In summary, it appears certain cognitive skills are necessary to make mature decisions. Many of these skills rely on cognitive abilities associated with the attainment of formal operations. However, cognitive abilities alone are not sufficient. Other factors such as egocentrism and previous experience influence adolescent judgment. The present study was designed to further explore Lewis' proposition: do younger adolescents make immature judgments/decisions because of a developmental inability to reason at a more mature level or is it because they are

inexperienced, with few opportunities to make decisions and see the consequences firsthand. One method to explore this intriguing issue would be to compare adolescents who have experience with "significant" decision making and its consequences, with those lacking such experience. If decision making skills are a developmental phenomenon, and the groups are at comparable developmental levels, few differences should appear. However, if such experience with decisions/consequences produces a substantial influence upon decision making skills, significant differences should appear. The social implication of such a finding would be clear: social policies protecting younger adolescents from making decisions may be contributing to their inability to utilize mature reasoning when such reasoning is expected.

Delinquency and Decision Making

Few adolescents in our society have relevant experience dealing with the consequences of major life decisions (Lewis, 1981). Exceptions to this rule are adolescents who have had contact with the legal systems, i.e., delinquents. The delinquent, through the legal process, has the "benefit" of experiencing direct consequences of behavioral decisions which have a major impact upon the course of his/her life. For this reason, this population seems an appropriate one in which to examine the effects of direct experience with the consequences of previous decisions (involving risk taking) upon the consideration of future consequences. The delinquent is defined as an individual, 16 to 18 years of age or younger, who, because of his/her behavior, has come into contact with the legal system. Thus, by definition, the adolescent adjudicated as a delinquent has made a decision, taken a risk, and experienced the negative

life consequences of this decision. Because of the prevalence and seriousness of delinquent behavior, delinquency has long been of concern to society. Still, much of adolescent crime goes undetected or unpunished, and the risk of being caught is minimal. The average adolescent considers the chance of being caught quite small and even then is overestimating the actual risk of punishment involved (Gold, 1970). The implication that the majority of adolescent crimes go unrecorded makes statistics on delinquency even more startling. More than half of the serious crimes in the United States are committed by 10-17 year olds (Time, 1977). The number of adolescents taking these legal risks appears to be steadily increasing. The majority of officially processed delinquents have been male and from lower socioeconomic status (SES) homes (Juvenile Court Statistics, 1970).

Delinquent offenders have been differentiated from nondelinquent controls along several behavioral lines related to decision making skills. The most relevant of these were cognitive development and egocentrism. Cognitive development was found to be delayed in delinquents: older delinquents scored no better on measures of cognitive abilities than did the youngest groups of nondelinquents (Hains & Miller, 1980). Additionally, levels of egocentrism were higher in delinquent adolescents than in nondelinquents (Chandler, 1973). Overall, delinquents exhibited reasoning abilities that were less mature than those of their nondelinquent peers (Davids & Falkoff, 1975; Hains & Miller, 1980). Decisions were more likely based upon biased information, situational pressures, and egocentric influences.

In summary, the relevant literature provides a basis for contrasting predictions. When the prediction of adolescent decision making

abilities is based upon the decision making literature, advanced decision making skills are predicted only in familiar areas. Thus, when compared to inexperienced peers functioning at equivalent cognitive and egocentrism levels, adolescents with experience in the juvenile justice system should have superior abilities when making decisions related to that system. However, when the prediction is based upon the delinquency literature, lowered decision making capabilities are predicted for the delinquent population. The present study will assess the effect of experience on decision making abilities related to the criminal justice system by comparing adolescents who have (delinquents) and have not (nondelinquents) directly experienced major life consequences as a result of their criminal risk taking behavior. Because of two contradictory bodies of literature, two sets of contradictory hypotheses will be presented.

Hypotheses I and II

Based on evidence from the decision making literature that suggests experience affects decision making capabilities, it is proposed that decision making abilities in adolescence are not solely influenced by maturational factors such as overall cognitive developmental level and egocentrism. Instead, experience with a specific situation (especially experience involving the consequences of decision making) could compensate for the lack of (supposed) necessary cognitive capabilities. If the conclusions drawn from the literature concerning adolescent decision making are valid in that familiarity with the area examined is the defining factor in decision making skills in that area, then Hypothesis I predicts delinquents and nondelinquents should demonstrate similar decision making abilities regarding problems concerning neutral situations where

both groups should have similar background experience (as measured by neutral applied dilemmas) regardless of cognitive level of development. Hypothesis II predicts that compared to nondelinquents, delinquents will exhibit more mature decision making abilities regarding problems relevant to the juvenile delinquent/judicial system (as measured by the criminal applied dilemma) regardless of overall level of cognitive development.

Hypothesis III

The delinquency literature suggests that the functioning of juvenile delinquents is significantly hampered by lowered cognitive development and increased egocentrism. Therefore, it is assumed that these adolescents' levels of cognitive functioning may prevent them from benefiting from previous experience. If the conclusions based on the literature concerning the characteristics of delinquents is correct in that the average delinquent is functioning at a lowered cognitive level and at a higher egocentric level, it can be predicted that: (a) compared to controls, delinquents will function at a lower level of cognitive development (as measured by classic Piagetian tasks); and (b) it is predicted that compared to controls, delinquents will demonstrate a higher level of egocentrism (as measured by the Self-Focus Sentence Completion Blank, the Personal Fable Questionnaire, and the Imaginary Audience Scale). If these predictions are supported, it is hypothesized that delinquents will show lowered decision making skills in both relevant and neutral problem areas (as assessed by applied dilemmas).

CHAPTER II

METHOD

Subjects

Fifty-one male adolescents ranging in age from 13 to 17 years were divided into two groups based upon their experience with the legal system. The delinquent group consisted of adolescents who had been adjudicated by the legal system as being delinquent because of previous criminal behaviors. They were residents of a juvenile facility in the state of Kansas. The nondelinquent group was comprised of adolescents recruited from the Big Brothers Program in Wichita, Kansas. Both groups had similar SES backgrounds. All subjects were reimbursed for their participation to insure cooperation. Consent from the institutional staff, program directors, parents, and adolescents was obtained prior to initiation of the experiment.

Materials

Materials consisted of four* sets of instruments. The presence of

*A fifth instrument, the Defining Issues Test (DIT), was used to assess the level of moral development. Moral development has been identified as an additional influence upon adolescent decision making and as a factor differentiating delinquent and nondelinquent populations. The DIT (Rest, Cooper, Coder, Mansanz, & Anderson, 1974) is a well established instrument providing objective scoring as well as good reliability and validity data. However, once scoring was completed, it became apparent the DIT was inappropriate for the present adolescent population. Two-

delinquent behavior patterns was assessed by a Delinquency Scale in order to validate behavioral differences in the two groups. Two factors thought to influence adolescent decision making were measured (cognitive level of development and egocentrism). First, several measures were used to assess cognitive developmental level: Displaced Volume, Proverbs, Word Problems, and Puns. Each of these tasks requires skills presumed present at the formal operational (but not at the concrete operational) level for successful completion. Second, level of egocentrism was assessed by three measures: the Self-Focus Sentence Completion Blank, the Personal Fable Questionnaire, and the Invisible Audience Scale. These measures indicate the extent that the adolescent is influenced by egocentrism factors. The last category examined was adolescent decision making skills. Three Applied Dilemmas, designed to assess level of decision making ability, were utilized. Additionally, demographic data were obtained. Refer to Appendix A for a copy of the demographic questionnaire.

Behavioral Measure

The Delinquency Scale was developed by Nye (1958) specifically to differentiate delinquent and nondelinquent adolescents through self-reported behaviors. This scale was used in the present study as an independent measure of delinquency to validate the legal status of delinquency. This scale contains 23 items, each describing a behavior and then asking if the individual has done the behavior. The subject marks the number of times s/he has done this behavior on a numbered dimension

thirds of the data were invalidated by validity/consistency checks. As a consequence, the DIT results were dropped from analysis in the present study.

provided. Higher summed totals of the items indicated higher levels of delinquent behavior. Nye provides good reliability and validity data supporting this instrument as a method of separating delinquent and nondelinquent populations. Refer to Appendix B for a copy of the Delinquency Scale.

Cognitive Developmental Level Measures

The Displaced Volume task involves eight water glass problems. Each problem describes a situation which requires the subject to identify the relevant variables and then mentally manipulate these variables in order to predict their effect upon the level of water in a pictured container (Linn & Pulos, 1981). A higher number of correct responses indicates higher cognitive abilities.

The Proverb task consists of three proverbs taken from the three adult levels of the Stanford-Binet (1973). The subject is required to explain what each proverb means. A formal level of functioning is necessary to realize the abstract meaning of the proverb, beyond the concrete reality of the statement. Scoring criteria for acceptable formal operational responses have been empirically validated and were used to determine level of cognitive functioning. Higher scores indicate higher cognitive functioning.

The Word Problem task consists of two problems involving deductive reasoning abilities available at the formal level. Answering both correctly indicates a higher level of cognitive abilities.

The final task involves four Puns which the subject is asked to explain. Not only is this task enjoyable for the subjects but also an understanding of this "play-on-words" type of humor requires formal skills.

Scoring criteria for these tasks have been validated (Jones, 1984), with higher scores indicative of higher cognitive functioning. See Appendix C for a copy of these tasks and the scoring criteria for each instrument.

Egocentrism Measures

The Self-Focus Sentence Completion (SFSC) is a 30 item sentence completion blank containing a majority of self-reference stems. This sentence blank was developed as an index of egocentrism as a response orientation or style (Exner, 1973). Extensive reliability and validity studies have been reported as well as normative data for both psychiatric (including adolescent behavioral problems) and non-psychiatric (including high school students) populations. The SFSC is a valid, reliable measure of egocentrism. Each statement was scored as to whether self or other-focused and a large proportion of self-focusing responses were indicative of an individual with a high level of egocentrism. Refer to Appendix D for a copy of the SFSC.

The Personal Fable Questionnaire (PFQ) consists of eight subscales. Each statement on the PFQ is answered on a five point scale ranging from strongly disagree (0) to strongly agree (4). The PFQ involves 44 statements constructed to determine the extent of the subject's personal fable. This instrument was recently developed (Green, Miller, Cornell, & Jones, 1984) and is based upon the concept of a personal fable identified by Elkind (1967). Developmental data have been gathered in children ranging from grades five to twelve. The scale score reliabilities ranged from $r = .54$ to $r = .82$. Testing is currently ongoing to ascertain validity data. Each scale score was the total sum of the scale items.

Higher totals reflected higher levels of egocentrism. Refer to Appendix E for a copy of the PFQ.

The Invisible Audience Scale (IAS) was developed by Elkind and Bowen (1979). Each of twelve dilemmas was constructed to directly involve the subject in a potentially embarrassing situation. Six dilemmas involve situations which are momentarily embarrassing--Transient Self Scale (TS), and six reflect a more permanent sense of self--Abiding Self Scale (AS). The subject chooses one of three answers, indicating agreement with their own behavioral choice in the situation. The answer chosen indicates the level of concern with "audience" opinion ranging from independent functioning (0) to extreme concern with the imaginary audience (2). Each score was the total sum of scale items, with higher scores indicating higher levels of concern with the imaginary audience. The IAS has good test-retest reliability (TS scale, $r = .66$; AS scale, $r = .62$; overall IAS scale, $r = .65$). The construct validity coefficient is .63. Refer to Appendix F for a copy of the IAS.

Decision Making Abilities Measure

The Applied Dilemmas were based upon Lewis' (1981) study. This task consists of three open-ended dilemmas with follow-up questions. These problems were tape recorded and played aloud to the subjects. Each problem involved an adolescent in a decision making situation. Subjects were asked to help the adolescent make a decision as well as to help him to think about important factors in making the decision. The dilemmas involved situations requiring the ability to consider the future consequences of the decisions made and the risks involved with the decision. Two dilemmas were neutral and identical to those used by Lewis (Neutral

Dilemmas) and one dilemma was developed by the experimenter and specifically dealt with the juvenile justice system (Criminal Dilemma). These dilemmas provided a measure of the adolescent's decision making style as well as cognitive functioning (future orientation and manipulation of variables), and egocentrism. Two primary variables (awareness of future consequences and awareness of risks) identified as having central importance in adolescent decision making (Peel, 1981; Lewis, 1981) were assessed. Several variables thought to be less central to the adolescent decision making process were also measured (number of people consulted about the decision; who was consulted: peer, adult, or specialist; and whether the trustworthiness of the individuals in the dilemmas was considered). The dilemmas were scored by two individuals who were unaware of group membership, following criteria set up by Lewis. Interrater reliability was .95. Refer to Appendix G for a transcribed version of the dilemmas.

Procedure

All subjects were tested in groups of two to fifteen subjects. (Efforts were made to control group size. However, some subjects did not appear at the time of the experiment.) The experimenter introduced herself and then explained the nature of participation in the study. Anonymity was assured to facilitate cooperation. All pencil and paper measures were distributed and instructions were given. The recorded dilemmas were played initially and the other measures appeared in the following order: demographic information, Piagetian cognitive tasks, PFQ, IAS, DIT, SFSC, and the Delinquency Scale. Each subject was reimbursed for his participation.

CHAPTER III

RESULTS

To facilitate comparison with other research samples, a description of the subjects based on selected demographic variables is provided. Refer to Table I for a summary of these variables. In order to assess any possible differences in the delinquent and nondelinquent groups due to sampling error, a multiple analysis of variance (MANOVA) was performed on these demographic variables. The two groups did not differ significantly on these demographic characteristics. Delinquent and nondelinquent group membership was based upon present involvement with the judicial legal system. A behavioral measure was used to assess differential experience with rule breaking. A General Linear Model (GLM) analysis with the scores from the Delinquency Scale, as the dependent variable revealed a significant main effect ($F [1,41] = 37.84, p < .0001$). The delinquent group ($M = 40.68, SD = 12.90$) scored much higher on this measure than did the nondelinquent group ($M = 19.55, SD = 10.15$).

Analyses Pertaining to the Decision

Making Literature Predictions

Hypotheses I and II were based upon predictions of adolescent decision making abilities from the decision making literature. Decision making was assessed by the Applied Dilemmas. The primary dependent variables measured awareness of risks and awareness of future consequences,

TABLE I
MEANS AND STANDARD DEVIATIONS FOR
ALL DEMOGRAPHIC VARIABLES FOR
THE TOTAL SAMPLE

Variable	Code	Mean/Standard Deviation
Age	Years	15.8/1.05
Grade	0 = 7th 1 = 8th 2 = 9th 3 = 10th 4 = 11th 5 = 12th/GED	3.04/1.34
Race	0 = White, 1 = Nonwhite	0.35/0.48
Dominant Religious Activity	0 = Very inactive 1 = Inactive 2 = Moderate 3 = Devout 4 = Very devout	1.38/0.90
Religion Fundamental	0 = No, 1 = Yes	0.79/0.91
Size of Home Town	0 = Rural/below 2,500 1 = 2,501-10,000 2 = 10,001-30,000 3 = 30,001-100,000 4 = Above 100,000	2.78/1.62
Number of Moves	0 = None 1 = 1-2 2 = 3-4 3 = 5 4 = 6 or more	2.61/1.51
Level of Education-- Father	0 = Post-graduate/professional 1 = College graduate 2 = Some college/business school 3 = High School 4 = Grammar school-8th grade	2.47/1.12
Level of Education-- Mother	Same as above	2.17/1.06
Mother in Home	0 = No, 1 = Yes	0.82/0.39
Sibling Position	0 = Oldest 1 = Middle 2 = Youngest	0.85/0.77
Number of Siblings	0 = 1 1 = 2 2 = 3 3 = 4-5 4 = 6 or more	1.86/1.43
Length of Delinquent Group Home Stay	0 = 1-2 months 1 = 3-6 months 2 = 7-12 months 3 = 13-18 months 4 = more than 18 months	1.52/1.09

and the secondary dependent variables were number of people consulted about the decision; who was consulted: peer, adult, or specialist; and whether the trustworthiness of the individuals in the dilemmas was considered. Because of unequal sample sizes in the groups, the General Linear Model (GLM) procedure was used to analyze these data. In order to assess whether the two groups differed on all of these variables, a MANOVA was attempted. Because the error effect matrix for the majority of these variables was singular, the analysis could not be performed. Univariate GLM analyses were utilized with this situation kept in mind.

For the hypothesis pertaining to the two neutral applied dilemmas, 15 dependent variables were examined (4 primary, 11 secondary). The GLM analyses yielded significant main effects on two secondary dependent variables on the second neutral dilemma: consulting a peer (CONPEER) ($F [1,49] = 9.11, p < .004$) and examining both peer and adult trustworthiness (PATRUST) ($F [1,49] = 6.15, p < .01$). For the variable CONPEER, the nondelinquent group ($M = .54, SD = .45$) consulted peers significantly more often than did the delinquent group ($M = .16, SD = .37$) when making a decision on the second neutral dilemma. For the variable PATRUST, the nondelinquent group ($M = .73, SD = .45$) examined both peer and adult trustworthiness more often than the delinquent group ($M = .40, SD = .50$). With the exception of these two secondary dependent measures, Hypothesis 1 was supported.

For the hypothesis regarding the criminal applied dilemma, six dependent variables were examined (2 primary, 4 secondary). GLM analyses revealed significant main effects on one primary dependent variable: awareness of future consequences ($F [1,49] = 3.99, p < .05$). Compared to delinquent subjects ($M = .68, SD = .56$), nondelinquent subjects ($M = .96,$

SD = .45) were more aware of possible future consequences of their actions and utilized this awareness when making a decision on this dilemma. Thus, Hypothesis II was not supported. Personal experience with the juvenile justice system did not produce superior decision making abilities in a related situation; in fact, the inexperienced nondelinquent group performed better.

Analyses Pertaining to Delinquency

Literature Predictions

Hypothesis III was based upon the delinquency literature which predicts lowered cognitive abilities and increased egocentrism in delinquent populations. Four measures were used to assess cognitive abilities: Pun, Word Problem, Proverb, and Displaced Volume. Egocentrism was assessed with three measures: Self-Focus Sentence Completion Blank, Personal Fable Scales, and Imaginary Audience Scales. Regressional analyses were attempted with the cognitive and egocentrism measures as predictor variables and the applied dilemma measures as the outcome variables. Missing data due to incomplete responses on some measures resulted in the elimination of a large number of subjects from these analyses. Thus, the stability of these results is questionable. A summary of these results is contained in Appendix H. Additionally, a MANOVA was attempted to assess whether the delinquent and nondelinquent groups differed on these variables. Again, due to missing data, the analysis could not be performed. Keeping this in consideration, univariate GLM analyses were then utilized.

For the cognitive measures, GLM analyses yielded significant main effects for two dependent variables: Proverb score ($F [1,37] = 4.26$,

$p < .04$) and Displaced Volume score ($F [1,49] = 5.34$, $p < .02$). The nondelinquent subjects ($M = 1.11$, $SD = .90$) scored significantly higher on the Proverb variable than did the delinquent group ($M = .52$, $SD = .87$). Significant differences also were found between the groups on the variable of Displaced Volume (M [nondelinquent] = 6.12, $SD = 2.49$; M [delinquent] = 4.60, $SD = 2.18$). (While not statistically significant [$F (1,28) = 3.07$, $p < .09$], it is of interest that the two groups also follow this pattern on the variable of Pun score. The nondelinquent group [$M = 6.56$, $SD = 4.72$] scored higher on this cognitive measure than the delinquent group [$M = 4.19$, $SD = 2.68$].) These results support the prediction that nondelinquent adolescents function at a higher level of cognitive development (as measured by these instruments) than do their delinquent counterparts.

For the measures of egocentrism, GLM analyses showed significant main effects on three dependent variables: the Egocentrism ($F [1,48] = 4.95$, $p < .03$) and Hedonism ($F [1,49] = 4.38$, $p < .04$) scales of the Per-Instrument and the Self-Focus Sentence Completion (SFSC) score ($F [1,49] = 68.00$, $p < .0001$). On the Personal Fable Scales of Egocentrism (M [nondelinquent] = 1.10, $SD = .74$; M [delinquent] = 1.54, $SD = .63$) and Hedonism (M [nondelinquent] = 1.88, $SD = .88$; M [delinquent] = 2.41, $SD = .92$) as well as the SFSC score (M [nondelinquent] = 1.81, $SD = .49$; M [delinquent] = 3.56, $SD = .65$), the delinquent group demonstrated higher levels of egocentrism. These findings support the prediction that delinquent adolescents demonstrate a higher level of egocentrism (as assessed by the present measures) than do their nondelinquent peers.

For the applied dilemmas, the GLM analyses previously reported revealed few differences between experienced and inexperienced subjects. However, those differences that were discovered support Hypothesis III.

Nondelinquents were more aware of primary factors important to mature decision making than were their delinquent counterparts.

CHAPTER IV

DISCUSSION

The present results indicate that the adolescent decision making process is as complex as earlier research has suggested. While many findings in the present study are consistent with previous research, several inconsistencies occurred and need further exploration. The central focus of this study examined differences in the process of decision making in male delinquent and nondelinquent populations based upon predictions from the decision making and the delinquency literatures. Both models predicted significant differences in decision making abilities, though the predictions were contradictory as to which group would display the higher skills.

The decision making literature assumes minimal differences in level of cognitive functioning and egocentrism in adolescent populations that do not significantly differ on demographic variables (such as the present groups). However, the variable of experience in an area is thought to differentiate these adolescents and exert a considerable influence upon decision making abilities in that area. Given this line of thought, it follows that in situations of common experience, the two groups should demonstrate similar levels of decision making abilities. This prediction was supported in the present investigation. The delinquent and nondelinquent populations performed at similar levels when asked to make decisions in a neutral situation. No significant differences appeared in

the two groups' awareness of risks/future consequences or their tendency to consult others about making a decision. It is of interest that, like Lewis' (1981) sample, neither group appeared aware of the risks involved in the neutral situations and were only minimally aware of future consequences connected with the decisions they were making. Both groups tended to consult another person when making their decision, indicating uncertainty in their ability to make even a neutral decision alone.

The two groups appear more aware of risks and future consequences in the criminal applied dilemma than in the neutral situations. Still, the number of risks (range 0-2) and consequences (range 0-2) mentioned remained low. On this dilemma, both groups were less likely to consult anyone before making their decision than in the neutral situations. The prediction based upon the assumption that delinquent adolescents would exhibit more mature decision making abilities in a situation involving risks of a criminal nature was not supported. This finding is not consistent with previous research which indicates that adolescents show higher, more mature levels of judgment in familiar situations (Piaget, 1972; Linn & Levine, 1977; Linn et al., 1983). Despite the delinquents' experience with criminal risk taking and the consequences of these behaviors, they demonstrated a lower level of awareness of risks/future consequences than did their nondelinquent peers.

While this finding is difficult to explain utilizing the decision making literature, it is consistent with findings in the delinquency literature which predicts lowered functioning in delinquent adolescents (Davids & Falkoff, 1975; Hains & Miller, 1980). This literature has shown delinquents, while not significantly different in background characteristics, are not equivalent to nondelinquents on levels of cognitive

functioning and egocentrism, two factors known to be major influences upon adolescent decision making. These predictions were supported in the current findings. The nondelinquent population demonstrated significantly higher cognitive abilities on two measures, Proverbs and Displaced Volume, and higher (though not statistically significant) abilities on a third measure, Puns. However, while demonstrating higher cognitive abilities for these measures, the nondelinquent group did not demonstrate higher abilities for the Word Problem task. It appears this instrument is probably nondiscriminating for this stage sample since approximately 90 to 95% of the subjects answered both questions correctly. As stated earlier, higher cognitive functioning seems closely linked to the abilities necessary for responsible decision making. Also, as predicted, increased egocentrism in the delinquent group was shown on two scales of the Personal Fable instrument--Egocentrism and Hedonism, and on the Self-Focus Sentence Completion task. The delinquent group tended to be more concerned with affirming their own views and satisfying their own desires than were the nondelinquent group.

Given these results as well as the outcome on the criminal applied dilemma, it appears at first glance that the hypothesis based on the delinquency literature, which predicted lowered decision making abilities in delinquents than in nondelinquents, has been supported. Indeed, the delinquents in this study are at a disadvantage cognitively and are more strongly affected by egocentric influences, thus supporting the findings of Hains and Miller (1980). Such differential functioning could account for the lowered performance on the criminal applied dilemma. These cognitive and egocentrism influences appear to be enough to hamper the

delinquents' decision making abilities in a criminal situation and overcome the gains, if any, produced by experience in a similar situation.

However, following this line of reasoning these factors should also influence the delinquents' performance on the neutral dilemmas. While this influence was apparent on two secondary variables, it did not occur on the primary variables predicted to have the greatest impact upon mature decision making. Instead, the two groups performed at approximately the same level of awareness of these primary factors when making decisions in the neutral situations. The findings seem to indicate that male delinquents and nondelinquents, despite differences in cognitive development and egocentrism, function at the same level of awareness of risks/future consequences when confronted with a neutral situation. Both groups tended to display little awareness of primary factors important to mature decision making in the neutral dilemmas. However, when confronted with a decision about a criminal situation involving major, life altering risks, the nondelinquent group demonstrated an ability to identify the important variables and utilize them when making a decision. This puzzling outcome is not predicted by either body of literature. Why should neither group be aware of the risks/consequences that exist (and might change their life) in neutral situations not involving possible criminal activity, yet one group clearly demonstrate the existence of this awareness when faced with a decision concerning criminal behavior? It seems likely that the answer to this question may be the key to why some adolescents become delinquents while those of similar backgrounds stay out of trouble.

At this point no clear-cut answer is apparent, but one may speculate upon possible explanations, given the present findings. It may be that

the situations exemplified by the neutral dilemmas do not involve an obvious type of life changing risk. These situations do involve life changes (parental divorce and change in a longterm relationship with a trusted adult) but the type of change may not produce the same fear or avoidance response that the chance of incarceration does. Thus, because the individual does not perceive the need for in-depth analysis of the situation, the nondelinquent adolescent may not use the capabilities for mature decision making he possesses. If this is so, little difference would be expected between adolescents of differing levels of cognitive abilities and egocentrism (within a reasonable range) in awareness of risks/future consequences in these neutral situations, as was found in the present study. In contrast, the situation involving criminal risks should be a more potent motivator. If mature reasoning skills are within their capabilities, adolescents should utilize these skills when dealing with such obvious and threatening situations. It seems likely that this increase in motivation was necessary to illuminate the differences discussed in the delinquency literature and demonstrate that male delinquents are hampered by their lowered cognitive levels and increased egocentricity. It seems quite significant that the very situations where mature reasoning is most necessary to avoid negative criminal consequences are the ones which differentiate male delinquents and nondelinquents.

Not only are the risks involved of different types, the neutral and criminal dilemmas also involve differential opportunities for certain variables to influence reasoning. Decisions on neutral dilemmas about home and family friends seem less likely to involve peers or transient emotional satisfaction than does a decision about riding in a stolen sports car with fellow gang members. The egocentric elements involved

in the personal fable seem more likely to exert their powerful influence in such situations. The nondelinquent youth is less likely to respond to egocentric pressures. They may allow the nondelinquent adolescent to separate her/himself from the situation so that the higher cognitive abilities possessed may be utilized to make the decision at hand. Obviously, the mature decision making abilities demonstrated on the applied criminal dilemma are carried over into life situations by the nondelinquent group. As evidenced in the behavioral measure, these adolescents exercise behavioral controls that the delinquents do not (and apparently are incapable of) in the area of rule breaking.

In summary, the present study supports the delinquency literature which predicts lowered cognitive abilities and higher levels of egocentrism in male delinquent adolescents. However, an interesting result from this study suggests this does not always produce lower decision making abilities than are found in nondelinquent males. Instead, these two groups appear to utilize quite similar strategies when making a decision regarding neutral situations. Neither group applied skills considered reflective of mature decision making abilities, but did differ on two less impactful variables in the neutral dilemmas. In contrast, a criminal dilemma produced two different levels of functioning on a primary dependent variable as predicted. Nondelinquent adolescents displayed the ability to apply mature decision making skills to this type of situation, while the delinquents continued with the same immature strategy as before. It appears the higher the obvious risk involved in a decision the more likely adolescents are to apply mature decision making skills, if they possess the capability to do so. Higher cognitive ability and lowered levels of egocentrism appear to be key elements in producing this

capability as well as the key elements differentiating delinquent and nondelinquent abilities.

If one accepts this line of reasoning, it becomes easier to explain earlier research findings that nondelinquent adolescents tend to display immature decision making skills regardless of level of cognitive functioning (Linn & Swiney, 1981; Linn et al., 1983). The research settings, combined with hypothetical classical tasks, did not produce the risk factor necessary to motivate adolescents to utilize their capabilities. These classical tasks produce responses similar to those seen in the neutral applied dilemmas of the current study. It seems adolescents do not make the effort to use their skills in this type of situation; a high risk, dangerous situation may be necessary before these abilities are applied. It is also possible that many of the risks adolescents take, based upon immature decisions, may be due to misperceiving a situation (an underestimation of the risks or danger involved) rather than to lack of ability to make these decisions. The key to reducing a large amount of risk taking may be discovering a method of motivating adolescents to use the abilities that many of them already possess. All of these speculations present fruitful areas for future research.

REFERENCES

- Chandler, M. (1973). Egocentrism and antisocial behavior: The assessment and training of social perspective-taking skills. Developmental Psychology, 9, 326-332.
- Daids, A., & Falkoff, B. (1975). Juvenile delinquents then and now: Comparison of findings from 1959 and 1974. Journal of Abnormal Psychology, 84, 161-164.
- Dickens, C. (1908). A tale of two cities. New York: Charles E. Merrill Co.
- Elkind, D. (1967). Egocentrism in adolescence. Child Development, 38, 1025-1034.
- Elkind, D. (1978). The child's reality: Three developmental themes. Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.
- Elkind, D., & Bowen, R. (1979). Imaginary audience behavior in childhood and adolescence. Developmental Psychology, 15, 38-44.
- Exner, Jr., J. E. (1973). The self-focus sentence completion: A study of egocentricity. Journal of Personality Assessment, 37, 437-455.
- Gold, M. (1970). Delinquent behavior in an American city. In J. Conger (Ed.) (1973), Adolescence and youth--Psychological development in a changing world. New York: Harper & Row Publishers, Inc.
- Green, V., Miller, K., Cornell, B., & Jones, F. (1984). Unpublished manuscript.

- Hains, A., & Miller, D. (1980). Moral and cognitive development in delinquent and non-delinquent children and adolescents. Journal of Genetic Psychology, 137, 21-35.
- Hoving, K., Hamm, N., & Galvin, P. (1969). Social influence as a function of stimulus ambiguity at three age levels. Developmental Psychology, 1, 631-636.
- Jones, F. (1984). Unpublished manuscript.
- Juhasz, A., & Sonnenshein-Schneider, M. (1980). Adolescent sexual decision making: Components and skills. Adolescence, 15, 743-750.
- Juvenile Court Statistics (1970). In J. Conger (Ed.) (1973), Adolescence and youth--Psychological development in a changing world. New York: Harper & Row Publishers, Inc.
- Levine, D., & Linn, M. (1977). Scientific reasoning ability in adolescence: Theoretical viewpoints and educational implications. Journal of Research in Science Teaching, 14, 371-384.
- Lewis, C. (1981). How adolescents approach decisions: Changes over grades seven to twelve and policy implications. Child Development, 52, 538-544.
- Linn, M. (1977). Scientific reasoning: Influences on task performance and response categorization. Science Education, 61, 357-369.
- Linn, M., Benedictis, T., & Delucchi, K. (1982). Adolescent reasoning about advertisements: Preliminary investigations. Child Development, 53, 1599-1613.
- Linn, M., & Pulos, S. (1981). Male-female differences in predicting displaced volume: The role of expectation-based strategies. Unpublished manuscript.

- Linn, M., & Swiney, J. (1981). Individual differences in formal thought: Role of expectation and aptitudes. Journal of Educational Psychology, 73, 274-286.
- Looft, W. (1971). Egocentrism and social interaction in adolescence. Adolescence, 6, 485-494.
- Nye, F. I. (1958). Family relations and delinquent behavior. London: John Wiley & Sons, Inc.
- Peel, E. A. (1981). The nature of adolescent judgment. New York: Wiley Interscience.
- Piaget, J. (1972). Intellectual evolution from adolescence to adulthood. Human Development, 15, 1-12.
- Rest, J., Cooper, D., Coder, R., Mansanz, J., & Anderson, D. (1974). Judging the important issues in moral dilemmas--An objective measure of development. Developmental Psychology, 10, 491-501.
- Terman, L. M., & Merrill, M. A. (1973). Stanford Binet Intelligence Scale: Manual for the Third Revision, Form L-M. Boston: Houghton Mifflin Co.
- Staff (July 11, 1977). The youth crime plague. Time, pp. 18-28.

APPENDIX A

DEMOGRAPHIC QUESTIONNAIRE

Instructions: Please answer the following questions. If you do not understand a question, please ask for help.

1. Race

- ☐ White
- ☐ Black
- ☐ Hispanic
- ☐ Native American
- ☐ Other

2. Sex

- ☐ Male
- ☐ Female

3. Year in school

- ☐ 5th grade ☐ 10th grade
- ☐ 6th grade ☐ 11th grade
- ☐ 7th grade ☐ 12th grade
- ☐ 8th grade ☐ college freshman
- ☐ 9th grade

4. Age

___ years ___ months

5. Dominant religion of family

- ☐ No religious belief
- ☐ Unitarian, Quaker
- ☐ Protestant (Fundamentalist, Pentecostal, Baptist, Sectarian, etc.)
- ☐ Protestant, all others (Methodist, Presbyterian, Episcopalian, etc.)
- ☐ Roman Catholic
- ☐ Eastern Orthodox
- ☐ Jewish
- ☐ Eastern Religions
- ☐ Other

6. Dominant religious activity of family

1	2	3	4	5
Very	In-	Moderate	Devout	Very
Inactive	active			Devout

7. Does your religion teach you that everything the Bible says is to be taken exactly as it reads?

If yes, check here ____.

8. Size of home town

- ☐ Rural address
☐ (town or city)
☐ Under 2,500
☐ 2,501-10,000
☐ 10,001-30,000
☐ 30,001-100,000
☐ 100,001-500,000
☐ 500,001 and above

(a) Roughly, how many times have you moved? ____ times

9. Educational level of father or head of household

- ☐ Post graduate degree, professional degree
☐ College graduate
☐ Some college, business school
☐ High school graduate
☐ Some high school
☐ Grades 7 and 8
☐ Grammar school to and including 6th grade

(a) Occupation of father or head of household

10. Educational level of mother or second adult in home

- ☐ Post graduate degree, professional degree
☐ College graduate
☐ Some college, business school
☐ High school graduate
☐ Some high school
☐ Grades 7 and 8
☐ Grammar school to and including 6th grade

(a) Occupation of mother or second adult in home

(b) Has your mother been in the home the majority of time during your childhood period? ____ Yes ____ No

11. How many brothers do you have? ____

What are their ages? _____

How many sisters do you have? ____

What are their ages? _____

APPENDIX B

DELINQUENCY SCALE

Behavioral Measure

Please answer the following questions by marking the answer that best describes your behavior.

Have you:

1. Driven a car without a driver's license or permit? (Do not include driver training courses.)
 - a. Very often
 - b. Several times
 - c. Once or twice
 - d. No
2. Skipped school without a legitimate excuse?
 - a. No
 - b. Once or twice
 - c. Several times
 - d. Very often
3. Ever disobeyed your parents?
 - a. Very often
 - b. Several times
 - c. Once or twice
 - d. No
4. Had a fist fight with one other person?
 - a. No
 - b. Once or twice
 - c. Several times
 - d. Very often
5. Ever told a lie?
 - a. Very often
 - b. Several times
 - c. Once or twice
 - d. No
6. "Run away" from home?
 - a. No
 - b. Once
 - c. Twice
 - d. Three times
 - e. Four times
 - f. Five times
 - g. More than five times

7. Been placed on school probation or expelled from school?
 - a. No
 - b. Once or twice
 - c. Three or four times
 - d. Five or six times
 - e. Over six times
8. Defied your parents' authority (to their faces)?
 - a. No
 - b. Once or twice
 - c. Several times
 - d. Very often
9. Driven too fast or recklessly in an automobile?
 - a. Very often
 - b. Several times
 - c. Once or twice
 - d. No
10. Taken little things (worth less than \$2) that did not belong to you?
 - a. No
 - b. Once or twice
 - c. Several times
 - d. Very often
11. Taken things of medium value (between \$2 and \$50)?
 - a. Very often
 - b. Several times
 - c. Once or twice
 - d. No
12. Taken things of large value (over \$50)?
 - a. No
 - b. Once or twice
 - c. Several times
 - d. Very often
13. Taken things that you really did not want that did not belong to you?
 - a. No
 - b. Once or twice
 - c. Several times
 - d. Very often
14. "Beat up" on kids who had not done anything to you?
 - a. Very often
 - b. Several times
 - c. Once or twice
 - d. No

15. Taken a car for a ride without the owner's knowledge?
 - a. No
 - b. Once
 - c. Twice
 - d. Three times
 - e. Four times
 - f. Five times
 - g. Over five times
16. Taken part in "gang fights"?
 - a. No
 - b. Once or twice
 - c. Three or four times
 - d. Five or six times
 - e. Over six times
17. Bought or drank beer, wine, or liquor? (Include drinking at home.)
 - a. No
 - b. Once or twice
 - c. Several times
 - d. Very often
18. Hurt or inflicted pain on someone else just to see them squirm?
 - a. No
 - b. Once or twice
 - c. Several times
 - d. Very often
19. Purposely damaged or destroyed public or private property that did not belong to you?
 - a. Very often
 - b. Once or twice
 - c. Several times
 - d. No
20. Used or sold narcotic drugs?
 - a. No
 - b. Once
 - c. Twice
 - d. Three times
 - e. Four times
 - f. Five times
 - g. Over five times
21. Gone hunting or fishing without a license (or violated other game laws)?
 - a. No
 - b. Once or twice
 - c. Several times
 - d. Very often

21. Had sex relations with another person of the same sex?
- a. No
 - b. Once or twice
 - c. Three or four times
 - d. Five or six times
 - e. Seven or eight times
 - f. Nine times or more
22. Had sex relations with another person of the opposite sex?
- a. No
 - b. Once or twice
 - c. Three or four times
 - d. Five or six times
 - e. Seven or eight times
 - f. Nine times or more

APPENDIX C

COGNITIVE MEASURES AND SCORING CRITERIA

Instructions

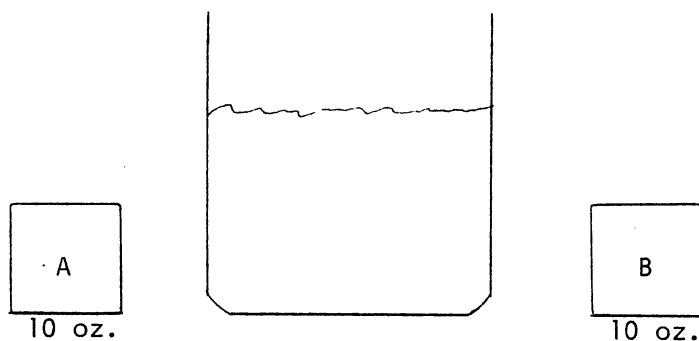
For each problem, tell which block would make the water go up higher if it were dropped into the glass of water.

1. All blocks are metal and sink.
2. Not all blocks are made of the same metal.
3. In each problem you will see metal blocks of different weights or sizes.

Circle your answer to each problem.

Example:

Blocks A and B are the same size. Blocks A and B weigh the same.

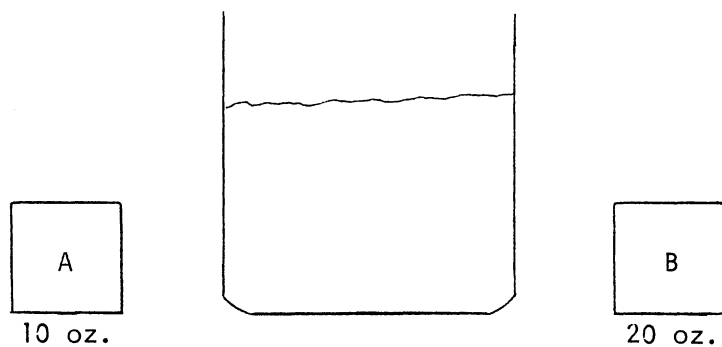


Which block will make the water go up higher?

- a. Block A
- b. Block B
- ☒ c. Both the same

After you have circled your answer, record that letter on the enclosed IBM sheet. Please note you will start on the IBM sheet with number 57.

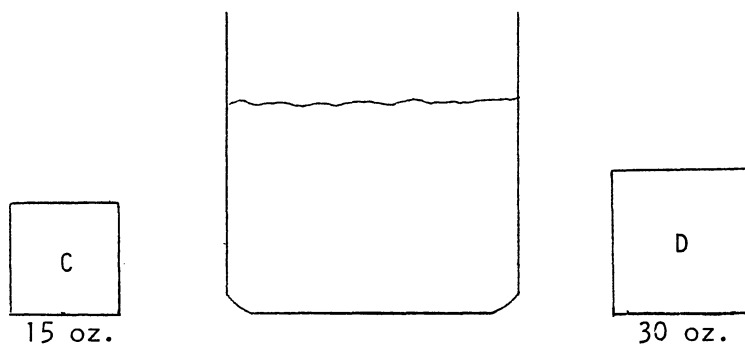
57. Blocks A and B are the same size. Block B weighs more than Block A.



Which block will make the water go up higher?

- a. Block A
- b. Block B
- c. Both the same

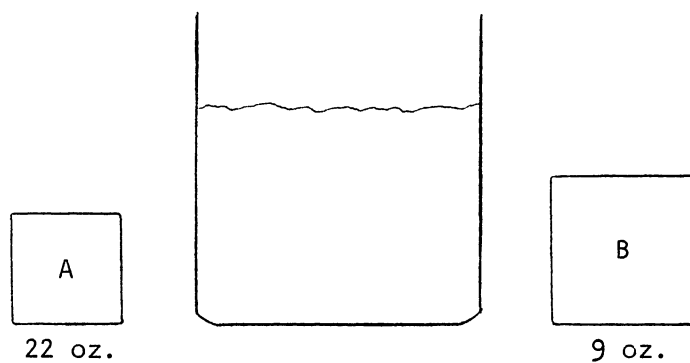
58. Block C is smaller than Block D. Block D weighs more than Block C.



Which block will make the water go up higher?

- a. Block C
- b. Block D
- c. Both the same

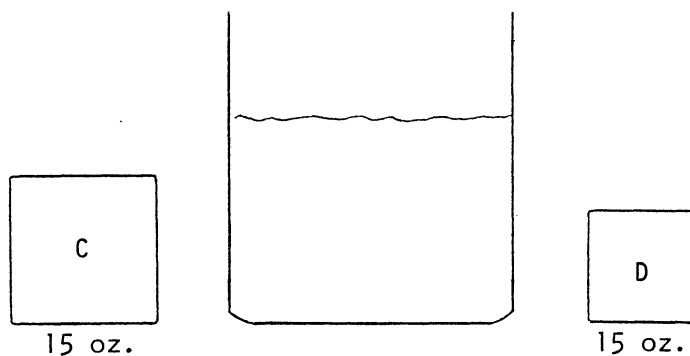
59. Block B is larger than Block A. Block A weighs more than Block B.



Which block will make the water go up higher?

- a. Block A
- b. Block B
- c. Both the same

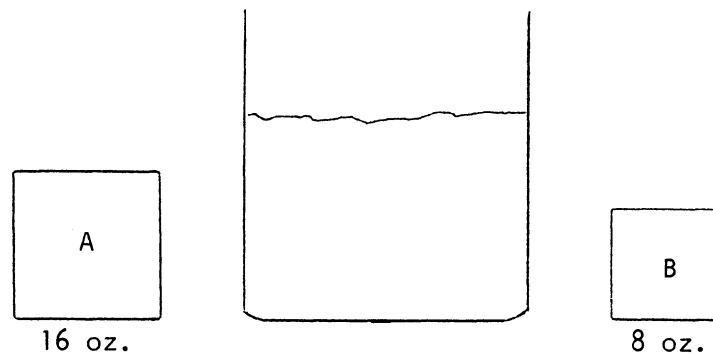
60. Block C is larger than Block D. Both blocks weigh the same.



Which block will make the water go up higher?

- a. Block C
- b. Block D
- c. Both the same

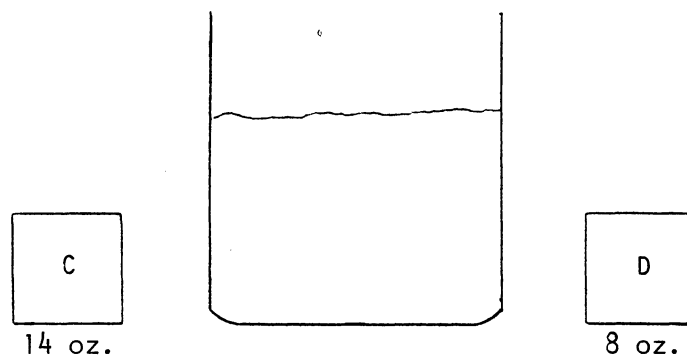
61. Block A is larger than Block B. Block A is heavier than Block B.



Which block will make the water go up higher?

- a. Block A
- b. Block B
- c. Both the same

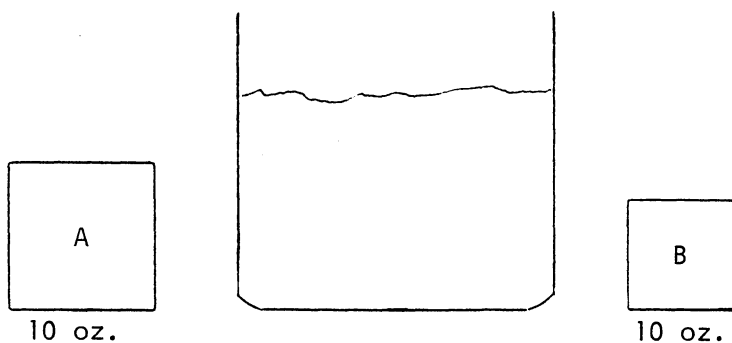
62. Blocks C and D are the same size. Block C weighs more than Block D.



Which block will make the water go up higher?

- a. Block C
- b. Block D
- c. Both the same

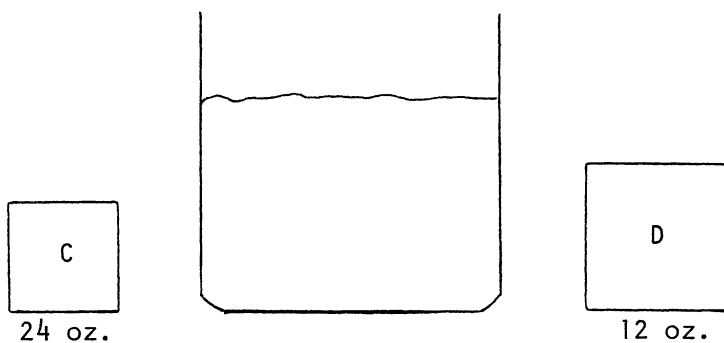
63. Block A is larger than Block B. Both blocks weigh the same.



Which block will make the water go up higher?

- a. Block A
- b. Block B
- c. Both the same

64. Block D is larger than Block C. Block C weighs more than Block D.



Which block will make the water go up higher?

- a. Block C
- b. Block D
- c. Both the same

Puns--Why are these statements funny?

1. Wrestling is a sport which gets a hold on you. _____

2. When adding machines were first used, they were so popular they began to multiply. _____

3. Elevator companies have their ups and downs. _____

Word Problem Task--Circle the correct answer:

1. Helen is taller than Mary and Mary is taller than Jane; who is the tallest of the three?

Helen
Mary
Jane
2. Jack is heavier than John and John is heavier than Peter; who is the heaviest of the three?

Jack
John
Peter

Proverbs

Here is a proverb and you are supposed to tell what it means. For example, this proverb, "Large oaks from little acorns grow," means that great things may have small beginnings. What do the following proverbs mean?

1. We only know the worth of water when the well is dry.

2. The mouse that has but one hole is easily taken.

3. Let sleeping dogs lie.

Scoring for Puns--Revised

Key:

(+) = quality response; (-) = marginal quality response; (0) = nonscorable

Pun No. 1:

"Wrest(l)ing is a sport which really gets a hold on you."

(Quality responses using HOLD as ATTENTION/INTEREST)

- (+) You can get into the sport
- (+) Keeps you interested
- (+) Grabs onto your liking
- (+) Gets you hooked
- (+) Wrestling gets a hold on the spectators as well as the opponents
- (+) To grab you emotionally
- (+) Because once you see a match you'll want to go back to see others
- (+) Wrestling is not a sport you're ambivalent about; you're either into it or you're not
- (+) Such a good sport you have to play
- (+) The grip is has on you mentally
- (+) Liking the sport when you try it
- (+) Wrestling is a sport that once you start watching you can't stop
- (+) Entice you; make you want to do it
- (+) Wrestling is a sport that's very easy to get addicted to
- (+) Can capture your attention
- (+) You will like wrestling

(Quality responses using HOLD as WRESTLING MOVES/PHYSICAL CONTACT)

- (+) Grabs you physically
- (+) Wrestling moves/maneuvers
- (+) Wrestling uses holds to win the game
- (+) You hold onto people in wrestling
- (+) In wrestling you need to grip a person in order to pin him to the floor
- (+) Holds you down to the mat
- (+) Contact sport

(Responses of marginal quality: ambiguous referent(s); tangential or inadequate content; other, marginal usages of HOLD)

- (-) Wrestling gets to you
- (-) Holding in wrestling
- (-) (Specific moves listed; e.g. :) headlocks, armlocks, etc.
- (-) Wrestling is a sport that brings a person down
- (-) Wrestling is an overly popular sport that "holds" you
- (-) Physically to keep a person down
- (-) Grabbing you/grasp/grip (unqualified)

- (-) To grasp an object
- (-) Wrestling brings you to your senses (discipline)
- (-) Wrestling makes you put yourself together mentally (discipline)
- (-) Wrestling--the sport is demanding and takes a lot to play it well
- (-) The other guy is on your back trying to twist your head off
- (-) Holding someone in your arms
- (-) It catches on

(Non-scorable responses)

- (0) Instead of getting into fights, fight for your team
- (0) Gets you nervous/uptight
- (0) You have to really understand the sport to enjoy
- (0) When wrestling you can be thinking and things can take a hold on you
- (0) You can be held in place where it hurts
- (0) That makes you work hard for it
- (0) Tricks you
- (0) Doesn't let go
- (0) Hold on life
- (0) To have the wrestler become more sane
- (0) It wakes you up and makes you more active
- (0) To get a hold on yourself is to come to grips with yourself; to understand yourself

Pun No. 2:

"When adding machines were first introduced, they were so popular they began to multiply."

(Quality responses using MULTIPLY as INCREASE IN PRODUCTION)

- (+) Adding machines became popular and the number of machines greatly increased
- (+) Many more were made and sold
- (+) Large production

(Quality responses using MULTIPLY as MATH FUNCTION)

- (+) Eventually multiplication was added to their abilities
- (+) Technology allowed computers to learn how to multiply
- (+) Multiply is an advanced form of addition
- (+) Adding machines were so popular that the manufacturer (added) multiplication as a feature
- (+) The machines began to figure out numbers in multiplication
- (+) They didn't just add anymore; they now multiplied
- (+) They could multiply numbers

(Responses of marginal quality: ambiguous referent(s); inadequate or tangential content; other marginal usages of multiply)

- (-) To grow rapidly
- (-) They became useful and necessary tools

- (-) Make more than one
- (-) Instead of the machines doing the function of multiplying they would multiply them-self
- (-) This machine added to the development of multiplying machines
- (-) They began to be used all over
- (-) They began to become popular on the market
- (-) To have more of
- (-) Adding machines became versatile
- (-) Many multiplied in the form of addition/multiplication
- (-) Calculation sense
- (-) Add, subtract, multiply, etc. on an adding machine
- (-) To times ex. $4 \times 4 = 16$; to do timesing
- (-) A form of arithmetic
- (-) To be used mathematically
- (-) Adding machines multiply problems

(Non-scorable responses)

- (0) The operation it does to make it work
- (0) A machine to add
- (0) Increase
- (0) Came out doubling
- (0) Became more popular
- (0) One machine will turn into two
- (0) The machines worked and did problems
- (0) A word in mathematics
- (0) To grow (unqualified)
- (0) To become larger because of mathematics
- (0) To make a duplicate
- (0) Adding machines reproduced

Pun No. 3:

"Elevator companies have their ups and downs."

(Quality responses using UPS and DOWNS as BUSINESS FLUCTUATIONS)

- (+) The companies have their ups and downs in business
- (+) Stock/sales/economy going up and down
- (+) Companies do well and then not so good
- (+) Prosper or don't
- (+) Sometimes elevators are popular and sometimes they are not
- (+) Elevator companies sometimes have good days when they make lots of money and bad days when they don't make lots of sales
- (+) The companies have business cycles
- (+) The company's profits fluctuate

(Quality responses using UPS and DOWNS as in MOVEMENTS OF AN ELEVATOR)

- (+) Elevators go up and down in order to operate
- (+) Actually going up and down

(Responses of marginal quality: ambiguous responses; inadequate content)

- (-) They have and don't have problems
- (-) Good and bad moments/days/times
- (-) The company has problems that move up and down
- (-) Good and bad qualities
- (-) Elevator companies sometimes do good and sometimes do bad
- (-) Highs and lows in spirit (morale)
- (-) Things go wrong for elevator companies
- (-) To take people to the next floor up or down
- (-) The companies travel up and down all day
- (-) Going up and down
- (-) To move like an elevator
- (-) To go up and down
- (-) Moving vertically
- (-) To move in an upward or downward direction
- (-) Motion
- (-) Elevators go up and down like their companies
- (-) Companies lose and gain money (up+down) like elevators lose and gain people

(Non-scorable responses)

- (0) They are in financially bad condition
- (0) High point and low point
- (0) Elevators get stuck--that's the downs, but elevators are better than stairs--that's the ups
- (0) Elevator companies have their ups and downs (simply repeated pun)
- (0) People who work with elevators often have problems
- (0) Machine moves up and down like in a person's life
- (0) Being that the companies sell elevators, the entire company moves up and down like an elevator
- (0) A mood people have
- (0) When the elevators are in trouble
- (0) A good and bad feeling day
- (0) High places-low places
- (0) Yes they ride in elevators all day

Supplemental Response Possibilities for
Proverbs and Promise

Proverb Key: (A) = quality/adequate response; (B) = inadequate/non-scorable

Promise Key: (2) = quality response--score 2 points; (1) adequate response--score 1 point; (0) = inadequate response--non-scorable

Proverb No. 1:

"We only know the value of water when the well is dry."

- (A) To appreciate something fully we must first live without it
- (A) You can only appreciate something when it's gone
- (A) You don't miss something until it's gone
- (A) When things aren't there, their value is realized
- (A) You don't know how good you have it until you don't have it anymore
- (A) You can only judge something by how good it is when it's gone and you realize what you're missing now
- (A) We know how much we need things when we can't have them
- (A) You don't know how valuable something is until you don't have it anymore
- (A) We take things for granted until there is a lack
- (A) When you have good fortune you don't appreciate it. If you didn't have it, you'd be wishing for it
- (A) We only know it's real value when something's happened to it

(ANY response using or alluding to WATER is TOO LITERAL)

- (B) You don't know what resources are really worth
- (B) We take things for granted (too general)
- (B) When you don't have something you miss it
- (B) You shouldn't overestimate a resource
- (B) You only know how much something is worth until you don't have it anymore (OPPOSITE generalization)
- (B) We realize something after it's gone
- (B) We don't appreciate it when we have it
- (B) We only appreciate something if we don't have it
- (B) That the things we find less important may not always be there

Proverb No. 2

"The mouse that has but one hole is easily taken."

- (A) If you see danger but only you think of one way out you're in trouble
- (A) If you only have one option you may get in trouble
- (A) When one is unprepared one will get caught

- (A) Only one way of doing things can be easily outdone
- (A) If you depend on only one thing, it is more likely that thing will fail and you won't have a backup thing
- (A) You must have several ideas just in case one doesn't work out
- (A) If there's only one chance and if that chance isn't valuable to you then you're in deep waters
- (A) If you have only one way to do something you can be cut off easily
- (A) People shouldn't be narrow-minded, but should be open so they won't be unprepared for anything
- (A) When your options are limited it is easier to get you
- (A) Single-minded people are easily wrong or deluded
- (A) If someone only has one option, that option may not be available at all times
- (A) A person who doesn't have an open mind can be overwhelmed by those that do

(ANY response using or alluding to the MOUSE is TOO LITERAL)

- (B) A person with one goal won't succeed
- (B) There must be other ways to do things
- (B) You have to give up a little bit of pleasure for safety--you can't have everything
- (B) You should have more than one possibility
- (B) If you have only one of something your less powerful than someone who has 2
- (B) There is no room for escape from a problem with only one way out
- (B) People or things must have more than one approach to life
- (B) If you need something you should have more than one of it
- (B) Create more than one alternative
- (B) You need more than one plan/choice/answer
- (B) You should always be well prepared
- (B) You should have more than one "hole" to escape to in life
- (B) Someone who only has one place to go will regret it
- (B) One option is sometimes no option
- (B) Someone who has only one goal in life may never reach it
- (B) If you are stupid you are dead
- (B) Don't let yourself be backed into a corner
- (B) Don't be gullible
- (B) You need more choices to survive
- (B) Narrow-minded people don't look at the whole picture
- (B) Someone who has little is easily swayed
- (B) You need more than one thing in your life
- (B) You should have more than one point of view
- (B) Plan several ways around something
- (B) Don't just leave one way out of a problem
- (B) If you pull the same tricks all the time people will figure you out
- (B) You cannot specialize in one thing; you must vary to succeed
- (B) It's harder to do things when there's one way out
- (B) Have many friends
- (B) You must have more than one way out
- (B) Something that is not protected can be taken
- (B) People who don't have much material goods are usually great people
- (B) Don't dig a hole you can't get out of

- (B) Try to spread things out
- (B) People only grab the first thing instead of getting something better
- (B) If you have only one way to do something you do easy mistakes
- (B) If you can't ever make up your mind you'll get nothing in life
- (B) When people are different it is understood
- (B) The person who is only closed can be hurt easily
- (B) You should always have more than one backup to fall back on

Proverb No. 3

"Let sleeping dogs lie."

- (A) Don't make waves
- (A) Don't stir up trouble
- (A) Let the past stay the past
- (A) Don't bother things that don't bother you
- (A) Let problems or fights rest
- (A) Let bygones be bygones
- (A) Don't bother what's ok as it is
- (A) Don't get people going, like don't complain about things that make them upset
- (A) Let old issues stay unprovoked
- (A) Don't wake up a sleeping giant
- (A) Put the past behind you; don't bring up old grievances
- (A) Stirring up the past can be dangerous
- (A) Don't press an issue that will cause problems
- (A) You should not provoke trouble; let it be
- (A) Don't disturb a potentially hazardous situation
- (A) If something is good don't change the pace or disrupt it somehow

(ANY response using or alluding to DOGS is TOO LITERAL)

- (B) Lazy people don't get anything done (or ANY response using LAZY, (SLEEPING))
- (B) When things want to stay, let them
- (B) Leave something alone and mind your own business
- (B) If a person is ok, leave her alone
- (B) If something won't move, leave it
- (B) Don't bother anyone
- (B) Leave things alone
- (B) Let people be in peace
- (B) If something is good, leave it
- (B) Do unto others as others would do unto you
- (B) Live and let live
- (B) When someone is peaceful don't bother them
- (B) If something is good let it stay that way
- (B) Let people do what they want
- (B) Don't bug people for the hell of it
- (B) Leave someone disturbed/troubled alone
- (B) Let people who don't want to be bothered alone
- (B) Mind your own business

- (B) You should not bother things if they are alright unless it is necessary
- (B) If you don't get involved you can't get in trouble
- (B) Don't pick a fight
- (B) Forget the past
- (B) If the issue is not active, leave it alone
- (B) Don't worry about past mistakes
- (B) What's done is done and shouldn't be worried about.

APPENDIX D

SELF FOCUS SENTENCE COMPLETION

The following are a series of sentences which have been partially written. You are to complete the sentences in your own words.

1. I think

2. I was happiest when

3. It's fun to daydream about

4. My father

5. If only I could

6. It's hardest for me

7. I wish

8. As a child I

9. I am

10. I'm at my best

11. Others

12. When I look in the mirror

13. If only I would

14. At least I'm not

15. My sex life

16. It upsets me when

17. The thing I like best about myself

18. Friends

19. I would most like to photograph

20. I guess I'm

21. My mother

22. I wonder

23. The worst thing about me

24. I always wanted

25. I try hardest to please

26. Someday I

27. My appearance

28. My parents

29. If I had my way

30. I like

APPENDIX E

PERSONAL FABLE QUESTIONNAIRE

Instructions

The following questions are designed to learn more about people your age. There are no right or wrong answers to these questions, so please answer them according to how you feel. Please answer every question. If you are not sure about a specific question, please give the best answer you can.

Read each statement and then put an "X" through the letter at the right that best describes how you feel.

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
Example:					
125. I like to get up early	A	B	C	D	E
If you <u>strongly disagree</u> with this state- ment, put an "X" through A, like this	X	B	C	D	E
If you <u>disagree</u> , put an "X" through B, like this	A	X	C	D	E
If you <u>agree</u> , put an "X" through D, like this	A	B	C	X	E

After you have put an "X" through the letter at the right that best describes how you feel, record that letter on the enclosed IBM sheet.

Example:

125.	A	B	C	D	E	or	A	B	C	D	E	or	A	B	C	D	E
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	If you <u>strongly disagree</u>						If you <u>disagree</u>						If you <u>agree</u>				

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1. The way I look at things is the only way to look at things	A	B	C	D	E
2. There are a lot of rules that don't apply to me .	A	B	C	D	E
3. I can make things come true just by wishing . . .	A	B	C	D	E
4. No one understands me	A	B	C	D	E
5. The world revolves around me	A	B	C	D	E
6. After I've done something that might get me in trouble, I can protect myself from harm by us- ing will power	A	B	C	D	E
7. When I get away with breaking a rule, I am like- ly to break it again	A	B	C	D	E
8. I think: If it feels good, do it	A	B	C	D	E
9. Other people know what is best for me	A	B	C	D	E
10. When I'm faced with danger, I do the first thing that comes to my mind	A	B	C	D	E
11. I think about things differently than anyone else in the world	A	B	C	D	E
12. Even if I wish very hard, I cannot make some- thing happen	A	B	C	D	E
13. If I did something wrong, I would get caught . .	A	B	C	D	E
14. I feel like nothing can hurt me	A	B	C	D	E

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
15. No one else knows what my feelings are like	A	B	C	D	E
16. I think: If a little of something is good, a lot is better	A	B	C	D	E
17. Before I make a choice, I think carefully	A	B	C	D	E
18. I obey rules	A	B	C	D	E
19. I like taking chances	A	B	C	D	E
20. I know what is best for me	A	B	C	D	E
21. When other people don't agree with me, they are wrong	A	B	C	D	E
22. Bad things can happen to me	A	B	C	D	E
23. I'm the only one in the world who feels the way I do	A	B	C	D	E
24. When I'm faced with danger, I think about several possible things to do	A	B	C	D	E
25. I don't do something just because it feels good . .	A	B	C	D	E
26. If I take risks, I won't get in trouble	A	B	C	D	E
27. I'm smart enough to keep myself out of trouble . .	A	B	C	D	E
28. My thoughts are so different that other people think they are weird	A	B	C	D	E

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
29. I do <u>not</u> obey rules	A	B	C	D	E
30. I know more about what is best for me than other people do	A	B	C	D	E
31. I think praying can keep bad things from happening	A	B	C	D	E
32. I'm the center of the universe	A	B	C	D	E
33. If I did something wrong, I wouldn't get caught	A	B	C	D	E
34. When I get bored, I seek out trouble	A	B	C	D	E
35. I believe that nothing really bad will ever happen to me	A	B	C	D	E
36. I can make something happen if I wish very hard about it	A	B	C	D	E
37. The world does <u>not</u> revolve around me	A	B	C	D	E
38. Once I have broken a rule, it's easier to break it again	A	B	C	D	E
39. No one else has ever looked at the world the same way that I do	A	B	C	D	E
40. Even though I believe something is wrong, I'm likely to do it anyway	A	B	C	D	E
41. God protects me when I am in danger	A	B	D	D	E

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
42. I do things without thinking	A	B	C	D	E
43. Other people know more about what is best for me than I do	A	B	C	D	E
44. Put an X through the letter that best de- scribes what you do. Compared to people your own age, how many chances do you take?					
(a) <u>Many more</u> than other people my age					
(b) <u>Somewhat more</u> than other people my age					
(c) <u>About as many</u> as other people my age					
(d) <u>Somewhat fewer</u> than other people my age					
(e) <u>Many fewer</u> than other people my age					

APPENDIX F

INVISIBLE AUDIENCE SCALE

Instructions

Please read the following stories carefully and assume that the events actually happened to you. Place a check next to the letter that best describes what you would do or feel in the real situation. After you have checked your answer, record that letter on the enclosed IBM sheet.

Please note you will start on the IBM sheet with number 45.

45. You have looked forward to the most exciting dress-up party of the year. You arrive after an hour's drive from home. Just as the party is beginning, you notice a grease spot on your trousers or skirt. (There is no way to borrow clothes from anyone.) Would you stay or go home?
- a. ☐ Go home.
 - b. ☐ Stay, even though I'd feel uncomfortable.
 - c. ☐ Stay, because the grease spot wouldn't bother me.
46. Let's say some adult visitors came to your school and you were asked to tell them a little bit about yourself.
- a. ☐ I would like that.
 - b. ☐ I would not like that.
 - c. ☐ I would not care.
47. It is Friday afternoon and you have just had your hair cut in preparation for the wedding of a relative that weekend. The barber or hairdresser did a terrible job and your hair looks awful. To make it worse, that night is the most important basketball game of the season and you really want to see it, but there is no way you can keep your head covered without people asking questions. Would you stay home or go to the game anyway?
- a. ☐ Go to the game and not worry about my hair.
 - b. ☐ Go to the game and sit where people won't notice me very much.
 - c. ☐ Stay home.
48. If you went to a party where you did not know most of the kids, would you wonder what they were thinking about you?
- a. ☐ I wouldn't think about it.
 - b. ☐ I would wonder about that a lot.
 - c. ☐ I would wonder about that a little.
49. You are sitting in class and have discovered that your jeans have a small but noticeable split along the side seam. Your teacher has offered extra credit toward his/her course grade to anyone who can write the correct answer to a question on the blackboard. Would you get up in front of the class and go to the blackboard, or would you remain seated?
- a. ☐ Go to the blackboard as though nothing had happened.
 - b. ☐ Go to the blackboard and try to hide the split.
 - c. ☐ Remain seated.

50. When someone watches me work . . .
- a. ☐ I get very nervous.
 - b. ☐ I don't mind at all.
 - c. ☐ I get a little nervous.
51. Your class is supposed to have their picture taken, but you fell the day before and scraped your face. You would like to be in the picture but your cheek is red and swollen. Would you have your picture taken anyway or stay out of the picture?
- a. ☐ Have your picture taken even though you'd be embarrassed.
 - b. ☐ Stay out of the picture.
 - c. ☐ Have your picture taken and not worry about it.
52. One young person said, "When I'm with people I get nervous because I worry about how much they like me."
- a. ☐ I feel like this often.
 - b. ☐ I never feel like this.
 - c. ☐ I feel like this sometimes.
53. You have been looking forward to your friend's party for weeks, but just before you leave for the party your mother tells you that she accidentally washed all your good clothes with a red shirt. Now all your jeans are pink in spots. The only thing left to wear are your jeans that are too big and too baggy. Would you go to the party or would you stay home?
- a. ☐ Go to the party, but buy a new pair of jeans to wear.
 - b. ☐ Stay home.
 - c. ☐ Go to the party in either the pink or baggy jeans.
54. Suppose you went to a party that you thought was a costume party but when you got there you were the only person wearing a costume. You'd like to stay and have fun with your friends but your costume is very noticeable. Would you stay or go home?
- a. ☐ Go home.
 - b. ☐ Stay and have fun joking about your costume.
 - c. ☐ Stay, but try to borrow some clothes to wear.
55. Let's say you wrote a story for an assignment your teacher gave you and she asked you to read it aloud to the rest of the class.
- a. ☐ I would not like that at all.
 - b. ☐ I would like that but I would be nervous.
 - c. ☐ I would like that.
56. If you were asked to get up in front of the class and talk a little about your hobby . . .
- a. ☐ I would not be nervous at all.
 - b. ☐ I would be a little nervous.
 - c. ☐ I would be very nervous.

APPENDIX G

APPLIED DILEMMAS

1. My parents are about to get a divorce and they're going to live separately. I have to decide which one to live with and I can't even begin to decide. I get along with both of them pretty well, and they both would like to have me live with them. I need some help on deciding. What should I do?

Follow-up questions:

- a. How should I decide which one to live with?
 - b. What different things should I think about to help me decide?
 - c. If you were me, would you talk to anyone about the decision and, if so, who?
2. I've known this lawyer, Mr. Babcock, for a long time and he's always been really nice to me. I know him because he handles my father's affairs and business and all. I haven't lived with my parents since I was small, and Mr. Babcock has been just like a father to me. Mr. Babcock never forgets my birthday, and he usually finds out something I really want from my friends and then gives it to me for my birthday. Once when my father didn't send me any money, Mr. Babcock lent me some money of his own and also gave me some jobs around his house to do to earn money. Since Mr. Babcock has always been really nice to me, I was really surprised to hear someone in my class say that Mr. Babcock cheated someone by not telling him about some money he was supposed to get. Now I don't know whether to trust Mr. Babcock or to believe the person in my class. What would you think of Mr. Babcock now?

Follow-up questions:

- a. Whom would you trust if it were you?
 - b. What different things should I think about to help me decide?
 - c. If you were me, would you talk to anyone about the decision and, if so, who?
3. I run around with a rough crowd. One guy, Brad, was even locked up for putting someone in the hospital. Since he got out, he's sort of been our leader. We just found a brand new sports car unlocked on this parking lot. Brad says he can hotwire it and the rest of the group think we should take it for a little spin. We wouldn't hurt it and we'd bring it back real soon. I want to go along, yet I really don't know. What should I do?

Follow-up questions:

- a. How should I decide whether to go along?
- b. What different things should I think about to help me decide?
- c. If you were me, would you talk to anyone about the decision and, if so, who?

VITA 2

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Candidate for the Degree of

Doctor of Philosophy

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