

COMPREHENSION OF TERMINOLOGY RELATED TO  
TREATMENT AND PATIENTS' RIGHTS  
BY INPATIENT CHILDREN  
AND ADOLESCENTS

By

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## PREFACE

This study investigates the relationship of various cognitive and demographic variables to an important concept in the psychological, medical and legal literature, the ability of minors to comprehend terminology related to treatment and patients' rights. It is my particular hope that the results of this investigation will assist mental health professionals in educating and informing minors of their rights in treatment situations.

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## CHAPTER I

### INTRODUCTION

In recent years, changing conceptions about the needs and rights of children have led to attempts to reform the institutions and practices that affect their lives (Takanishi, 1978). As a result, the legal status of minors has become significantly more complex. It was as recently as 1967 that children were declared to be "persons" under our Constitution (Melton, 1983a). Since that time, the general trend has been to move away from the view of older minors as needing protection (except in cases of abuse and/or neglect) and toward a view of them as independent and able to participate in decisions affecting their lives (Feshbach & Feshbach, 1978).

While acknowledging that care must be taken not to thrust important decisions upon minors unless they are capable of accepting this increased independence (Melton, 1983b), researchers and policy makers have begun to acknowledge that withholding the right to make decisions from older, competent adolescents is not always the most beneficial practice. Although there have been recent gains in specific legal rights for minors, the limits of their legal autonomy remain unclear (Grisso, 1981). A minor's ability to make decisions about important matters will typically be constrained by a specific court's belief about his or her level of competence to make sound judgments. Additionally, even mature minors may find their decision-making ability constrained by the court's deference to parental decisions about their child's welfare, except in cases where the parents are found to be

unfit as caretakers of the child (Ehrenreich & Melton, 1983). It is only in recent years that legal authorities have begun to acknowledge that children's wishes are not necessarily identical with those of their parents. Even within the child advocacy movement, a great deal of controversy exists regarding the proper limits of state authority in intervening in the lives of children, (Mnookin, 1978; Rogers & Wrightsman, 1978).

Laws regarding the appropriate ages at which children can participate in various activities vary widely from state to state, with most states setting the age of majority at eighteen (Dodson, 1984). In many states an adolescent can work, make purchases, drive an automobile, request birth control, or receive treatment for a drug problem or venereal disease, yet cannot make independent decisions about psychological treatment (Klenowski, 1983). Even the Supreme Court has acknowledged that "[c]onstitutional rights do not mature and come into being magically only when one attains the state-defined age of majority" (Planned Parenthood v. Danforth, 1976). Yet the Court has not addressed the issue of how to determine when a minor's rights should be limited or advanced (Dodson, 1984). Many of the legal decisions about minors' competence appear to have been based on traditions and values rather than on empirical evidence (Melton, 1983a). Because legal and professional ethical standards regarding intervention in children's lives are not clear, mental health professionals are often "caught in the middle" in decisions about whether to ally with the child, the parents, or with the state as parens patriae (the state as father) (Stier, 1978).

With regard to decisions about psychological treatment, there has been a movement toward allowing adolescents to have greater powers of consent to treatment and refusal of treatment (Ehrenreich & Melton, 1983). There are documented examples of instances in which treatment can be

delayed, denied, or adversely affected by the adolescents' inability to consent to treatment (Klenowski, 1983). There have also been examples of adolescents feeling that their rights have been violated due to their inability to refuse psychological treatment, particularly inpatient treatment (Wilson, 1978). There has been an increasing emphasis on providing institutionalized adolescents with information about their rights and responsibilities as patients (Ehrenreich & Melton, 1983).

As ideas change about the rights of minors to become involved in psychological treatment decisions, laws change as well. For example, the state of Virginia has enacted a law that will allow a child to independently consent to outpatient psychotherapy (Cogbill, 1979). States such as Pennsylvania, Michigan, and Tennessee have enacted statutes that prohibit the institutionalization of minors against their will without a formal commitment hearing (Ehrenreich & Melton, 1983). These laws vary with regard to the age at which they require such a proceeding to take place. The philosophy behind the enactment of these laws seems to be that children should have more to say about decisions that affect their lives. These legal developments also acknowledge that parents do not always recognize or act in their children's best interests when mental health treatment is involved (Ellis, 1974; Holder, 1977).

Many minors are in favor of having greater rights and responsibilities with regard to legal, medical, psychological, intellectual, and financial issues (Margolin, 1980, 1982; Rogers & Wrightsman, 1978; Taylor, Adelman, & Kaser-Boyd, 1985; Tremper & Feshbach, 1981). There is evidence that the experience of choice is likely to result in numerous psychological benefits for children (Melton, 1980b, 1982). For example, when children have experience with participation in decision making, their competence in

reasoning increases (Tapp & Melton, 1983) and their sense of efficacy is heightened (Lewis, 1983). Other benefits are "a reduction of negative affect toward unpopular decisions, improved understanding, more follow-through, and better outcomes, including improved relationships between the children and adults involved in joint decision-making processes" (Taylor & Adelman, 1986, p. 346).

Before greater rights and responsibilities with regard to treatment are extended to minors, more information needs to be gathered about their ability to understand treatment situations. In the psychological and legal literature there have been increasing numbers of attempts to determine when children are competent to make independent decisions regarding legal, medical, and psychological matters. The concept of "competence to make informed treatment decisions" is a complex one, encompassing numerous aspects such as comprehension of consent vocabulary; ability to understand the nature, risks, and benefits of the treatment situation; decision-making ability; and intelligence (Grisso, 1981). The purpose of the present study was to examine an issue of relevance to mental health professionals and their young clients, the question of older children's and adolescents' competence to understand various aspects of psychological treatment, specifically inpatient treatment. The present study investigated the competence of individuals in these two age groups (a) to comprehend vocabulary and statements used in descriptions of psychological treatment and (b) to comprehend statements of patients' rights and responsibilities.

Although other studies have examined the ability of minors to understand psychological treatment decisions, none have attempted to develop an objective scoring system for the comprehension of terminology related to treatment and patients' rights. The development of such a scoring system

could eventually lead to greater precision in the assessment of competency to consent to psychological treatment. Information about the ability of individuals of different age-groups and different levels of abstract reasoning ability to understand treatment-related and rights-related terms and phrases could be used to develop or modify consent forms and statements of patients' rights in order to increase readability. An awareness of consent issues on the part of mental health service providers stands to benefit both practitioner and client by lending greater clarity to the terms of the relationship in which they are engaged.

## CHAPTER II

### LITERATURE REVIEW

The topic of competence to consent to psychological treatment is a multifaceted, complex one. The following literature review will present material from several related areas. The areas and their order of presentation are: (a) the general topic of informed consent to treatment; (b) research on specific abilities necessary to consent to psychological treatment; (c) factors related to minors' ability to provide consent to psychological treatment (including minors' conceptions of rights, of illness and emotional disturbance, and of psychotherapy and psychotherapists); (d) minors' comprehension of terminology in descriptions of treatment and in consent forms for treatment; and (e) cognitive and demographic variables related to comprehension of treatment and consent terminology. This chapter will conclude with a description of the present study, designed to examine the ability of older children and adolescents to comprehend terminology in descriptions of psychological treatment and statements of rights and responsibilities and to understand risks and benefits of psychological treatment.

#### Informed Consent

In order for a decision to enter treatment to be considered legally valid and to meet the requirements of truly "informed" consent, three

general conditions must be satisfied: competency, voluntariness, and knowledge (Weithorn, 1983). Those adults most often judged incompetent are those individuals with severe cognitive deficits or who are psychotic. Consent is obtained after informing the patient of the risks and benefits inherent in the treatment and the alternatives to the proposed treatment. The practitioner must also attempt to determine that the individual has the ability to understand this information; if this is not the case, a legal guardian must be consulted (Ehrenreich & Melton, 1983).

Because minors are considered to be legally incompetent and therefore lacking in the ability to make treatment decisions (Ehrenreich & Melton, 1983), it is the parents rather than the child who have the right to be consulted for consent purposes. When a parent is not available or is judged to be incompetent, a guardian or other person or agency acting in loco parentis (in place of the parent) is authorized to provide consent. The parental consent requirement exists in order to protect children from adult providers who might otherwise take advantage of their immaturity (Wilson, 1978). Many argue, however, that this requirement prevents some minors from receiving the treatment they need or that this results in minors being forced into treatment despite their resistance (e.g., Klenowski, 1983).

Several exceptions to the parental consent requirement exist. These are: (a) the "emancipated minor" exception from parental consent, wherein the minor is independent of or living separate from his or her parents due to financial independence, marriage, and/or enlistment in the armed forces; (b) the "mature minor" exception from parental consent, wherein the minor is judged by a court of law to be sufficiently mature to consent to or refuse a particular treatment; (c) the situation wherein specific types of treatment are exempted from the parental consent requirement; and (d) the situation



wherein the parents are judged not to be acting in the best interests of the child, as in cases of medical neglect.

Some states have passed specific laws allowing minors to provide independent consent to mental health services, while some have allowed children to consent to all medical treatment. These laws vary widely with regard to age guidelines, and are unclear on many points, particularly with regard to confidentiality issues (Ehrenreich & Melton, 1983). Some of these laws have been criticized because they protect only medical providers from liability, while nonphysician mental health providers are excluded from coverage (Wilson, 1978). Additionally, while providing little guidance on how to determine competence to seek treatment, they do not remove the ethical responsibility of the professional to determine whether the patient has the capacity to understand and consent to treatment.

Numerous laws have defined the conditions required in inpatient mental health settings. One of the most basic rights of institutionalized minors is the right to rehabilitative treatment rather than mere incarceration. Three essential components of adequate treatment have been defined: a humane physical and psychological environment, individualized treatment plans, and professional staff in adequate numbers to implement those plans (Ehrenreich & Melton, 1983). Additional requirements have been stipulated for the treatment of minors, including the right to education, recreation, regular and frequent access to mental health professionals, and an individualized treatment plan specifically tailored to the child's developmental and maturational level. Other requirements and limitations have been placed upon the use of seclusion, corporal punishment, and drug treatment (Ehrenreich & Melton, 1983). The consent literature has not addressed minors' abilities to comprehend these rights and to make

decisions regarding inpatient treatment.

Because the process of child development includes changes in intellectual, social, physical and emotional capabilities, it is unclear at what point minors become able to make informed decisions. The fact that there is considerable variability among the rates of maturity of different individuals makes the determination of minors' competence an even more difficult problem. Yet, because parents cannot always be depended upon to act in the best interests of their child when the need for psychological treatment is involved (Ferleger, 1973), and because some minors appear to be competent to make informed treatment decisions (Weithorn, 1983), there is a clear need for definite guidelines about when a child should be able to consent to or refuse psychological treatment. While the ultimate decision about whether minors' level of competence will affect their rights to self-determination is a legal decision rather than a scientific one, psychologists can play a role in informing legal policymakers of empirical findings about minors' performance in consent situations (Melton, 1983a).

#### Research on the Competence to Consent to Psychological Treatment

In a review article, Grisso and Vierling (1978) examined the cognitive capacity to consent to treatment in light of data provided by two areas of developmental research: (a) minors' abilities to assimilate and analyze complex information at different developmental stages; and (b) developmental trends in children's deference to authority and how these trends affect children's treatment decisions. They concluded that (a) minors under eleven years of age are likely to be unable to provide independent consent due to their level of cognitive development; (b) minors age fifteen and above

are likely to be able to provide independent consent; and (c) minors ages 11-14 appear to be in a transitional period of cognitive development; some individuals in this age range might be able to provide independent consent for limited purposes. Although the Grisso and Vierling review was an important step in the competence literature, it was limited by the fact that there were few studies at that time dealing directly with treatment decisions. A more recent article (Powell, 1984) has modified the conclusions of the Grisso and Vierling (1978) article, stating that age 16 might be a more appropriate age at which to assume competence, and that minors aged 12-15 should be presumed incompetent unless considerable evidence to the contrary can be provided for the individual case.

One attempt to operationalize the concept of competence to consent is provided by Weithorn and Campbell (1982), in their study on competence to make decisions about medical and psychological treatment. The authors referred to legal standards of competence in the planning of their study in order to maximize the criterion validity of their measurements. The primary hypothesis of the study was that 14-year-olds would not differ from adults in terms of decision-making competence. The age of 14 was chosen because it has been described as an "equilibrium point" in the acquisition of formal operations (Inhelder & Piaget, 1958). This is the stage of cognitive development in which individuals are believed to become capable of reasoning in a more flexible, future-oriented, and mature fashion. The authors did not test for the presence of formal operational thinking directly.

The results of the Weithorn and Campbell study indicated that (a) when compared on all the tests of competence, minors aged 14 demonstrated a level of competence equivalent to that of adults; and (b) minors aged 9 appeared less competent than adults according to the standards of

competence requiring understanding and a rational decision-making process. Even 9-year-olds, however, appeared to be capable of comprehending the basics of what is required to state a treatment preference, and they tended to express clear and sensible treatment preferences similar to those of adults. These results indicated that even though 9-year-olds are not fully competent to make independent treatment decisions, they are capable of meaningful involvement in decision making about medical and psychological health care.

Important work on the topic of competence to consent has been done in areas other than consent to psychological treatment. For example, areas of examination have included consent to medical care (Grodin & Alpert, 1983; Lewis, C. C., 1980; Lewis, C. E., 1983; Raitt, 1975; Rosoff, 1981; Seagull, 1978; Wadlington, 1973, 1983; Wilkins, 1975); psychoeducational assessment (Adelman, Lusk, Alvarez, & Acosta, 1985; Bersoff, 1983; Taylor, Adelman, & Kaser-Boyd, 1985); and research (Ferguson, 1978; Keith-Spiegel, 1976, 1983). The ability of minors to comprehend Miranda warnings has been examined extensively (Grisso, 1981, 1983; Grisso & Manoogian, 1980; Melton, 1981). Although an examination of these lines of inquiry would be too lengthy for the present discussion, they have contributed considerably to the knowledge about minors' capacity to make decisions about important matters.

### Factors Related to the Capacity to Consent to Psychological Treatment

#### Conceptions of Rights

An area of research related to children's competence to consent is the

study of children's concepts of their rights per se and their rights to seek and receive adequate treatment. It would appear that one aspect of competence to consent is the recognition that the act of voluntary consent involves the exercise of a right. Melton (1980a) found that three basic levels of reasoning regarding rights appear to exist. (a) Young, more egocentric children seem to perceive that all that they have and do is representative of a right bestowed by a benevolent authority. (b) As the child grows older, rights are seen as a system of laws enacted by and potentially changed by people. At this concrete, conventional level of reasoning, rights might still be confused with privileges accorded by one's role, physical competence, or social status. (c) On the third level of reasoning, rights may be conceptualized on a higher plane of ethics and "natural law," in which they are seen to be part of basic requirements for maintenance of human dignity and individual freedom. Although he did not directly test this hypothesis, Melton points out that the achievement of this more abstract level of understanding about rights is likely to coincide with the entry into formal operations.

### Conceptions of Psychological Disturbance

A developmental progression has been demonstrated with regard to children's understanding of social factors in psychological disturbances (e.g., Coie & Pennington, 1976; Dollinger, Thelen, & Walsh, 1980; Novak, 1974). Coie and Pennington (1976) found that cognitive development is related to increases in children's concepts of psychological causality. These authors found that 17-year-olds, as compared to 10- and 13-year-olds, had developed a more advanced form of social judgment in the form of greater social perspective-taking ability. They state that these older adolescents, since they are able to acknowledge the existence of other psychological

perspectives, can recognize that individual characteristics lead to particular responses to circumstances. This ability can lead to understanding of psychological disturbance as an idiosyncratic response. These authors surmise that the adolescent who is better able to conceptualize psychological disturbance in others may be better able to identify when his or her own behavior is worthy of therapeutic attention.

### Conceptions of Psychological Treatment and Psychological Professionals

Little is known about children's knowledge and beliefs about psychological treatment. We do know that accurate perception of the role of professional help givers increases developmentally (Dollinger & Thelen, 1978) and that accurate perceptions of psychological treatment by children are related to the perceptions of their parents (Day & Reznikoff, 1980). Adelman, Kaser-Boyd, and Taylor (1984) found that children as young as ten with histories of learning and behavior problems demonstrated a reasonable understanding of treatment, as well as demonstrated a satisfactory level of ability to communicate views about their involvement.

Research on children's knowledge about psychological treatment could help to counteract some of the problems often associated with treatment of children. For example, Holmes and Urie (1975) found that pretreatment interviews with children (to review their expectations and to establish a truly mutual treatment contract between therapist and child client) reduced premature terminations. In a related finding, Day and Reznikoff (1980) found that inaccurate expectations of treatment by children were related to treatment dropout.

### Comprehension of Terminology Related to Treatment, Consent, Risks, and Benefits

Grisso and Vierling (1978) pointed out in their review of developmental literature that there is little information available regarding children's understanding of the meanings of terms likely to arise in treatment consent situations. Although research has been conducted in this area in recent years, little is known about how children conceptualize psychotherapy, consent, or numerous other treatment-related terms. Messenger and McGuire (1981) found that children gradually evolve a conception of confidentiality consistent with professional guidelines, and that their ideas about confidentiality are strongly affected by their previous experiences with treatment. Kaser-Boyd, Adelman, Taylor, and Nelson (1986) state that the ability to think about risks and benefits of treatment "may be the building block upon which the other aspects of reasoning about treatment are built" (p. 167).

Kaser-Boyd, Adelman, and Taylor (1985) found that the majority of minors aged 10-20 in a treatment program were able to understand the terms "risk" and "benefit." While most of the minors were able to identify at least one risk or one benefit of therapy, older minors were able to identify more risks and benefits and used more abstract concepts in their discussions of these concepts. In a related study, Kaser-Boyd et al. (1986) found that even 10- and 11-year-old children were able to correctly sort risk and benefit statements and that many were able to weigh risks and benefits in their decisions regarding hypothetical treatment dilemmas.

### Cognitive and Demographic Variables Related to Comprehension of Treatment Terminology

In the limited research done on the ability of individuals of different ages to comprehend treatment-related and consent-related terminology, age was found to be a significant variable in increasing comprehension of the concept of confidentiality (Messenger & McGuire, 1981), but not in the comprehension of risks and benefits (Kaser-Boyd et al., 1986). In a related area of research, Grisso's (1981) study of the ability of adolescents to comprehend statements and vocabulary in Miranda warnings, the variables of age and intelligence were found to be most closely related to comprehension scores. Additionally, Grisso's results suggested that better predictions about comprehension could be made by considering both variables simultaneously than by using either variable independently.

In their study of the comprehension of risks and benefits, Kaser-Boyd et al. (1986) found abstract reasoning ability as measured by reading comprehension scores to be more closely related to comprehension of risks and benefits than was the variable of age. Other authors (e.g., Grisso & Vierling, 1978; Melton, 1980a; Weithorn, 1983) have hypothesized a relationship between abstract reasoning ability and various elements of minor's competence to consent, stating that the person with the ability to reason abstractly should be able to "think in a sufficiently differentiated manner to weigh more than one treatment alternative and set of risks simultaneously, . . . abstract or hypothesize as yet nonexistent risks and alternatives, and . . . employ inductive forms of reasoning" (Grisso & Vierling, 1978, p. 418). For the individual who is developing abstract reasoning abilities and flexibility of thinking, consideration of a problem from a



variety of perspectives is common. Rather than being bound to the here and now as in the preceding period of concrete reasoning, the individual becomes capable of abstract, hypothetico-deductive, and reflective reasoning, imagining possibilities and solving problems mentally, before acting. These abilities are relevant in the case of treatment and rights comprehension, as much of the information that new patients are asked to consider relates to situations with which they have had no previous experience, and which can have ramifications beyond the immediate context.

It is important to note that the process of developing abstract reasoning ability is a gradual one. According to Inhelder and Piaget, children progress from concrete to formal operations between the ages of eight and sixteen (Linn, 1977); it would therefore be expected that most of the participants in the present study would be in a transitional phase. Exactly what enables an individual to attain the ability for abstract reasoning is not clear, with Piaget speculating that contributing factors are neurological development occurring around the time of puberty, social environment, education, the intellectual level of the culture, and the individual's experience (Ginsberg & Opper, 1988). Some researchers (e.g., Fischer, Hand, & Russell, 1984) believe that the development of abstract reasoning capacity does not end in adolescence, but rather continues through the adult years. Some individuals appear never to process information on an abstract level, even in adulthood (Tomlinson-Keasey, 1972).

Various lines of research on abstract reasoning ability have developed during the years since Piaget proposed his theories. While researchers following Piaget have tended to focus on the emergence of logical strategies that are in effect across subject matter domains, researchers working in the cognitive science model have emphasized the

importance of content and context in reasoning (Linn, 1983). This group of researchers would tend to emphasize the importance of subject matter knowledge in influencing performance (e.g., Fischer et al., 1984; Griggs & Cox, 1982). According to the cognitive science model, an individual who has acquired the general ability to process verbal information (such as verbal analogies) on an abstract level might not be able to reason abstractly about specific content areas (such as treatment consent issues), depending on previous experience with the particular subject matter in question (Linn, 1983).

This literature review has included information on the ability of minors to comprehend treatment and rights. It began with the general topic of informed consent and competence to consent to treatment, areas from which much of the research on adolescents' competence in other areas has grown. Other variables related to competence to understand treatment were then introduced, including understanding of rights, conceptions of psychological disturbance, conceptions of psychological professionals, and the comprehension of risks and benefits of treatment. It was shown that ages at which minors are considered competent vary widely across categories, with researchers generally believing that minors younger than age fourteen have difficulty comprehending treatment and rights-related information. The ability for abstract reasoning was widely cited as a necessary ability for this type of comprehension, yet few empirical tests of this hypothesis have appeared in the literature. Numerous gaps in our knowledge about children's and adolescents' abilities to comprehend treatment-related information were reported.

## Description of the Present Study

The present study examined whether the characteristics found to be relevant to the comprehension of Miranda rights (age and intelligence) are also salient factors in the comprehension of inpatient treatment and rights. In order to measure comprehension, the subjects were asked to: (a) give definitions for several of the basic terms and phrases found in a description of inpatient treatment and a statement of patients' rights and responsibilities; (b) paraphrase statements used in a description of inpatient treatment and a statement of patients' rights and responsibilities; and (c) identify sentences with meanings similar to the statements in a description of inpatient treatment and a statement of patients' rights and responsibilities. A standard method of administration and a scoring system for these responses were developed, based on the work of Thomas Grisso (1981) in his assessment of juveniles' comprehension of Miranda rights. Intelligence was evaluated using the Wechsler (1974) test.

The literature in the consent area identifies comprehension of consent terminology and understanding of risks and benefits as two related aspects of competence to consent (Kaser-Boyd et al., 1986). As abstract reasoning has been found to relate to comprehension of risks and benefits, the present study examined whether or not differences in abstract reasoning ability are also predictive of differences in the comprehension of treatment and rights terminology. Three measures of abstract reasoning ability were used. The Abstract Reasoning Cluster score from the Woodcock-Johnson Psycho-educational Battery (Woodcock & Johnson, 1977) was used to measure general abstract reasoning ability. Two context-specific measures of abstract reasoning ability were also used, in order to determine the relationship

between comprehension of treatment and rights terminology and the ability to understand the risks and benefits of hypothetical psychological treatment situations (TRMT-DIL) and hypothetical social situations (S-DIL). These context-specific measures were included as a way to assess the findings of Linn (1983) that context is an important variable in the ability to use abstract reasoning.

Certain variables were included as covariates in this study: gender, SES, reading comprehension ability, and length of previous inpatient and outpatient treatment. Gender differences were assessed because some research has shown that females exhibit superior verbal abilities, including superior comprehension abilities (Maccoby & Jacklin, 1974; Petersen, Crockett, & Tobin-Richards, 1982), although Hyde (1981) has found the size of the difference to account for only 1% of the variation in scores. The variable of socioeconomic status (SES) was included because there is some suggestion that individuals of different SES levels may have different levels of comprehension due to cultural and linguistic differences (Grisso, 1981). In order to assess the influence of reading ability upon performance on the comprehension measures, the subjects' Reading Cluster Score from the Woodcock-Johnson Psychoeducational Battery was obtained. This measure was included because it was surmised that differences in reading ability might provide a more parsimonious explanation for differences in comprehension than variables such as intelligence or abstract reasoning. Because the subjects were patients at an inpatient institution and many had been exposed to previous treatment, the contribution of length of previous treatment to comprehension of treatment and rights terminology was assessed.

## Hypotheses

It was predicted that if the findings of Grisso (1981) with regard to Miranda rights comprehension could be generalized to the situation of treatment and rights comprehension, then: (a) the variable of age would correlate positively with comprehension measures; (b) the variable of intelligence would correlate positively with comprehension measures; and (c) the variables of age and intelligence considered simultaneously would be a better predictor of scores on comprehension measures than would either variable considered independently.

It was predicted that if the findings of Kaser-Boyd et al. (1986) with regard to abstract reasoning could be generalized to the situation of treatment and rights comprehension, then positive correlations would be found between comprehension of treatment and rights terminology and the abstract reasoning measures. It was also predicted that the measures of abstract reasoning ability would be better predictors of comprehension scores than would the variable of age and that the general abstract reasoning measure would account for a portion of the variance in comprehension scores not accounted for by the variables of age and intelligence considered simultaneously.

It was predicted that if the findings of Linn (1983) with regard to the difference between general and context-specific abstract reasoning ability could be generalized to the current study, then: (a) the abstract reasoning measure designed to assess understanding of risks and benefits of treatment would be a better predictor of treatment and rights comprehension scores than would the general abstract reasoning measure; and (b) that the abstract reasoning measure designed to assess understanding of social situations (not

specifically related to treatment situations) would not be a better predictor of treatment and rights comprehension than the general abstract reasoning measure.

Given Grisso's (1981) findings that SES correlated positively with scores on Miranda comprehension measures, it was hypothesized that SES would also correlate positively with the treatment and rights comprehension measures. Given the findings of Hyde (1981) regarding the variable of gender, it was predicted that gender would not account for a significant portion of the variation between scores on the comprehension measures.

Considering that comprehension of inpatient treatment and patients' rights has not been addressed previously in the literature, more specific hypotheses regarding patterns of results of regression analyses were not generated. This aspect of the present study can be considered to be exploratory, with the purpose of generating hypotheses for future research regarding the relationship between comprehension of treatment and rights terminology and the various cognitive and demographic variables.

## CHAPTER III

### METHOD

#### Subjects

Forty subjects, 18 males and 22 females, ranging in age from 10 years, zero months to 17 years, 9 months, participated in the study. The mean age of participants was 15 years, 2 months (SD=1 year, 8 months). The sample included three Black females, one American Indian female, and one American Indian male; the remainder of the subjects were Caucasian. The mean Hollingshead SES score was 40.39 (SD=10.93); this score is at the upper end of the range of individuals who are skilled craftsmen or clerical and sales workers. The mean family income was \$25,578 (SD=\$15,673); actual income levels ranged from \$7,000 to \$60,000. The mean of the fathers' Hollingshead occupation scores was 5.13 (SD=2.43), and the mean of the mothers' Hollingshead occupation scores was 4.41 (SD=2.78); these scores are characteristic of clerical and sales workers or small farm and business owners. Occupations ranged from individuals who were unemployed or employed in low-level service occupations to individuals who were members of professions or owned medium-sized businesses. The mean of the fathers' education scores was 4.50 (SD=1.11), and the mean of the mothers' education scores was 4.74 (SD=1.37); these scores correspond with completion of high school. Educational levels ranged from completion of junior high school to completion of advanced degrees. Subjects were recruited from a private inpatient psychiatric institution in an urban area in the southwestern United

States. They had a variety of diagnoses, primarily substance abuse, conduct disorder, and depression. The mean IQ of the subjects was 97.45 (SD=11.99). Sixty percent of the subjects had no previous inpatient treatment; the previous inpatient time of the remaining subjects ranged from two weeks to 102 weeks, with a mean of 17.19. Fifty percent had no previous outpatient treatment; the previous outpatient time of the remaining subjects ranged from one session to 260 sessions, with a mean of 34.80. All participants in the study were seen shortly after their admission to the institution; all had been admitted seven days or less at the time of data collection. Data were collected during a two-month period in the spring and early summer of 1987. All newly admitted patients during this period participated in the study, except for three individuals whose parents did not wish for their children to take part in the research.

## Measures

### Outcome Measures

#### Measures of Comprehension of Treatment and Rights Terminology

Measures based on three indicants of comprehension of treatment and rights terminology were employed: (a) the subjects' ability to accurately define critical words appearing in a treatment description and a statement of rights and responsibilities; (b) the subjects' ability to accurately paraphrase statements in a treatment description and a statement of rights and responsibilities; and (c) the subjects' ability to identify preconstructed sentences with meanings similar to those in the treatment description and statement of rights and responsibilities. These indicants were modeled after those used



by Grisso (1981) in his research on juveniles' comprehension of Miranda warnings. These three indicants can be categorized into two response modes recommended by Ebel (1972) and Gronlund (1968) for adequate assessment of comprehension. The first response mode is "to have persons supply their own expression of their understanding of a content area in question" (Grisso, 1981, p. 47). The second response mode is "to have persons select an answer from a variety of alternative answers which have been preconstructed, as in multiple-choice or true-or-false items" (Grisso, 1981, p. 47). Although each of these methods of assessing comprehension has limitations, the use of multiple indicants to assess a single construct as recommended by Kerlinger (1973) allows for the verification of results across measures.

Three measures of comprehension of treatment terminology and three measures of rights terminology were developed, corresponding to the three indicants of comprehension. The scores on the three measures are seen as independent assessments of a common content area and are not meant to be combined in order to provide a composite score of comprehension. The development and use of the six measures is described below.

Comprehension of Treatment Vocabulary (CTV) and Comprehension of Rights Vocabulary (CRV)--Development. The treatment vocabulary items used in this study were taken from a description of inpatient treatment written by the author in consultation with members of the psychology department at the psychiatric institution. The rights vocabulary items used in this study were taken from a statement of rights and responsibilities used at the institution. Guidelines for adequate, questionable, and inadequate definitions were developed by the author. Two independent raters in addition to the author scored all protocols; they were blind to all identifying infor-

mation regarding the subjects except that they were adolescents in an inpatient psychiatric facility. These raters were graduate students in psychology who were trained by the author to score the CTV and CRV responses. For the 40 subjects, correlations were computed for each pair of raters for each item and for the total score for each instrument. On the CTV, the correlation coefficients for the individual items ranged from .25 to 1.00, with most of the coefficients above .75. The correlation coefficients for the three interrater comparisons for the total CTV scores were .96, .95, and .94. On the CRV, the correlation coefficients for the individual items ranged from .65 to 1.00. The correlation coefficients for the three interrater comparisons for the total CRV scores were .98, .97, and .94.

CTV and CRV Administration. Each of the words were presented audibly and printed on a card. A sentence containing the word was read. The subject was then asked to "tell me in your own words what the word means." Specific rules were used by the examiner in asking subjects to clarify or elaborate on their responses when these responses are of questionable adequacy. These "query rules" are similar to those used by Grisso (1981). The subjects' responses were recorded on tape and later transcribed for purposes of scoring.

CTV and CRV Scoring. Each item was evaluated according to specific scoring standards. For each item, responses were given 2 points (adequate understanding), 1 point (questionable or partial understanding) or 0 points of credit (inadequate understanding). The score used in the final analyses was the average of the scores given by the three raters. Total CTV scores ranged from 0 to 20 and total CRV scores ranged from 0 to 26. Rather than requiring sophisticated wording in order to achieve full credit for responses,

the scoring criteria emphasized the conveyance of the essential meaning of the words. Refer to Appendices C and F for copies of the CTV and CRV items and the corresponding administration and scoring instructions.

Comprehension of Treatment Statements (CTS) and Comprehension of Rights Statements (CRS)--Development. Statements from a description of treatment and from a statement of rights and responsibilities were chosen by the author to reflect important aspects of treatment (CTS) and patients' rights (CRS). Definitions of adequate, questionable, and inadequate paraphrases were written by the author. Two independent raters in addition to the author scored all protocols. These raters were graduate students in Psychology who were trained by the author to score the CTS and CRS responses. For the 40 subjects, correlations were computed for each pair of raters for each item and for the total score for each instrument. On the CTS, the correlation coefficients for the individual items ranged from .76 to .98. The correlation coefficients for the three interrater comparisons for the total CTS scores were .97, .96, and .92. On the CRS, the correlation coefficients for the individual items ranged from .56 to .97. The correlation coefficients for the three interrater comparisons for the total CRS scores were .95, .97, and .93.

CTS and CRS Administration. Statements from the description of treatment and from the statement of rights were read aloud to the subject. The subject was provided with printed copies of these statements and allowed to follow along with the examiner during the reading. The subjects were then asked to say "in your own words" what each statement means. Specific rules were used by the examiner in asking subjects to clarify or elaborate on their initial responses when these responses are of questionable

adequacy. These "query rules" are similar to those used by Grisso (1981). The subjects' responses were recorded on tape and later transcribed for purposes of scoring.

CTS and CRS Scoring. Each item was evaluated according to specific scoring standards. For each item, responses were given 2 points (adequate understanding), 1 point (questionable or partial understanding) or 0 points of credit (inadequate understanding). The score used in the final analyses was the average of the scores given by the three raters. Total CTS and CRS scores ranged from 0 to 10. Refer to Appendices D and G for copies of the CTS and CRS items and the corresponding administration and scoring instructions.

Comprehension of Treatment Statements, True or False (CTS-TF) and Comprehension of Rights Statements, True or False (CRS-TF)--Development. The same statements used in the CTS and CRS were used. Accurate and inaccurate rewordings were generated by the author of this study, with preference given to items that are worded simply.

CTS-TF and CRS-TF Administration. The subject was presented with a card on which statements from the description of treatment or rights statements are printed. Each statement was read aloud as it was presented. The subject was told that the examiner would present some other written sentences which use different words and that some of the sentences would "mean the same thing" as the printed sentence while others would not. The subject was asked to say "true" or "same" when the meanings were similar, and "false" or "not the same" when they were dissimilar to the original sentence.

CTS-TF and CRS-TF Scoring. Inaccurate choice of paraphrase was scored zero points, while accurate choice of paraphrase was scored one point. Total scores on the CTS-TF and on the CRS-TF can range from 0 to 15. Refer to Appendices E and H for copies of the CTS-TF and CRS-TF items and the corresponding administration and scoring instructions.

### Predictor Measures

#### Intelligence Test Score

In order to determine the subjects' levels of intelligence, the full-scale score from the Wechsler (1974) test was used. For subjects aged 16 and under, the WISC-R score was used; for 17-year-old subjects, the WAIS-R score was used. Scores were obtained from the subjects' records; the Wechsler is given routinely upon admission to the institution. The full-scale score of the WISC-R has an average reliability coefficient of .96 in the standardization group over the entire age range covered by the scale. The test is judged to have satisfactory criterion validity when compared to a variety of intelligence tests, achievement tests, and school grades (Sattler, 1988). The average reliability coefficient for the WAIS-R across the age range covered by the scale is .97, and the test has been found to correlate highly with various other measures of global intelligence (Wechsler, 1981). The WAIS-R and the WISC-R are judged to yield equivalent IQ's for individuals in the lower age range of the WAIS-R (Wechsler, 1981).

#### Reading Comprehension Score

In order to determine the subjects' levels of reading comprehension, the standard score from the Reading Cluster of the Woodcock-Johnson

Psychoeducational Battery (Woodcock & Johnson, 1977) was used. Scores were obtained from the subjects' records; the Woodcock-Johnson is given routinely upon admission to the institution. The Woodcock-Johnson Psychoeducational Battery has been judged to be a well-standardized, reliable, and valid measure of scholastic achievement (Sattler, 1988). The Reading Cluster consists of Letter-Word Identification, Word Attack, and Passage Comprehension, selected because they represent three of the most significant aspects of overall reading ability (Hessler, 1982).

#### Tests of Abstract Reasoning Ability

General Abstract Reasoning Measure. A test consisting of verbal and nonverbal reasoning tasks was used to provide an indicator of the subjects' ability for general abstract reasoning. The score came from the Abstract Reasoning Cluster of the Woodcock-Johnson Psychoeducational Battery (Woodcock & Johnson, 1977). The Reasoning Cluster primarily measures nonverbal abstract reasoning, conceptualization, and problem-solving; verbal expressive requirements are minimized. Subjects with more flexible cognitive propensities tend to perform better on the cluster (Hessler, 1982).

Context-Specific Reasoning Measures: Hypothetical Treatment Dilemmas (TRMT-DIL) and Hypothetical Social Dilemmas (S-DIL). Subjects were presented with four hypothetical inpatient treatment dilemmas and four hypothetical social dilemmas (not related to treatment). They were then asked to name the risks and benefits inherent in each situation, and asked to explain their reasoning. Responses were scored on a 4-point scale. The two scores used in the analyses were the total scores for the TRMT-DIL and S-DIL instruments. Dilemmas were written by the author of this study;

scoring procedures were based on those developed by Kaser-Boyd et al. (1986). Two independent raters in addition to the author scored all protocols. These raters were graduate students in Psychology who were trained by the author to score the TRMT-DIL and S-DIL responses. Correlations were computed for each pair of raters for each item and for the total score. On the TRMT-DIL instrument, the correlation coefficients for the individual items ranged from .45 to .97. The correlation coefficients for the three interrater comparisons for the total TRMT-DIL scores were .94, .90, and .83. On the S-DIL instrument, the correlation coefficients for the individual items ranged from .55 to .94. The correlation coefficients for the three interrater comparisons for the total S-DIL scores were .94, .94, and .88. Refer to Appendices I and J for copies of the TRMT-DIL items and the corresponding administration and scoring instructions.

#### Demographic Information

The following information was obtained from institutional records for each subject: (a) age; (b) gender; (c) socioeconomic status, calculated using the method developed by Hollingshead (1975); (d) number of weeks of prior experience with outpatient treatment, if any; (e) number of weeks of prior experience with inpatient treatment, if any.

#### Procedure

##### Obtaining Consent From Parents and Children

Consent to participate in the study was obtained at the time of admission by an employee who provided the family with a description of the study. The parents were asked to sign a consent form after having an opportunity to ask questions (refer to Appendix A for the description of

study and consent forms). After the parents had signed the consent form, the subjects were approached individually by the researcher, given a verbal description of the study, and asked to participate. Contact with the subjects occurred within one week of their admission. The voluntary and confidential nature of the research was emphasized, with subjects being informed that refusal to participate would not adversely affect their treatment progress. After verbal permission was obtained and before the data collection began, a description of the study was read and a written consent form was signed by the participant (see Appendix B). Procedures for consent to research were based on guidelines suggested by Levine (1975).

#### Order of Administration of Procedures

There are three groups of instruments in this study; these groups were presented in a counterbalanced order in order to control for the effects of fatigue on the quality of subject's responses. The order of presentation within the groups is: (a) Comprehension of Treatment Measures: Comprehension of Treatment Vocabulary (CTV); Comprehension of Treatment Statements (CTS); and Comprehension of Treatment Statements, True or False (CTS-TF); (b) Comprehension of Rights Measures: Comprehension of Rights Vocabulary (CRV); Comprehension of Rights Statements (CRS); and Comprehension of Rights Statements, True or False (CRS-TF); (c) Abstract Reasoning Instruments: Hypothetical Treatment Dilemmas (TRMT-DIL); and Hypothetical Social Dilemmas (S-DIL). Further information about the administration procedure for each instrument can be found in the Appendices C through J. Scores for the variables of IQ, Reading Comprehension, and General Abstract Reasoning were obtained from the subjects' charts; these tests were given routinely upon admission to the institution. Demographic information was



also obtained from the subjects' charts.

### Feedback and Debriefing Procedure

After the completion of data collection, subjects were given an opportunity to ask further questions about the study. In the event that a participant expressed a need for further explanation of the rights and responsibilities statement during this portion of the study or at any time during the data collection process, the experimenter answered questions as soon as the data collection process was completed. If it was judged that the patient needed more information than could adequately be provided by the experimenter, the experimenter assisted the patient in seeking out the information from a staff member at the institution. See Appendix K for a description of the feedback and debriefing procedure.

## CHAPTER IV

### RESULTS

#### Correlational Analyses

All statistical analyses were performed using the CRUNCH statistical package (Bostrom, 1986); the significance level used was .05. Pearson Product moment correlational analyses were used to assess relationships between the predictor and outcome measures. Refer to Appendix L for correlation matrices. The independent variable of age correlated positively with all comprehension measures. The relationship was statistically significant only in the case of CTS, CRV, and CRS-TF. The relationship of age with all three instruments was moderately strong ( $r = .48$ ,  $r = .41$ , and  $r = .48$ , respectively). The variable of intelligence (IQ) correlated positively with all comprehension measures. The relationship was statistically significant in all cases except that of CRS-TF. The relationships between IQ and the remaining two rights comprehension measures, CRV ( $r = .60$ ) and CRS ( $r = .64$ ) were the strongest. The relationships between IQ and the treatment comprehension measures, CTV, CTS, and CTS-TF, were not as strong ( $r = .37$ ,  $r = .32$ , and  $r = .32$ , respectively).

Based on a semi-partial correlation from a regression analysis using age and intelligence (IQ) as the only predictor variables, the variables of age and intelligence considered simultaneously were better predictors of scores on comprehension measures than either variable considered independently.

This was true for all of the comprehension instruments except for CTS-TF. Regarding the treatment comprehension instruments, for the variable of CTV, age and IQ accounted for 26% of the variance ( $p < .01$ ); age accounted for 13% of the unique variance ( $p < .05$ ), while IQ accounted for 18% of the unique variance ( $p < .01$ ). For the variable of CTS, age and IQ accounted for 39% of the variance ( $p < .01$ ); age accounted for 28% of the unique variance ( $p < .001$ ), while IQ accounted for 16% of the unique variance ( $p < .01$ ). For the variable of CTS-TF, the variable of IQ alone accounted for 10% of the variance ( $p < .05$ ). With IQ in the model, the addition of age did not significantly improve the predictive ability. IQ considered independently, therefore, appeared to be the better predictor of CTS-TF scores than either age alone or the two scores considered simultaneously.

Regarding the rights comprehension instruments, for the variable of CRV, age and IQ accounted for 62% of the variance ( $p < .0001$ ); age accounted for 26% of the unique variance ( $p < .0001$ ), while IQ accounted for 45% of the unique variance ( $p < .0001$ ). For the variable of CRS, age and IQ accounted for 57% of the variance ( $p < .0001$ ); age accounted for 16% of the unique variance ( $p < .001$ ), while IQ accounted for 48% of the unique variance ( $p < .0001$ ). For the variable of CRS-TF, age and IQ accounted for 33% of the variance ( $p < .05$ ); age accounted for 27% of the unique variance ( $p < .001$ ), while IQ accounted for 9% of the unique variance ( $p < .05$ ). It should be noted that with other variables in the model in the regression analyses to be described later in this chapter, age and IQ did not remain in each model as significant predictors. In these cases the entry of various abstract reasoning measures caused either age, IQ, or both variables to drop out of the model.

Pearson product moment correlational analyses were used to assess the relationships between the comprehension measures and the variables

included as covariates. The variable of reading comprehension correlated positively with all comprehension measures. The relationship was statistically significant in the case of CTS-TF, CRV, and CRS. The relationships were moderately strong in the case of CRV ( $r = .52$ ) and CRS ( $r = .53$ ) and not as strong in the case of CTS-TF ( $r = .34$ ). The variable of SES correlated positively with comprehension scores on all measures except CTS. None of these relationships were significant. The variables of gender, previous outpatient treatment, and previous inpatient treatment correlated positively with the comprehension scores for all measures. None of these relationships were significant.

Pearson product moment correlational analyses were used to assess the relationships between the comprehension measures and the variables of abstract reasoning ability (both general and context-specific). Significant positive correlations were found in all cases for the relationships between the comprehension measures and the general abstract reasoning measure, the Abstract Reasoning Cluster Score from the Woodcock-Johnson. This relationship was strong in the case of CRV ( $r = .61$ ) and CRS ( $r = .58$ ), moderately strong in the case of CTS-TF ( $r = .50$ ), and not as strong in the case of CTV ( $r = .34$ ), CTS ( $r = .34$ ), and CRS-TF ( $r = .33$ ). For the context-specific abstract reasoning measures, the scores on both the treatment dilemmas (TRMT-DIL) and the social dilemmas (S-DIL) were positively correlated with all of the comprehension measures. The relationships were statistically significant in all cases except that of CTS-TF for both TRMT-DIL and S-DIL. For TRMT-DIL, the relationship was strong in the case of CTS ( $r = .60$ ), CRV ( $r = .65$ ), and CRS ( $r = .60$ ). The relationship was moderately strong in the case of CTV ( $r = .54$ ) and CRS-TF ( $r = .48$ ). For S-DIL, the relationship was strong in the case of CTV ( $r = .57$ ), CTS ( $r = .59$ ), CRV

( $r = .58$ ), and CRS ( $r = .64$ ). The relationship was moderately strong in the case of CRS-TF ( $r = .44$ ).

Based on the use of a formula devised by Walker and Lev (1958) for the purpose of comparing correlation coefficients, setting a significance level of .05, the variable of general abstract reasoning ability was not a better predictor of comprehension scores than was the variable of age. Also based on the use of this formula, the general abstract reasoning measure was found to be a better predictor of comprehension scores than was the context-specific abstract reasoning measure related to treatment, TRMT-DIL, except in the case of CTS. The general abstract reasoning measure was found to be a better predictor of comprehension scores than was the context-specific abstract reasoning measure related to social dilemmas, S-DIL, except in the case of CTV and CTS.

### Regression Analyses

Each of the dependent measures in the categories of comprehension of treatment information and comprehension of rights information was subjected to a general linear models (GLM) procedure in order to determine if there were different regression lines to explain the data for individuals of different age groups, different levels of intelligence, different genders, different levels of SES, different levels of reading comprehension ability, different levels of previous treatment experience, and/or different levels of abstract reasoning ability. The interaction terms found to be significant on the basis of this GLM procedure were entered into the regression equation for each of the criterion measures. Only two of 42 of these analyses resulted in significant interaction terms. Since this is no more than would be expected by chance, given that the original variables were already in the

model, it was determined that the interaction effects were not pervasive enough to warrant dividing the subjects into groups for the purpose of the regression analyses.

Hierarchical regression analyses were performed in order to identify predictors of good performance on the comprehension measures. The demographic and cognitive variables of age, IQ, SES, gender, previous treatment (outpatient and inpatient) and reading comprehension were introduced into the first model simultaneously. The general and context-specific abstract reasoning measures were then introduced into the second model in a step-wise fashion, in order to see if any of these abstract measures accounted for a portion of the variance not already accounted for by the variables in the original model.

### Results for Treatment Instruments

For the Comprehension of Treatment Vocabulary measure (CTV), the social dilemmas measure (S-DIL) was the only variable which entered the model, accounting for 32% of the variance ( $p < .001$ ). The addition of other variables failed to account for a significant amount of additional variance.

For the Comprehension of Treatment Statements measure (CTS), four variables were significant predictors. The social dilemmas measure (S-DIL) accounted for 17% of the unique variance ( $p < .001$ ). Age accounted for 17% of the unique variance ( $p < .001$ ), SES accounted for 9% of the unique variance ( $p < .01$ ), and IQ accounted for 5% of the unique variance ( $p < .05$ ). Together, these four variables accounted for 63% of the variance ( $p < .0001$ ).

For the Comprehension of Treatment Statements -- True/False measure (CTS-TF), two variables were significant predictors. The general abstract reasoning measure accounted for 33% of the unique variance

( $p < .001$ ), and SES accounted for 8% of the unique variance ( $p < .05$ ). Together, these two variables accounted for 34% of the variance ( $p < .001$ ).

### Results for Rights Instruments

For the Comprehension of Rights Vocabulary measure (CRV), three variables were significant predictors. IQ accounted for 19% of the unique variance ( $p < .0001$ ), age accounted for 17% of the unique variance ( $p < .001$ ), and treatment dilemmas (TRMT-DIL) accounted for 7% of the unique variance ( $p < .01$ ). Together, these three variables accounted for 70% of the variance ( $p < .0001$ ).

For the Comprehension of Rights Statements measure (CRS), three variables were significant predictors. IQ accounted for 19% of the unique variance ( $p < .001$ ), age accounted for 11% of the unique variance ( $p < .01$ ), and social dilemmas (S-DIL) accounted for 8% of the unique variance ( $p < .01$ ). Together, these three variables accounted for 65% of the variance ( $p < .0001$ ).

For the Comprehension of Rights Statements -- True/False measure (CRS-TF), two variables were significant predictors. Treatment dilemmas (TRMT-DIL) accounted for 16% of the unique variance ( $p < .01$ ), and age accounted for 17% of the unique variance ( $p < .01$ ). Together, these two variables accounted for 40% of the variance ( $p < .001$ ).

### Qualitative Analyses

The subjects' ability to correctly define the various vocabulary words and paraphrase the sentences varied widely. An examination of the content of the various responses can be instructive in identifying specific misconceptions, thereby aiding in the determination of how to modify information for

future use. Refer to Appendix M for a discussion of the content of responses to the various items.

Besides the content of responses to particular items, certain patterns of comprehension were discovered. For one, there were differences within each instrument in the difficulty level of the various items. In other words, there were some items that were relatively easy for the majority of subjects, regardless of age or developmental level, such as "behavior" and "goal." There were other items that were difficult for many subjects, such as "grievance procedure" or the phrase "disclosed to." In contrast, responses to other items, such as "evaluation" or "consultation" were more variable, ranging from definitions rivaling those found in a dictionary to highly inaccurate answers.

Another pattern of comprehension was the tendency for certain groupings of items to be more difficult than others. For example, for treatment instruments, vocabulary words were understood more readily than sentences. This pattern did not hold true for the rights instruments, however. Both terms and statements related to rights appeared to be difficult to understand. Comparing categories across instruments, treatment vocabulary words seemed to be more difficult than rights vocabulary, while treatment and rights sentences seemed to be about equally difficult. The following data will illustrate these trends. For Comprehension of Treatment Vocabulary (CTV), for five of the ten words, more than half of subjects achieved scores indicating adequate comprehension. These words are: Behavior, Peers, Goal, Positive Relationship, and Self-Esteem. In contrast, for Comprehension of Rights Vocabulary (CRV), at least half of subjects achieved adequate comprehension for only two of thirteen words, Responsibilities and Confidential. For Comprehension of Treatment Statements (CTS), more than



half of the subjects achieved scores indicating adequate comprehension for only one of the sentences, the one that addressed the importance of talking about problems rather than acting out. For Comprehension of Rights Statements (CRS), more than half of the subjects achieved scores indicating adequate comprehension for two of the sentences, those addressing the freedom from unreasonable search and seizure and freedom from unreasonable seclusion. Another pattern noted in the data was that subjects generally had an easier time with the true-false instruments requiring recognition of correct paraphrases than they did with the instrument requiring them to produce a correct paraphrase without assistance.

## CHAPTER V

### DISCUSSION

This study investigated the competence of children and adolescents to comprehend treatment and patients' rights terminology. Newly-admitted inpatient children and adolescents from age 10 through age 17 were asked to give definitions of treatment- and rights-related words, to paraphrase sentences, and to choose sentences with meanings similar to the original treatment and rights sentences. The instruments used for these assessments were generated for the purpose of this study. The results indicate that there are many gaps in the ability of minors of different ages when asked to state their understanding of these kinds of information.

Based on the work of Grisso (1981) regarding the comprehension of Miranda rights, the first set of hypotheses predicted significant and positive relationships between the comprehension measures and the variables of age, intelligence, and SES. The correlations between the variable of age and three out of the six comprehension measures, CTS, CRV, and CRS-TF, were found to be statistically significant. The correlations between the variable of IQ and five out of the six comprehension measures (all except CTS-TF) were found to be statistically significant. These results concur with the findings of Grisso (1981) with regard to comprehension of Miranda warnings; he found that IQ accounted for more of the individual differences in comprehension scores than did age. While Grisso obtained only low to modest correlations between the variable of age and the comprehension measures, the results of this

study indicate moderately strong relationships between these variables. The magnitude of the correlation coefficients for the relationship between IQ and comprehension are quite comparable in both this study and that of Grisso (1981).

In the present study, the variables of age and intelligence considered simultaneously were better predictors of scores on comprehension measures than either variable considered independently, except in the case of CTS-TF, where IQ alone was the better predictor. These results were also comparable with those of Grisso (1981); he found that age and IQ considered simultaneously accounted for 29% of the variance in comprehension of Miranda vocabulary, and 51% of the variance in comprehension of Miranda statements. The results of this study indicate that age and IQ considered simultaneously accounted for 26% of the variance in comprehension of treatment vocabulary; 39% of the variance in comprehension of treatment statements; 62% of the variance in comprehension of rights vocabulary; and 57% of the variance in comprehension of rights statements.

For the variable of SES, none of the correlations with the comprehension instruments were found to be significant. Grisso (1981) had suggested that individuals of different SES levels may have different levels of comprehension due to cultural and linguistic differences; the failure of SES to act as a significant predictor in this sample may have been due to the fact that this was primarily a Caucasian sample and only one individual (an American Indian girl) was bilingual. Grisso's sample, on the other hand, was 73.3 percent Caucasian and 26.7 percent black.

A comparison with Grisso's study that did hold true was the comparison of experienced vs. nonexperienced subjects. Grisso compared individuals with differing levels of previous experience with the juvenile justice

system, while the present study compared individuals with differing levels of previous experience with inpatient and outpatient treatment. Neither set of results indicated that previous experience with the respective systems contributed significantly to comprehension of related statements and vocabulary. Grisso did not report reading comprehension levels for his sample; in the current study the variable of reading comprehension was found to correlate significantly with three of the six comprehension measures, CTS-TF, CRV, and CRS.

Based on the results obtained with this relatively small sample size, the patterns of correlations for age, IQ, and age and IQ combined are consistent enough with Grisso's findings to warrant further investigation of treatment and rights comprehension based on his model and using the techniques adapted from his study. The possibility exists that comprehension of Miranda rights and comprehension of treatment and patients' rights may be based on similar processes. It would seem necessary, however, to administer instruments assessing both areas of comprehension to the same sample of individuals in order to make direct comparisons of these areas of comprehension ability. Additionally, future research might compare comprehension across these areas in subjects who had been arrested, who had been admitted to an inpatient institution, and a control group of students.

Based upon the work of Kaser-Boyd et al. (1986), in their study of risk-benefit comprehension, the second set of hypotheses predicted significant and positive relationships between the comprehension measures and the abstract reasoning measures. As predicted, the general abstract reasoning measure and the context-specific abstract reasoning measures were significantly and positively correlated with all of the comprehension measures with the exception of CTS-TF for both TRMT-DIL and S-DIL. The

hypotheses also predicted that the variable of abstract reasoning would be a better predictor of comprehension scores than the variable of age; this did not hold true for any of the measures. The hypotheses also predicted that the abstract reasoning measures would account for a portion of the variance in comprehension scores not accounted for by age and intelligence; this was true only in the case of the CTS-TF measure.

Because the variables of age and IQ were both highly correlated with abstract reasoning in this sample, these results are not surprising. It is possible that the results of these analyses differ from the Kaser-Boyd et al. (1986) results due to the fact that different instruments were used for the measurement of abstract reasoning. The measure they used for abstract reasoning, the reading comprehension score from the California Achievement Test, is of questionable validity for this purpose. The reading score used for the current study, the Reading Cluster Score from the Woodcock-Johnson battery, was highly correlated ( $r = .79$ ) with the abstract reasoning measure, yet it is possible that the reading comprehension score used by Kaser-Boyd would have resulted in a different pattern of correlations. The instrument used in this study for the assessment of general abstract reasoning may not be sensitive enough to detect differences between subjects; one must also consider the possibility that abstract reasoning ability does not exist as a domain that is psychometrically distinct from the measurement of intelligence.

Based on the work of Linn (1983), the third set of hypotheses predicted a difference between general and context-specific abstract reasoning ability. The pattern of results was not confirmatory of the predictions. The context-specific measures of treatment dilemmas (TRMT-DIL) and social dilemmas (S-DIL) had been predicted to relate to the general abstract

reasoning measure in particular ways. The TRMT-DIL measure was expected to be a better predictor of comprehension scores than the general abstract reasoning measure. This was the case only for the CTS measure. The S-DIL measure was not expected to be a better predictor of comprehension than the general abstract reasoning measure, yet it was found to be a better predictor for the CTV and CTS instruments. These results indicate that the TRMT-DIL and S-DIL instruments may not be measuring different contexts of reasoning about risks and benefits. It is to be noted that they are highly correlated with each other ( $r = .72, p < .0001$ ) and show a moderately strong level of correlation with the general abstract reasoning measure ( $r = .44, p < .01$  for TRMT-DIL;  $r = .54, p < .001$  for S-DIL).

There are several possible explanations for the finding that TRMT-DIL was not a better predictor of comprehension scores than the general abstract reasoning measure. One possibility is that the method of eliciting responses and/or scoring the hypothetical dilemmas was not adequately sensitive to different levels of sophistication in abstract reasoning ability. A second possibility is that the context-specific reasoning measures may not tap reasoning abilities that are markedly different from those tapped by the general instrument. This is closely related to the third possibility, that adolescents reason identically across contexts, as claimed by Papini and Seby (1986), and that the postulation of context-specific reasoning made by Linn (1983) is incorrect. It seems to be the case, however, that these instruments did tap into different levels of sophistication in abstract reasoning ability, although they may not have been adequately sensitive to differences between treatment and social contexts.

With regard to the results of the regression analyses, there were some fairly clear patterns of predictor variables for comprehension measures. One

of the abstract reasoning measures, either the general abstract measure, or one of the hypothetical dilemma measures, entered the model for each of the comprehension measures. The variable of age entered the model for all of the comprehension measures except CTV and CTS-TF. The variable of IQ entered the model for CTS, CRV, and CRS. The variable of SES entered the model for CTS and CTS-TF. These regression models are comprised of variables that are related directly to individuals' ability to process information logically. It is usually considered to be the case that individuals of increasing age will develop greater powers of reasoning, just as it is considered to be true that individuals with higher IQ's and higher scores on measures of abstract reasoning will be more effective in processing complex information. It is unclear why the variable of SES entered the model in two cases; it will be interesting to note whether this pattern holds up in future research.

The amount of variance accounted for by the regression models for the comprehension measures was acceptable in all cases and impressive in some cases. The magnitude of R-squared ranged from .33 in the case of CTS-TF to .70 in the case of CRV. The values of R-squared were also quite high in the case of CTS (.63) and CRS (.65). This indicates that with parsimonious models, it is possible to predict a considerable portion of the variance for most of the comprehension instruments used in this study. Learning a person's age is quite simple, and while IQ is a more time-consuming figure to obtain, this information is often available for individuals admitted to inpatient institutions, or is one of the pieces of information that is collected routinely.

The fact that one of the hypothetical dilemma measures (TRMT-DIL and S-DIL) enters the regression models in four out of six cases is quite notable. These measures are quite simple to administer, take only 15

minutes at most, and have been found to be enjoyable for the participant. It is significant that this simple methodology appears to tap into the underlying abilities that are required to comprehend treatment and rights. Higher scores were obtained by individuals who could go beyond the basic facts of a situation to imagine possibilities and suggest alternative approaches. This ability to go beyond the concrete and obvious to the more abstract and unclear elements of a situation appear to be necessary to a good understanding of treatment and rights. This type of decision-making dilemma seems to hold a lot of promise for prediction of adolescent reasoning ability in other areas.

The question arises as to why specific abstract reasoning measures were more likely to appear in the regression equations. First, the various abstract reasoning measures may have tapped into different reasoning abilities or styles. The general abstract reasoning measure entered only one of the equations, that for CTS-TF. Perhaps it could be argued that instruments using situations more closely related to real-life situations, such as the hypothetical dilemmas, are more predictive of comprehension than are the tasks used in the general abstract reasoning measure, which tend to be further removed from a context of practical reasoning; this possibility could be addressed in future research. The regression equation for the CTS-TF measure was markedly different than that for the other comprehension measures. It was the only measure for which neither age nor IQ were significant predictors; the reasons for this difference are unclear.

Rather than differentiating between practical versus general reasoning, the abstract reasoning measures may have been sensitive to verbal/nonverbal aspects of problems. The fact that the decision-making dilemma instruments entered the equations more frequently than the general



abstract reasoning measure may be due to the fact that they consisted of verbal reasoning problems, while the general abstract reasoning measure consisted of both verbal and nonverbal reasoning tasks, weighted toward nonverbal tasks. Because the definition of comprehension terms and statements is a verbal task, the decision-making dilemmas may have been more sensitive to prediction of this dimension of comprehension.

It is unclear why the variable of IQ enters the prediction equation in only three cases: CTS, CRV, and CRS. Because this variable did not contribute significantly to the variance for the two true-false measures, it is possible that having a higher IQ is more relevant for tasks on which individuals are being asked to provide a response than on tasks requiring only that the individual select correct and incorrect responses. Future research should examine whether this difference holds up in other samples.

It is also unclear why the variable of SES enters the prediction equation in only two cases, CTS and CTS-TF. It is unknown whether differences in SES are more strongly related to prediction of treatment comprehension. Additionally, it should be noted that the measures of CTS and CTS-TF were the only two comprehension measures that did not conform to the predictions in more than one hypothesis. It is difficult to ascertain the reasons for these differences based on the results of this small sample size. The study should be replicated and, if the effect holds up in a larger sample, future research should address this issue. It is possible that the treatment statements comprising these instruments will need to be rewritten in order to be more sensitive to individual differences; it is also possible that the scoring criteria need to be reevaluated as well.

### Characteristics of Comprehension Errors

Analysis of the qualitative data by grouping responses into patterns provided information on the types of comprehension errors made by the participants in the study. Based upon these data, several patterns are of interest here. Generally, adolescents who were higher functioning in terms of intelligence and abstract reasoning ability were able to understand the content of many of the terms and statements. Even the most intelligent and therapy-experienced subjects, however, had glaring misconceptions in some of their responses. Personnel at clinics and treatment centers are likely to assume that patients who present as relatively intelligent are generally capable of comprehending treatment and rights information. They therefore might spend less time or be less rigorous in the explanation of treatment and rights to this type of patient. This situation potentially places higher functioning patients at risk for harboring misconceptions about treatment and rights information.

Participants who functioned less adequately in terms of intelligence and abstract reasoning ability misunderstood many of the statements, as could be expected. When some of these participants encountered particular phrases that were most difficult for them, such as "grievance procedure" and "pharmacological restraints," they tended to assume that they would be unable to understand the remainder of the sentence and would want to give up. This phenomenon speaks to the need for assessing patients familiarity with all relevant words. An assessment of the reading difficulty level of all written materials about treatment would be helpful.

Certain patterns of comprehension errors were observed: (a) those subjects who made many errors often tended to exhibit concrete ideas about

terms and statements that had abstract meaning; (b) subjects tended to develop an idea of the sentence's meaning based on the portion of the sentence that was understandable to the subject, generally ignoring the remainder of the sentence. Thus, if sentences contain qualifying clauses, these are rife with possibilities for misunderstanding, as the child or adolescent may not understand and therefore may not take into account the qualifying information; (c) subjects had a tendency to read a statement of "rights" as if it were a "rule" permitting the institution to do a certain act. This was a fairly common error. For example, when reading about the right of patients not to be restrained unless a certain situation exists, some participants read it as though it stated that the institution does have a right to restrain a patient if they perform certain acts. The notion of a patient's right to be protected from certain actions seemed to be lost to these participants, leaving them at risk for maltreatment, not only in the institution but in the larger world. Perhaps it should come as no surprise that after years of dependency and living under rules imposed by adults, children and adolescents fail to see the correct meaning of a statement meant to grant them rights, and continue to function at the lower levels of reasoning about rights as described by Melton (1980a). It may be particularly difficult for institutionalized adolescents to keep in mind that there are inalienable rights that do not have to be earned, particularly when so much emphasis is placed upon earning privileges. This difficulty distinguishing between rights and privileges places young people at risk for abuse by unscrupulous practitioners. As many theorists have noted (e.g., Adelman et al., 1984; Weithorn, 1983), it is important for minors to have experience with the exercise of rights and autonomy while they are growing up rather than being expected to develop this understanding suddenly upon the age of legal maturity.

Regarding the patterns of comprehension between different groupings of items, the finding that treatment words are easier to define than treatment statements is not a difficult trend to understand, as it typically requires more verbal facility and cognitive capacity to explain the meaning of a sentence expressing a complete thought than to define a single word. The finding that words and statements related to rights are both quite difficult is not particularly surprising, as several of the rights-related words were quite sophisticated and probably unfamiliar, and the rights-related statements were long and complex. Adequate comprehension of rights terminology and statements may have required greater abstract reasoning ability and a more advanced level of morality development as well. The finding that the instruments requiring recognition of correct paraphrases were less difficult than those requiring definitions would suggest that the use of true-false instruments might be useful in assessing comprehension, particularly in individuals with limited expressive abilities. These instruments might provide a quicker and more efficacious way to determine specific misconceptions held by different individuals. Such instruments might also be helpful in teaching adolescents about their rights, although ability to perform on instruments requiring recognition of correct responses would not necessarily generalize to situations in which individuals must discern the meaning of statements without the benefit of comparing alternate versions.

### Summary and Implications of Findings

The current research addressed the relationship between cognitive variables and competence to understand treatment and rights terminology. Based on these results, it can be stated as a general rule that older adoles-

cents are better able to comprehend treatment and rights terminology and statements, that individuals with higher IQ's have better comprehension skills in these areas, and that individuals who can respond adequately to risk-benefit dilemmas requiring abstract reasoning ability are also more likely to comprehend treatment and rights vocabulary and statements. The comparability of the pattern of results with those of Grisso (1981) regarding comprehension of Miranda warnings suggests that there are certain abilities common to the understanding of both treatment situations and legal rights. Kaser-Boyd, Adelman, Taylor, and Nelson (1986) state that the ability to think about risks and benefits of treatment "may be the building block upon which the other aspects of reasoning about treatment are built" (p. 167), yet it appears that the true building blocks are the logical reasoning abilities that typically increase with age and seem to be found more readily in individuals who score higher on tests of intelligence. Grisso and Vierling (1978) have enumerated processes that are crucial to more adequate reasoning: the ability to attend to a task; the ability to reflect on the issues at hand before giving a response, the ability to weigh more than one alternative at a time, the ability to hypothesize alternatives, and the ability to use both inductive and deductive forms of reasoning. These are based on the characteristics of formal operations (Inhelder & Piaget, 1958), the stage of cognitive development when individuals become more capable of reasoning at a complex level. The results of this study suggest that these formal operational abilities may be deployed in a similar manner across the content areas of treatment comprehension and legal rights comprehension. These results would seem to contradict the theories of those working in the cognitive science model, who feel that content and context are powerful determinants of ability to use abstract reasoning. As with most areas of human behavior, it is likely that

this is not an either/or situation; future research should focus on the determination of when context is important and when basic abstract reasoning abilities override the need to have a specific knowledge base related to context and content.

It would be premature based on the results of data from this relatively small sample to postulate cutoff ages or IQ's for the adequate comprehension of treatment and patients' rights. It is probably more accurate to say that while demographic and cognitive characteristics can provide guidelines to individuals attempting to assess competence in minors, the characteristics and abilities of individual children should be considered on a case-by-case basis. Only seven individuals under the age of 14 were included in this study; the youngest of these was age ten. It is not possible, therefore, to generalize from their performance levels to the performance of all individuals of this age. It was notable, however, that these younger individuals, for the most part, evidenced considerable difficulty in comprehending the various terms and statements and provided markedly less sophisticated responses to the risk/benefit dilemmas. These results would seem to agree with those found by Grisso (1981) with regard to comprehension of Miranda warnings; he stated that individuals 12 years of age or younger were lacking in such comprehension ability, with those aged 13, 14, and 15 more variable in outcome, and individuals aged 16 to 19 having more adequate levels of comprehension. Again taking into account the small size of the sample, these results would seem to be at variance with the findings of researchers such as Weithorn and Campbell (1982), who found that some minors aged nine were capable of comprehending basic issues of treatment preference. These results also appear to differ from those of Adelman et al. (1984), who found that children as young as ten demonstrated a reasonable understanding of

treatment. Further research is clearly needed in order to determine the characteristics of children who can comprehend treatment and rights; it will be important to determine if certain types of information and/or certain types of presentation styles are more comprehensible.

### Directions for Future Research

Prior to the current study, the ability of inpatient children and adolescents to comprehend information related to psychiatric treatment and patients' rights had not been addressed in the psychological literature. Additional research will need to replicate the reliability of the instruments used in this study and further assess their validity. Additional work on improvement of the scoring criteria for all items with lower reliability will be needed. Although the current research has been valuable in providing some baseline information about adolescents' comprehension and reasoning abilities and in providing a structured method of assessment for such understanding, further research might also address these abilities in a more open-ended manner. For example, rather than requesting information from subjects on the basis of highly structured rules for querying, a semistructured interview format might be more valuable for determining gaps in knowledge and the origins of fallacies. Such a methodology might more adequately replicate the situation that exists when adolescents are being informed about treatment and its associated rights and responsibilities.

Future research should also include assessment of adolescents' ability to apply rather than simply state definitions and risk/benefit information. The dilemmas included in the current research were quite simple, perhaps did not adequately reflect the subjects' life situations, and required decisions that did not lead to serious consequences. Future research should include

treatment and social dilemmas with a somewhat higher level of detail, a greater level of realism, and more serious implications. These changes would enable researchers to more adequately test the limits of adolescents' reasoning abilities and for them to address the issue of when and how context affects reasoning. Weithorn and Campbell (1982) have included more complicated and realistic dilemmas in their research, yet these vignettes were perhaps too lengthy and complicated. It will be important that vignettes are written in such a way that enables investigators to clearly tease out the basic patterns of reasoning.

Researchers might also examine differences in ability to comprehend treatment descriptions, statements of rights, and consent forms with different levels of readability. Epstein and Lasagna (1969) showed that comprehension of medical information given to untutored adult subjects is inversely correlated with the elaborateness of the material presented. Because the reading comprehension level of many children and adolescents does not permit them to understand material at even a minimal level of complexity, researchers should also investigate the efficacy of different methods of oral presentation and explanation of treatment, rights, and consent-related material. The development of semistructured interviews as described above could allow for more open-ended probing of misconceptions and could potentially be quite effective in facilitating the remediation of gaps in knowledge. Taylor and Adelman (1986) raise the question of whether such remediation can actually lower the age of competence to comprehend treatment-related information; this possibility warrants further investigation.

Grisso and Vierling (1978) have suggested that it would be important to examine the competence of children to understand terminology: (a) in different clinical settings; (b) for different treatment decisions; and (c) using



different procedures for obtaining informed consent. For example, Melton (1981) suggested that future research might include direct comparisons of competency to consent by adolescents seeking treatment independently, adolescents whose parents have brought them to the clinic, and nonclinic populations. Investigators might address the issue of how best to discuss treatment, rights, and consent issues with individuals who have not come to the clinic or institution voluntarily.

It will be important in future research to consider the decision-making ability of adolescents vs. adults, because adults might not be as ideal in their decision-making ability as is generally presumed (Weithorn & Campbell, 1982). If the decision-making abilities of adults were more often compared directly, as in the studies of Tapp and Levine (1974), evaluation of the competence of adolescents could include a comparison with adult norms. Additional data on the differences and similarities between the decision-making abilities of adolescents and adults could lead to greater precision in explaining treatment and rights information to members of both age groups.

The encouragement of children's participation in decision making can contribute to their sense of autonomy and individual responsibility as well as preparing them for future roles as joint or independent decision-makers (Weithorn & Campbell, 1982). The concept of the autonomy and individuality of minors is becoming more widely accepted, and the ability to assess treatment-related comprehension is becoming increasingly important as there is continued movement to allow adolescents to have input on treatment decisions and to be designated as competent to refuse inpatient treatment (Beyer & Wilson, 1976). It is hoped that more research will address the abilities of children and adolescents to make decisions in actual legal and psychological situations.

## REFERENCES

- Achenbach, T. (1982). Developmental psychopathology (2nd ed.). New York: John Wiley & Sons.
- Adelman, H. S., Kaser-Boyd, N., & Taylor, L. (1984). Children's participation in consent for psychotherapy and their subsequent response to treatment. Journal of Clinical Child Psychology, 13(2), 170-178.
- Adelman, H. S., Lusk, R., Alvarez, & Acosta, N. K. (1985). Competence of minors to understand, evaluate, and communicate about their psycho-educational problems. Professional Psychology: Research and Practice, 16(3), 426-434.
- Bersoff, D. N. (1983). Children as participants in psychoeducational assessment. In G. B. Melton, G. P. Koocher, & M. J. Saks (Eds.), Children's competence to consent. New York: Plenum Press.
- Beyer, H. A., & Wilson, J. P. (1976). The reluctant volunteer: A child's right to resist commitment. In G. P. Koocher (Ed.), Children's rights and the mental health professions. New York: Wiley, 1976.
- Bostrom, A. (1986). Crunch statistical package. [Computer program]. Oakland, CA: Crunch Software Corporation.
- Cogbill, J. V., III. (1979) Outpatient mental health services: A minor's right. University of Richmond Law Review, 13, 915-926.
- Coie, J. D. & Pennington, B. F. (1976). Children's perception of deviance and disorder. Child Development, 47, 407-413.
- Day, L., & Reznikoff, M. (1980). Social class, the treatment process, and parents' and children's expectations about child psychotherapy. Journal of Clinical Child Psychology, 9, 195-198.
- Dodson, G. D. (1984). Legal rights of adolescents: Restrictions on liberty,

- emancipation, and status offenses. In R. M. Horowitz and H. A. Davidson (Eds.), Legal Rights of Children (pp. 114-176). New York: McGraw-Hill.
- Dollinger, S. J., & Thelen, M. H. (1978). Children's perceptions of psychology. Professional Psychology, 9, 117-126.
- Dollinger, S. J., Thelen, M. H., & Walsh, M. L. (1980). Children's conceptions of psychological problems. Journal of Clinical Child Psychology, 9, 119-194.
- Ebel, R. (1972). Essentials of educational measurement. Englewood Cliffs, N. J.: Prentice-Hall.
- Ehrenreich, N. S., & Melton, G. B. (1983). Ethical and legal issues in the treatment of children. In C. E. Walker and M. C. Roberts (Eds.), Handbook of Clinical Child Psychology (pp. 1285-1305). New York: Wiley.
- Ellis, J. W. (1974). Volunteering children: Commitment of minors to mental institutions. California Law Review, 62, 840-916.
- Epstein, L. C., & Lasagna, L. (1969). Obtaining informed consent: Form or substance. Archives of Internal Medicine, 123, 682-688.
- Ferguson, L. R. (1978). The competence and freedom of children to make choices regarding participation in research: A statement. Journal of Social Issues, 34(2), 114-121.
- Ferleger, D. (1973). Incarcerated juveniles -- Why? An analysis of partial data submitted by defendants in response to interrogatories by plaintiffs. In *Bartley v. Kremens*, Civil Action No. 72-2272 (U.S.D.C., E.D. Pa., September 17, 1973).
- Feshbach, N. D., & Feshbach, S. (1978). Toward an historical, social, and developmental perspective on children's rights. Journal of Social Issues, 34(2), 1-7.
- Fischer, K. W., Hand, H. H., & Russell, S. (1984). The development of abstractions in adolescence and adulthood. In M. L. Commons, F. A. Richards, & C. Armon (Eds.), Beyond formal operations: Late adolescent and adult cognitive development (pp. 43-73). New York: Praeger.
- Ginsberg, H.P., & Opper, S. (1988). Piaget's theory of intellectual development

- (3rd ed.). Englewood Cliffs, N. J.: Prentice-Hall.
- Grisso, T. (1981). Juveniles' waiver of rights: Legal and psychological competence. New York: Plenum Press.
- Grisso, T. (1983). Juveniles' consent in delinquency proceedings. In G. B. Melton, G. P. Koocher, & M. J. Saks (Eds.), Children's competence to consent. New York: Plenum Press.
- Grisso, T., & Manoogian, S. (1980). Juvenile's comprehension of Miranda warnings. In P. D. Lipsitt & B. D. Sales (Eds.), New directions in psychological research (pp. 127-148). New York: Van Nostrand Reinhold Company.
- Grisso, T., & Vierling, L. (1978). Minors' consent to treatment: A developmental perspective. Professional Psychology, 9, 412-427.
- Grodin, M. A., & Alpert, J. J. (1983). Informed consent and pediatric care. In G. B. Melton, G. P. Koocher, & M. J. Saks (Eds.), Children's competence to consent. New York: Plenum Press.
- Gronlund, N. (1968). Readings in measurement and evaluation. New York: MacMillan.
- Hessler, G. L. (1982). Use and interpretation of the Woodcock-Johnson Psychoeducational Battery. Hingham, MA: Teaching Resources.
- Holder, A. R. (1977). Legal issues in pediatrics and adolescent medicine. New York: Wiley.
- Hollingshead, A. B. (1975). Four-factor index of social status. Working paper. New Haven, CT: Author.
- Holmes, D. S. & Urie, R. G. (1975). Effects of preparing children for psychotherapy. Journal of Consulting and Clinical Psychology, 43, 311-318.
- Hyde, J. S. (1981). How large are cognitive gender differences? A meta-analysis. American Psychologist, 36, 892-901.
- Inhelder, B., & Piaget, J. (1958). The growth of logical thinking. New York:

### Basic Books.

- Kaser-Boyd, N., Adelman, H. S., & Taylor, L. (1985). Minors' ability to identify risks and benefits of therapy. Professional Psychology: Research and Practice, 16(3), 411-417.
- Kaser-Boyd, N., Adelman, H. S., Taylor, L., & Nelson, P. (1986). Children's understanding of risks and benefits of psychotherapy. Journal of Clinical Child Psychology, 15(2), 165-171.
- Keith-Speigel, P. (1976). Children's rights as participants in research. In G. P. Koocher (Ed.), Children's rights and the mental health professions, New York: John Wiley & Sons.
- Keith-Speigel, P. (1983). Children and consent to participate in research. In G. B. Melton, G. P. Koocher, & M. J. Saks (Eds.), Children's competence to consent, New York: Plenum Press.
- Kerlinger, F. (1973). Foundations of behavioral research. New York: Holt, Rinehart, and Winston.
- Klenowski, J. R. (1983). Adolescents' rights of access to counseling. Personnel and Guidance Journal, 61, 365-367.
- Levine, R. J. (1975). The nature and definition of informed consent in various research settings. Washington, D.C.: National Commission for the Protection of Human Subjects.
- Lewis, C. C. (1980). A comparison of minors' and adults' pregnancy decisions. American Journal of Orthopsychiatry, 50, 446-453.
- Lewis, C. E. (1983). Decision-making related to health: When could/should children act responsibly? In G. B. Melton, G. P. Koocher, & M. J. Saks (Eds.), Children's competence to consent, New York: Plenum Press.
- Linn, M. C. (1977). Scientific reasoning: Influences on task performance and response categorization. Science Education, 61(3), 357-369.
- Linn, M. C. (1983). Content, context, and process in reasoning during adolescence: Selecting a model. Journal of Early Adolescence, 3(1-2), 63-

82.

- Maccoby, E. E., & Jacklin, C. M. (1974). The psychology of sex differences. Stanford, CA: Stanford University Press.
- Margolin, C. R. (1980). Children's attitudes toward school and work. Educational Perspectives, 19, 28-32.
- Margolin, C. R. (1982). A survey of children's views on their rights. Journal of Clinical Child Psychology, 11(2), 96-100.
- Melton, G. B. (1980a). Children's concepts of their rights. Journal of Clinical Child Psychology, 9, 186-190.
- Melton, G. B. (1980b). Psychological effects of increased autonomy on children. Educational Perspectives, 19(4), 10-14.
- Melton, G. B. (1981). Psycholegal issues in juveniles' competence to waive their rights. Journal of Clinical Child Psychology, 10, 59-62.
- Melton, G. B. (Ed.). (1982). Legal reforms affecting child and youth services. New York: The Haworth Press.
- Melton, G. B. (1983a). Children's competence to consent: A problem in law and social science. In G. B. Melton, G. P. Koocher, & M. J. Saks (Eds.), Children's competence to consent, New York: Plenum Press.
- Melton, G. B. (1983b). Decision-making by children: Psychological risks and benefits. In G. B. Melton, G. P. Koocher, & M. J. Saks (Eds.), Children's competence to consent, New York: Plenum Press.
- Melton, G. B. (1987). Children, politics, and morality: The ethics of child advocacy. Journal of Clinical Child Psychology, 16(4), 357-367.
- Messenger, C. B., & McGuire, J. M. (1981). The child's conception of confidentiality in the therapeutic relationship. Psychotherapy: Theory, Research, and Practice, 18(1).
- Mnookin, R. H. (1978). Beyond kiddie libbers and child savers. Journal of Clinical Child Psychology, 7, 163-167.

- Novak, D. W. (1974). Children's reactions to emotional disturbance in imaginary peers. Journal of Consulting and Clinical Psychology, 42, 462.
- Papini, D. R., & Seby, R. A. (1986, March). Contextual variations in cognitive processes: Transitions from adolescence to young adulthood. Paper presented at the first biennial meeting of the Society for Research on Adolescence, Madison, WI.
- Petersen, A. C., Crockett, L., & Tobin-Richards, M. H. (1982). Sex differences. In H. E. Mitzel (ed.), Encyclopedia of education research (5th ed.). New York: Free Press.
- Planned Parenthood v. Danforth, 428 US 52, 74 (1976).
- Powell, C. J. (1984). Ethical principles and issues of competence in counseling adolescents. Counseling Psychologist, 12(3-4), 57-68.
- Raitt, G. E. (1975). The minor's right to consent to medical treatment. Southern California Law Review, 48, 1417-1456.
- Rogers, C. M. & Wrightsman, L. S. (1978). Attitudes toward children's rights: Nurturance or self-determination. Journal of Social Issues, 34(2), 59-68.
- Rosoff, A. J. (1981). Informed consent: A guide for health care providers. Rockville, Maryland: Aspen Systems Corporation.
- Sattler, J. M. (1988). Assessment of children (3rd ed.). San Diego: Jerome M. Sattler, Publisher.
- Seagull, E. A. W. (1978). The child's rights as a medical patient. Journal of Clinical Child Psychology, 17, 202-205.
- Stier, S. (1978). Children's rights and society's duties. Journal of Social Issues, 34(2), 46-58.
- Takanishi, R. (1978). Childhood as a social issue: Historical roots of contemporary child advocacy movements. Journal of Social Issues, 34(2), 8-28.
- Tapp, J. L., and Levine, F. (1974). Legal socializations: Strategies for an ethical legality. Stanford Law Review, 27, 1-72.

- Tapp, J. L., and Melton, G. B. (1983). Preparing children for decision making: Implications of legal socialization research. In G. B. Melton, G. P. Koocher, & M. J. Saks (Eds.), Children's competence to consent. New York: Plenum Press.
- Taylor, L., & Adelman, H. S. (1986). Facilitating children's participation in decisions that affect them: From concept to practice. Journal of Clinical Child Psychology, 15(4), 346-351.
- Taylor, L., Adelman, H. S., & Kaser-Boyd, N. (1985). Minors' attitudes and competence toward participation in psychoeducational decisions. Professional Psychology, 16(2), 226-235.
- Tomlinson-Keasey, C. (1972). Formal operations in females from eleven to fifty-four years of age. Developmental Psychology, 6, 364.
- Tremper, C., & Feshbach, N. D. (1981). Attitudes of parents and adolescents toward decision-making by minors. Paper presented at the annual meeting of the American Psychological Association, Los Angeles.
- Wadlington, W. (1973). Minors and health care: The age of consent. Osgoode Hall Law Journal, 11, 115-125.
- Wadlington, W. (1983). Consent to medical care for minors: The legal framework. In G. B. Melton, G. P. Koocher, & M. J. Saks (Eds.), Children's competence to consent. New York: Plenum Press.
- Walker, H. M., & Lev, J. (1958). Elementary statistical methods. New York: Holt.
- Wechsler, D. (1974). Manual for the Wechsler Intelligence Scale for Children -- Revised. New York: Psychological Corporation.
- Wechsler, D. (1981). Manual of the Wechsler Adult Intelligence Scale -- Revised. New York: Psychological Corporation.
- Weithorn, L. A. (1983). Involving children in decisions affecting their own welfare: Guidelines for professionals. In G. B. Melton, G. P. Koocher, & M. J. Saks (Eds.), Children's competence to consent. New York: Plenum Press.



Weithorn, L. A., & Campbell, S. B. (1982). The competency of children and adolescents to make informed treatment decisions. Child Development, 53, 1589-1598.

Wilkins, L. P. (1975). Children's rights: Removing the parental consent barrier to medical treatment of minors. Arizona State Law Journal, 31, 31-92.

Wilson, J. P. (1978). The rights of adolescents in the mental health system. Lexington, Massachusetts: Lexington Books.

Woodcock, R. W., & Johnson, M. B. (1977). Woodcock-Johnson Psychoeducational Battery. Hingham, Massachusetts: Teaching Resources Corporation.

## APPENDICES

## APPENDIX A

### LETTER TO PARENTS OF PARTICIPANTS AND PARENTAL CONSENT FORM

Dear Parents:

We would appreciate your child's participation in a research project currently being conducted at \_\_\_\_\_ Institute. The topic of this research is "Children's and adolescents' ability to understand patients' rights and responsibilities." The project is being conducted by Kathi Morton, a doctoral student in clinical psychology at Oklahoma State University, and Dr. Vicki Green, Head of the Psychology Department at Oklahoma State University. The project has been reviewed and fully approved by the research committee of \_\_\_\_\_ Institute. The purpose of this letter is to ask your approval of your child's participation in this research during his/her stay at \_\_\_\_\_. The information gathered during this study will help us gain information on better ways to prepare children who are entering treatment.

Your child's total time of participation in this study will be approximately one hour. Your child will be asked to provide definitions of several words and phrases, to do some word problems, and to answer questions about treatment situations. A tape recording of your child's answers will be made; this tape will be erased immediately after being transcribed by the examiner. Short breaks will be taken if necessary. This testing is not stressful and is usually viewed by the child as an interesting experience and/or an opportunity to receive individual attention from an adult.

Participation in this study is completely voluntary. Refusal to consent to participation will not affect the other services your child will receive while at \_\_\_\_\_. Your child will be asked his/her preference about participation, and he/she will be free to withdraw at any time. You will also have the right to change your mind about your child's participation.

If you agree to allow your child to participate in this process, it will be

necessary for the experimenter to obtain basic information about your child from his/her chart. This information will consist of your child's age, length of previous psychological treatment, and scores from intelligence and achievement tests that will be given during your child's stay at \_\_\_\_\_ We would also like to obtain information about parental occupations. All of this information will be used for the purpose of statistical analysis only.

All information will be kept confidential and will be used only for research purposes. At no time will any participant's identity be revealed to individuals who are not employees of \_\_\_\_\_ Institute. Questionnaires will be identified by numbers only, and the final analysis of information will focus on participants as members of a larger group.

If you would like additional information about this study in order to make a decision about your child's participation, you may call Kathi Morton at (405) 743-3023. If you would like a summary of the final results of the study, please write your name and address on the consent form. Research results will then be sent to you after completion of the study.

If you agree to allow your child's participation in the study, please sign the consent form on the following page. Thank you.

Kathi Morton, M.S.  
Doctoral Student  
Psychology Department  
Oklahoma State University

Vicki Green, Ph.D.  
Department Head and Research Adviser  
Psychology Department  
Oklahoma State University

## CONSENT FORM

I have read the attached letter describing the research being conducted on "Children's and adolescents' ability to understand patients' rights and responsibilities" (or it has been explained to me). I understand the contents of the letter, and am aware of the opportunity to contact the researcher if I have questions about the research that are not addressed by the letter. I give permission for my child, \_\_\_\_\_, to participate in this research.

\_\_\_\_\_  
Signature of Parent/Guardian

\_\_\_\_\_  
Date Signed

\_\_\_\_\_  
Signature of Witness

\_\_\_\_\_  
Date Signed

I would like to receive information about the results of the study when it is completed.

\_\_\_\_\_  
Name

\_\_\_\_\_  
Street Address

\_\_\_\_\_  
City

\_\_\_\_\_  
State Zip Code

## APPENDIX B

### INTRODUCTION TO EXPERIMENT AND PROCEDURE FOR OBTAINING CONSENT FROM PARTICIPANT

I'm Kathi Morton from Oklahoma State University. You and I will be working together for about an hour today, on a special research project. The purpose of the project is to help find out what people your age know about the rights and responsibilities of patients in places such as \_\_\_\_\_ . You have been selected to participate in this study because I am interested in learning about the thoughts of people your age.

I'm going to ask you questions about situations that have to do with treatment in places such as \_\_\_\_\_ . I would also like to ask you the meanings of some words and sentences. Your job is to pay attention and give me the best answers that you can. One of the other things I'd like for you to do today is work some word problems.

I'll be writing down your answers as we go along. If it's okay with you, I would like to turn on the tape recorder just in case I need to listen to your answers later on. I'm the only person who will listen to the tape, and after I'm through with it, I'll erase it. Is it okay with you if I use the tape recorder while we're working together? (Wait for response, discuss any concerns raised at this point).

I'm not going to write your name on any of the papers with your answers on them, so no one else would be able to tell that these are your answers. When I study your answers, I'll be looking at them along with a lot of other peoples' answers at the same time.

You may get tired while we're working together, because I'll be asking you a lot of questions. If you do get tired, just let me know, and we'll take a break. At other times you might feel worried or embarrassed if you feel that you don't know the answers to my questions. It's okay if you don't know all the answers. Just do your best on each question and that will be fine.

It's up to you to decide about whether you want to work with me today, and if you decide that you want to stop at any time, just let me know. Do you have any questions about what I've said so far? (Give opportunity for questions). If you would like to participate in this study, please sign here to show me that you have understood the things I've said and that you want to participate.

When we finish our time together, we can talk about what we have just done. Let's get started.

## CONSENT FORM

I have listened to the description of this research project. I understand what is expected of me and I have had a chance to ask questions about the parts that were unclear to me. I understand that my answers will not be shared with other people. I understand that I am free to stop at any time.

---

Signature of Participant

---

Date Signed

---

Signature of Witness

---

Date Signed



## APPENDIX C

### COMPREHENSION OF TREATMENT VOCABULARY

#### (CTV) -- INSTRUMENT, INQUIRY RULES, AND SCORING PROCEDURES

##### Introduction to the Instrument

Administration of the CTV was tape-recorded and later transcribed for scoring. The examiner had ten cards on which were printed the ten words from the CTV. Instructions to the examinee were as follows: "I am going to give you some cards which have words on them. As I give you a card, I will read the word, then I will use it in a sentence, then read it again. Then I would like you to tell me in your own way what the word means. This first word is just for practice so you can get used to what I want you to do. Here is the card. It says 'Apple'. She gave him an 'apple'. 'Apple'. What does 'apple' mean?"

After the subject achieved understanding of what was expected, the examiner then performed the procedure just described for the first word (goal) and asked, "What does 'goal' mean?" No feedback was given regarding correctness from this point on. The sequence of words and the example sentences which contain the words appear later.

##### Inquiry Rules

In certain cases, the examiner must ask inquiry questions after the examinee's original response. The most typical situation requiring inquiry is that in which the examinee has given a 0-point or a 1-point answer, and the examiner wishes to discern whether the examinee has additional understanding of the term in question. Inquiries which can be used at this point are non-leading questions such as, "Tell me more about it" or "Explain what you mean." In addition to this rule, it is permissible for the examiner to inquire as needed when an examinee's original response is confusing because

of double negatives, grammatical confusion, slang, or disorganization (e.g., "Can you explain that a little more?").

## Scoring the CTV

### General Scoring Criteria

Responses on each vocabulary item may be scored 2, 1, or 0. In general, 2-point responses convey adequate understanding of the vocabulary item in question, 1-point responses convey vague or incomplete understanding, and 0-point responses convey a lack of understanding of the item.

Although examinee's responses may include both his or her original response and a response following the examiner's inquiry, the total response is to receive only one score. It is important for the scorer not to be biased by the quality of verbal or grammatical style in the response. Very unsophisticated verbalizations, lacking in grammatical or structural clarity, are still very likely to contain a correct sense of the meaning of a vocabulary word. Conversely, highly sophisticated and intellectualized responses can turn out to be "empty" regarding the essential meanings to be understood. Additionally, it is important to rely only on the data offered in the transcript when assessing the degree of understanding of the examinee.

### Specific Scoring Criteria

Scoring of the CTV is quite similar to the process involved in scoring the Wechsler Vocabulary subtest, in that it employs 2-, 1-, and 0-point credits. The scoring system presented here provides criteria for assigning points to each answer.

1. Goal (He has a goal in mind.)

2 Points -- Conveys the idea of an end toward which effort is directed, something which is to be achieved or accomplished.

1 Point -- Recognition that a goal is the terminal point of a process, but without the idea of effort being involved in reaching the terminal point.

0 Point -- Inaccurate meaning, or only able to state that a goal relates to sports, as in a basketball or soccer goal, even when asked to state an alternate meaning.

2. Self-esteem (She is working on her self-esteem).

2 Points -- Conveys the idea of feelings or thoughts and opinions about oneself.

1 Point -- Recognition that self-esteem is an entity with positive or negative aspects or recognition that it is a feeling, without relating these two ideas.

0 Point -- Inaccurate meaning.

3. Peers (She saw her peers in the cafeteria.)

2 Points -- Conveys the idea of people that are in equal standing with another, as in other residents at \_\_\_\_, other adolescents, friends, "people my same age," "people who live here."

1 Point -- Recognition that a peer is another person, but without explicitly conveying the idea of equal standing. For example, if the examinee states "people around you."

0 Points -- Inaccurate meaning, for example, if examinee specifically mentions parents, staff, or other adults.

4. Positive Relationship (They want to form a positive relationship.)

2 Points -- Conveys the idea of a beneficial alliance or connection between individuals. "Good friendship" is an adequate paraphrase. "Relationship" need not be specifically defined as long as an understanding of its meaning is implied in the response (i.e., a recognition that interaction with another person is involved).

1 Point -- Recognition of either the meaning of "positive" or "relationship" but without the ability to connect the meanings.

0 Point -- Inaccurate meaning.

5. Resident (He is a resident at \_\_\_\_.)

2 Points -- Conveys the idea of someone who lives in a certain place, such as \_\_\_\_\_. The examinee should relate the meaning to inpatient treatment.

1 Point -- Recognition of the fact that a resident is a person who lives someplace, without relating the meaning to inpatient treatment.

0 Point -- Inaccurate meaning. Definitions of "residence" should receive a zero.

6. Authority Conflicts (He used to have authority conflicts).

2 Points -- Conveys the idea of resistance to or defiance of someone "higher up," in a position of power or influence over one's situation.

1 Point -- Recognition of either the idea of "authority" or "conflict," but without the ability to relate the two ideas accurately. Can include the idea of authorities fighting with each other.

0 Point -- Inaccurate meaning.

7. Therapy (He is participating in therapy).

2 Points -- Conveys the idea of meeting together individually or in groups in order to work out problems or come to greater insight by talking, interacting with others, and/or performing activities designed to be therapeutic. To achieve a 2-point response, the examinee should indicate understanding that therapy involves active participation by the patient.

1 Point -- Recognition of the idea of meeting together, but without conveying the idea of working out problems/achieving insight. One point is also assigned (1) to responses that do not convey an understanding of therapy as a unique relationship, different from some other sort of meeting or (2) to responses that describe a purpose or result of therapy without indicating that it involves working with another person or persons.

0 Point -- Inaccurate meaning. Or, if individual gives a definition related

to medical or physical therapy and is unable to give an alternate definition when asked.

8. Behavior (They have asked him to change his behavior).

2 Points -- Conveys the idea that behavior is the general manner of conducting oneself, the way one acts, the things one does in a general sense.

1 Point -- Recognition that behavior has to do with an action, but concentrating on a specific action or type of action without generalizing to how a person acts in general.

0 Point -- Inaccurate meaning.

9. Respect (He asked to be treated with respect).

2 Points -- Conveys the idea of treating someone with high regard and/or esteem, taking a person's rights and needs into account, or treating another person as one wishes to be treated.

1 Point -- Recognition that respect is a positive way to be treated, without the ability to state the specific meaning. Also assign one point to responses that convey the ability to state a vague meaning, such as "look up to someone," "be nice," etc.

0 Point -- Inaccurate meaning, including answers that only include definitions of "obey."

10. Feedback (They gave him feedback on what he had done).

2 Points -- Conveys the idea of evaluative or corrective information conveyed by others about one's demeanor or actions.

1 Point -- Recognition of the idea that feedback is information, but without recognition of the evaluative nature of that information.

0 Point -- Inaccurate meaning, or if the meaning stated relates to feedback in the sense of machines/computers, the inability to state an alternate meaning when queried.

### Procedure for Scoring

The following general procedure should be used in scoring CTV responses: (a) Read through the whole response before attempting to match it to scoring criteria; (b) Review all of the scoring categories for the word in question; (c) Begin matching the response to scoring criteria, starting with 2-point criteria; (d) If the response does appear to satisfy 2-point criteria, proceed anyway to review the response in light of 1-point criteria. Likewise, if a response appears to meet 1-point criteria, proceed to review it in light of 0-point criteria; (e) Record the final score arrived at for the response, and make the assignment of a summary score when all ten vocabulary words have been scored. The summary score is the sum of the examinee's scores on all ten words.

## APPENDIX D

### COMPREHENSION OF TREATMENT STATEMENTS

(CTS) -- INSTRUMENT, INQUIRY RULES,

AND SCORING PROCEDURES

#### Introduction to the Instrument

The examiner begins by giving the following instructions to the examinee: "I will be showing you some cards with some sentences on them. When I show you one, I will read the sentence to you. Then I want you to tell me what it says in your own words. Try to tell me just what it says, but in different words from those that appear in the sentence on the card. Now can you explain to me what it is I would like you to do?"

If the examinee does not understand, repeat the instructions slowly or answer specific questions. When understanding seems to have been accomplished, the examiner hands to the examinee a card on which a practice sentence has been typed, and says: "This first card is just for practice so you can get used to what I want you to do. Here is the card. It says, 'I have volunteered to be in this study.' Now tell me in your own words what is said in that sentence."

The primary reason for the use of a practice sentence is to "teach" the examinee to avoid verbatim use of words or phrases appearing in the stimulus sentences. Thus, if the examinee uses the words "volunteer" and/or "study" verbatim in his or her original response, the examiner should ask: "What do you mean by (volunteered) (study)?"

The examiner proceeds to the first stimulus sentence after the examinee has expressed an understanding of the elements of this practice sentence. No feedback is given regarding correctness from this point on.

The remainder of the administration procedure consists of presenting each of the treatment statements in the above fashion. Each treatment statement is presented on a separate card, and an examinee's response to one statement (as well as any necessary inquiry) is completed before

proceeding to the next treatment statement.

### Inquiry Rules

During each original response by the examinee, the examiner focuses on the need for any inquiry. The objective of inquiry is: (a) to maximize the examinee's chances of manifesting whatever understanding might exist, but without providing cues which might supplement the examinee's understanding; and (b) to allow the examiner to understand clearly what the examinee is attempting to express.

In general, inquiry most often occurs when an examinee's original response is incomplete or demonstrates at least partial understanding. (In the scoring system, these are 1-point responses.) Thus, inquiry generally occurs:

1. When the examinee's paraphrased response includes words or phrases verbatim from the treatment statement (the examiner should say "What does (verbatim word or phrase) mean?");
2. When nonspecific pronouns are used so that it is unclear to whom the examinee is referring (e.g., therapist, staff member), the examiner should say "Who do you mean?" or "Who is it that you mean when you say \_\_\_\_\_?";
3. When the examinee's original response omits some elements of the treatment statement, the examiner should say "Tell me more about what this statement means" or "Please explain more about that";
4. When the examinee's verbal confusion, double negative, contradictions, grammatical inconsistencies, or slang render the response confusing or difficult for the examiner to understand (the examiner should say "Please explain what you mean" or "What do you mean by \_\_\_\_\_" or "Let me read the statement again, and you can start from the beginning."

### Scoring the CTS

#### General Scoring Criteria

Responses on each treatment statement may be scored 2, 1, or 0. In general, 2-point responses convey adequate understanding of the treatment statement in question.

There are several types of 1-point responses: (a) the examinee has omitted, distorted, or inadequately expressed some portion of the statement while having demonstrated adequate understanding of another portion of it;



(b) the response is vague, so that one cannot clearly determine whether the examinee had adequate or inadequate understanding; (c) some surplus meaning is attached to an otherwise adequate response, spoiling it because its meaning has been changed; (d) the response contains one (but no more than one) verbatim use of a phrase in the treatment statement in question.

No credit is assigned to : (a) responses which demonstrate clearly inaccurate understanding of the treatment statement; (b) situations in which the examinee can offer no interpretation of the treatment statement.

### Specific Scoring Criteria

For each of the treatment statements, criteria are provided below for 2-, 1-, and 0-point credits. The scoring criteria below do not provide information on the scoring of responses in which examinees employ verbatim one of the "critical phrases" from the treatment statements and fail to paraphrase it. These "critical phrases" are underlined in the scoring criteria. A response cannot be given a 2-point credit if any of these phrases appear verbatim in the response and were not paraphrased during inquiry, even if the response meets the other criteria of a 2-point response. A response can receive no more than a 1-point credit if any one critical phrase was used verbatim and was not paraphrased during inquiry. A 0-point credit must be assigned to any response which, after inquiry, contains two or more critical phrases used verbatim without having been paraphrased by the examinee. The statements and corresponding scoring categories appear below.

1. During inpatient treatment, residents have the opportunity to work on authority conflicts by learning to live within limits and respect other people's rights.
  
- 2 Points -- The idea that residents can learn more effective ways of dealing with people in authority and/or situations that require rules by learning to follow those rules and to behave in ways that are considerate of other people's needs/rights. To be scored as a 2 point response, the examinee must demonstrate basic knowledge both of the definition of an authority conflict and that following rules/respecting others relates to the resolution of problems of authority.
  
- 1 Point -- A correct paraphrase of at least one critical element of the sentence, without the ability to relate the various aspects of the

sentence. For example, an understanding of either the idea of working on authority conflicts or the idea of living within limits or the idea of respecting other people's rights would qualify as a 1-point response. A general statement of the basic idea of the sentence would qualify as a 1-point response, for example: "Learning to follow rules helps you get along better with other people."

0 Point -- Stated lack of understanding; erroneous paraphrases, or paraphrases that essentially "parrot" the original sentence.

2. Residents at \_\_\_ can improve their self-esteem by learning to accept responsibility for their own behavior.

2 Points -- The idea that \_\_\_ residents can improve the way they feel about themselves by learning to admit their mistakes/monitor their own actions rather than ignoring rules/blaming others/denying their shortcomings. Not all of these elements must be mentioned, but examinees must indicate a knowledge of what it means to improve self-esteem and be able to give an example of what it means to take responsibility for one's own behavior.

1 Point -- Indicated understanding of either the self-esteem aspect of the sentence or the responsibility aspect of the statement. Or a vague yet accurate restatement of the basic idea of the sentence.

0 Point -- Stated lack of understanding; erroneous paraphrases, or paraphrases that essentially "parrot" the original sentence.

3. Some \_\_\_ residents have a goal of learning how to build positive relationships with their peers and with adults.

2 Points -- An understanding of the idea of "positive relationships," indicated by the ability to name more than one aspect of this type of relationship, such as building trust, sharing feelings, acting courteously, etc. The examinee must also understand the meaning of "peers" and "adults."

1 Point -- An understanding of the basic idea of the sentence, but with a vague paraphrase of the idea of "positive relationships" and the failure to name a specific aspect of this type of relationship. For example, the examinee might state that a positive relationship means getting along

with someone," but be unable to elaborate further. Or the examinee names a specific aspect of positive relationship-building, yet misunderstands the meaning of "peers and adults."

0 Point -- Stated lack of understanding; erroneous paraphrases, or paraphrases that essentially "parrot" the original sentence.

4. Sometimes personal growth is difficult because it requires admitting problems and expressing feelings that may be hard to talk about.

2 Points -- The idea that making changes in the way one acts/sees the world/reacts to situations is hard because it means that a person has to examine aspects of themselves that may be unattractive/undesirable/limiting, and the person must talk about feelings associated with personal growth/admitting problems.

1 Point -- A response that indicates vague understanding of the meaning of the sentence or a response that indicates understanding of some aspects of the sentence without indicating an awareness of the relationship between personal growth and the reasons why it can be difficult.

0 Point -- Stated lack of understanding; erroneous paraphrases, or paraphrases that essentially "parrot" the original sentence.

5. Some of the residents at \_\_\_ are learning to talk out their problems instead of misbehaving or communicating in an indirect way.

2 Points --The idea that some individuals are learning to express feelings about their problems rather than breaking rules or communicating indirectly. The examinee should give an example of misbehavior or indirect communication, such as going AWOL/breaking rules/hitting things when angry/sulking when sad or disappointed.

1 Point -- A response that indicates vague understanding of the meaning of the sentence without giving an example of misbehavior or indirect communication.

0 Point -- Stated lack of understanding; erroneous paraphrases, or paraphrase that essentially "parrot" the original sentence.

### Procedure for Scoring

(a) Read through the whole response before attempting to match it with any scoring criteria; (b) Review the response to isolate essential and nonessential phrases; (c) Review all of the scoring categories for the treatment statement in question; (d) Begin matching the response to scoring criteria, starting with 2-point criteria. Attempt to discover the essential criteria within the response to be scored, but do not "read between the lines"; (e) Even if the response appears to satisfy 2-point criteria, proceed to review the response in relation to 1-point criteria. Likewise, even if it appears to meet 1-point criteria, continue to review it in relation to 0-point criteria; (f) Record the final score arrived at for the response. An examinee's CTS sum score is the total of the scores obtained on the five treatment statements, and may range from 0 to 10.

As stated above, it is important not to "read between the lines" when examining a CTS protocol. In addition, the scorer should avoid being biased by the quality of verbal or grammatical style in a response when deciding on a score. Very unsophisticated verbalizations may possibly contain a correct sense of the meanings conveyed in the treatment statement. Further, highly sophisticated and intellectualized responses sometimes are found to be "empty" regarding the essential meanings to be understood.

## APPENDIX E

### COMPREHENSION OF TREATMENT STATEMENTS, TRUE OR FALSE, (CTS-TF) -- INSTRUMENT AND SCORING PROCEDURES

#### Introduction to the Instrument

Instructions to the subject are as follows: "Now I am going to show you the sentences we have just been talking about. After I read a sentence to you, I will read three more statements. Each statement means either the same thing or not the same thing as the first sentence. I want you to tell me whether each statement is the same or different from the sentence on the card."

These instructions are followed immediately by the examples: "Here are two examples so that you know what to do. (Put example card A on table.) This sentence says 'I have volunteered to be in this study.' Now look at this card. (Put example card A1 on table and read.) 'I have agreed to take this test and nobody forced me to do it.' Now, does that card say the same thing or something different from the first sentence? (If subject says 'same,' remove card A1, leave card A, and proceed to second example. If subject says 'different,' explain why they are the same, and go on to second example.) Here is the next card. (Put example card A2 on table beside example A.) 'I have to take this test whether I want to or not.' Is that the same as the first sentence (point to example card A) or something different? (If 'same,' discontinue test. If 'different,' proceed to CTS-TF items.)"

To begin the CTS-TF items, a card bearing the first treatment statement is placed before the subject. The examiner then proceeds through the three related CTS-TF statements in the manner shown in the examples, but does not give feedback about correctness of answers. After the three item statements, the examiner proceeds to the second treatment statement, and so on.

## CTS-TF Items

The following are the treatment statements, their corresponding CTS-TF items, and the correct response for each item (in parentheses).

1. During inpatient treatment, residents have the opportunity to work on authority conflicts by learning to live within limits and respect other people's rights.
  - a. People who live at places like \_\_\_ can get better at receiving requests and orders from other people and following rules without becoming angry. (Same, or true)
  - b. While in a residential treatment center, the people who live there can learn to live with their authority conflicts. (Different, or false)
  - c. At residential treatment centers like \_\_\_, young people can learn that there are certain rules that must be followed if other people's rights are to be considered. (Same, or true)
2. Residents at \_\_\_ can improve their self-esteem by learning to accept responsibility for their own behavior.
  - a. The people who live at \_\_\_ can get better marks on their point sheets by learning to follow rules. (Different, or false)
  - b. The people who live at \_\_\_ can begin to feel better about themselves when they learn to follow rules and accept their own mistakes instead of blaming other people. (Same, or true)
  - c. It is possible for the people who live at \_\_\_ to feel more confident after they take charge of their own lives rather than expecting other people to tell them what they need to do. (Same, or true)
3. Some \_\_\_ residents have a goal of learning how to build positive relationships with their peers and with adults.
  - a. Some \_\_\_ residents are learning more effective ways of getting what they want from people their age and people older than they are. (Different, or false)

- b. Some of the people who live at \_\_\_ are working toward learning to trust grownups and be better friends with people their age. (Same, or true)
  - c. Some \_\_\_ residents are learning to have better communication with people their age and with adults. (Same, or true)
4. Sometimes personal growth is difficult because it requires admitting problems and expressing feelings that may be hard to talk about.
- a. It is hard to learn to become a better person, because it is necessary to face the things that bother you and to talk about them. (Same, or true)
  - b. It is tough to make changes in your behavior, because it means you have to take a hard look at things that aren't easy for you to deal with. Then, to make changes, you have to talk about these things. (Same, or true)
  - c. Sometimes growing up is hard because other people put limits on you and fail to listen to your expressions of feelings. (Different, or false)
5. Some of the residents at \_\_\_ are learning to talk out their problems instead of misbehaving or communicating in an indirect way.
- a. Some of the \_\_\_ residents are learning to give directions to others about how not to misbehave. (Different, or false)
  - b. Some \_\_\_ residents are learning that expressing their feelings is more effective than hitting someone or walking away angry. (Same, or true)
  - c. Some of the people who live at \_\_\_ are learning to calmly tell people how they feel about things that bother them instead of yelling or holding the bad feelings inside. (Same, or true)

#### Scoring the CTS-TF

Items correctly identified as "same" or "different" are scored one point, while incorrectly identified items are scored zero points. The total score on the CTS-TF can range from 0 to 15.

## APPENDIX F

### COMPREHENSION OF RIGHTS VOCABULARY (CRV)

#### -- INSTRUMENT, INQUIRY RULES, AND SCORING PROCEDURES

##### Introduction to the Instrument

Administration of the CRV was be tape-recorded and later transcribed for scoring. The examiner had thirteen cards on which were printed the thirteen words from the CRV. Instructions to the examinee are as follows: "I am going to give you some cards which have words on them. As I give you a card, I will read the word, then I will use it in a sentence, then read it again. Then I would like you to tell me in your own way what the word means. This first word is just for practice so you can get used to what I want you to do. Here is the card. It says 'Smile.' He often has a 'smile.' 'Smile.' What does 'smile' mean?"

After the subject has achieved understanding of what is expected, the examiner then performs the procedure just described for the first word (rights) and asks, "What does 'rights' mean?" No feedback regarding correctness of response is given from this point on. The sequence of words and the sentences to be used which contain the words appear with the scoring criteria.

##### Inquiry Rules

In certain cases, the examiner must ask inquiry questions after the examinee's original response. The most typical situation requiring inquiry is that in which the examinee has given a 0-point or a 1-point answer, and the examiner wishes to discern whether the examinee has additional understanding of the term in question. Inquiries which can be used at this point are non-leading questions such as, "Tell me more about it" or "Explain what you mean." In addition to this rule, it is permissible for the examiner



to inquire as needed when an examinee's original response is confusing because of double negatives, grammatical confusion, slang, or disorganization (e.g., "Can you explain that a little more?").

## Scoring the CRV

### General Scoring Criteria

Responses on each vocabulary item may be scored 2, 1, or 0. In general, 2-point responses convey adequate understanding of the vocabulary item in question, 1-point responses convey vague or incomplete understanding, and 0-point responses convey a lack of understanding of the item.

Although examinee's responses may include both his or her original response and a response following the examiner's inquiry, the total response is to receive only one score. It is important for the scorer not to be biased by the quality of verbal or grammatical style in the response. Very unsophisticated verbalizations, lacking in grammatical or structural clarity, are still very likely to contain a correct sense of the meaning of a vocabulary word. Conversely, highly sophisticated and intellectualized responses can turn out to be "empty" regarding the essential meanings to be understood.

### Specific Scoring Criteria

Scoring of the CRV is quite similar to the process involved in scoring the Wechsler Vocabulary subtest, in that it employs 2-, 1-, and 0-point credits. The scoring system presented here provides criteria for assigning points to each answer.

#### 1. Rights (He was reading about his rights.)

2 Points -- Actions or conditions which are allowed to a person, as well as the notion that these privileges are protected, "inalienable," or not able to be denied arbitrarily by others.

1 Point -- The idea of being allowed to do something, without the notion of protection of one's privilege to lay claim to that allowance. If the examinee states that rights are what a person is "entitled to do" without further explaining the concept of entitlement, the response should receive a score of one point.

0 Point -- Inaccurate meaning, or no recognition of allowance or privilege. If the examinee is only able to state that these are things one "has a right to do," without further elaboration, the response should receive a score of zero points.

2. Responsibilities (She learned more about her responsibilities.)

2 Points -- Conveys the idea of something for which one is held accountable, an action which one is expected to perform reliably. Acceptable responses: what one "has to do," is "supposed to do," is "expected to do," or "required to do."

1 Point -- Recognition that a responsibility is an action, without conveying the idea that one is held accountable for that action.

0 Point -- Inaccurate meaning.

3. Evaluation (The evaluation lasted two hours.)

2 Points -- Conveys the idea of a process of appraisal or judgment, ending in a decision about the value or significance of a certain aspect, as in the use of testing.

1 Point -- Recognition either that it is a process of appraisal or that some decision is made, without relating the two aspects of the meaning.

0 Point -- Inaccurate meaning.

4. Confidential (The records were kept confidential.)

2 Points -- Secret, as in information meant to be kept secret or only shared by certain individuals.

1 Point -- The idea of secrecy without further elaboration or examples.

0 Point -- Inaccurate meaning.

5. Disclosed to (The information was disclosed to the nurse.)

2 Points -- Conveys the idea of giving or revealing information to another individual or agency.

1 Point -- Conveys the idea that disclosure is an act of giving, but with the idea of exclusivity attached, as in stating that it can only be seen by a particular person.

0 Point -- Inaccurate meaning, as in stating that something that is disclosed is private.

6. Informed consent (His parents gave informed consent to the doctor.)

2 Points -- Conveys the idea of agreeing to participate in a situation after receiving information about that situation.

1 Point -- Recognition of the idea of agreement or the receiving of information without relating the two aspects of the definition.

0 Point -- Inaccurate meaning.

7. Entitled to (He is entitled to use the telephone.)

2 Points -- The notion of being qualified or deserving to do or receive something, having the right to do something.

1 Point -- The idea of possession or receipt without the notion of rights being involved.

0 Point -- Inaccurate meaning.

8. Grievance procedure (She started a grievance procedure.)

2 Points -- The formal process of initiating a complaint or grievance about some type of real or imagined injustice.

1 Point -- Recognition of the idea of a complaint, or the idea of a procedure, without relating the two aspects of the meaning.

0 Point -- Inaccurate meaning.

9. Confiscate (They told him that they would confiscate the item.)

2 Points -- Deprivation of property, seizing of property. The response should convey an understanding that confiscation takes place when a rule is broken.

1 Point -- The idea of taking something from someone without conveying understanding about contraband or reasons for seizure.

0 Point -- Inaccurate meaning.

10. Seclusion (She spent half an hour in seclusion.)

2 Points -- To be placed in isolation, away from other people, as a form of punishment. To achieve 2 points, the response must convey the idea of involuntary seclusion.

1 Point -- The idea of being separate from other people, without conveying the idea of punishment or involuntary seclusion.

0 Point -- Inaccurate meaning.

11. Mechanical restraints (They did not want to use mechanical restraints.)

2 Points -- Understanding that mechanical restraints are physical means such as leather bands or strait jackets used to keep a person under control. The response must include an explicit statement about the purpose of the restraint, i.e., if you get out of control.

1 Point -- Knowledge about the idea of restraint in general, or understanding of the meaning of mechanical in this case, without the ability to relate the two aspects of the phrase. Inclusion of information regarding pharmacological restraints in this definition earns one point, unless the examinee defines only pharmacological restraints (this type of response would earn a zero).

0 Point -- Inaccurate meaning, including definitions of pharmacological restraints. Responses that indicate a misunderstanding about the nature of

mechanical restraints should also receive a zero; for example, interpreting "mechanical" too literally.

12. Pharmacological restraints (It was necessary to use pharmacological restraints.)

2 Points -- Understanding that pharmacological restraints are drugs used to sedate a person in order to achieve control over their behavior. The response must include an explicit statement about the purpose of the drug. i.e., "to calm you down."

1 Point -- Knowledge about the idea of restraint in general, or understanding of the meaning of pharmacological, without the ability to relate the two aspects of the phrase. Inclusion of information regarding mechanical restraints in this definition earns one point, unless the examinee defines only mechanical restraints (this type of response would earn a zero).

0 Point -- Inaccurate meaning, including definitions of mechanical restraints.

13. Consultation (He spent one hour in consultation with his lawyer).

2 Points -- Conveys the idea of information or advice being provided or sought.

1 Point -- Recognition that discourse is involved, but without the notion of aid, advice, or recognition of directed use of the discourse.

0 Point -- Inaccurate meaning.

Procedure for Scoring

The following general procedures should be used in scoring CRV responses: (a) Read through the whole response before attempting to match it to scoring criteria; (b) Review all of the scoring categories for the word in question; (c) Begin matching the response to scoring criteria, starting with 2-point criteria.; (d) If the response does appear to satisfy 2-point criteria, proceed anyway to review the response in light of 1-point criteria. Likewise, if a response appears to meet 1-point criteria, proceed to review it in light of 0-point criteria and examples; (e) Record the final score arrived at for the

response, and make the assignment of a summary score when all thirteen vocabulary words have been scored. The summary score is the sum of the examinee's scores on all thirteen words.

## APPENDIX G

### COMPREHENSION OF RIGHTS STATEMENTS (CRS)

#### -- INSTRUMENT, INQUIRY RULES, AND SCORING PROCEDURES

##### Introduction to the Instrument

The examiner begins by giving the following instructions to the examinee: "This part is like the part we did a little while ago. I will be showing you some cards with some sentences on them. When I show you one, I will read the sentence to you. Then I want you to tell me what it says in your own words. Try to tell me just what it says, but in different words from those that appear in the sentence on the card. Now can you explain to me again what it is I would like you to do?"

If the examinee does not understand, repeat the instructions slowly or answer specific questions. When understanding seems to have been accomplished, the examiner hands to the examinee a card on which a practice sentence has been typed, and says: "This first card is another card for practice so you can get used to what I want you to do. Here is the card. It says, 'I am currently a resident at \_\_\_\_\_.' Now tell me in your own words what is said in that sentence."

The primary reason for the use of a practice sentence is to "teach" the examinee to avoid verbatim use of words or phrases appearing in the stimulus sentences. Thus, if the examinee uses the words "currently" and/or "resident" verbatim in his or her original response, the examiner should ask: "What do you mean by (currently) (resident)?"

The examiner proceeds to the first stimulus sentence after the examinee has expressed an understanding of the elements of this practice sentence. No feedback is given regarding correctness from this point on.

The remainder of the administration procedure consists of presenting each of the consent statements in the above fashion. Each consent statement is presented on a separate card, and an examinee's response to one

statement (as well as any necessary inquiry) is completed before proceeding to the next consent statement.

### Inquiry Rules

During each original response by the examinee, the examiner focuses on the need for any inquiry. The objective of inquiry is: (a) to maximize the examinee's chances of manifesting whatever understanding might exist, but without providing cues which might supplement the examinee's understanding; and (b) to allow the examiner to understand clearly what the examinee is attempting to express.

In general, inquiry most often occurs when an examinee's original response is incomplete or demonstrates at least partial understanding. (In the scoring system, these are 1-point responses.) Thus, inquiry generally occurs:

1. When the examinee's paraphrased response includes words or phrases verbatim from the consent statement (the examiner should say "What does (verbatim word or phrase) mean?");
2. When nonspecific pronouns are used so that it is unclear to whom the examinee is referring (e.g., therapist, staff member) the examiner should say "Who do you mean?" or "Who is it that you mean when you say \_\_\_\_\_?";
3. When the examinee's original response omits some elements of the consent statement, the examiner should say "Tell me more about what this statement means" or "Please explain more about that";
4. When the examinee's verbal confusion, double negative, contradictions, grammatical inconsistencies, or slang render the response confusing or difficult for the examiner to understand (the examiner should say "Please explain what you mean" or "What do you mean by \_\_\_\_\_" or "Let me read the statement again, and you can start from the beginning."



## Scoring the CRS

### General Scoring Criteria

Responses on each consent statement may be scored 2, 1, or 0. In general, 2-point responses convey adequate understanding of the consent statement in question.

There are several types of 1-point responses: (a) the examinee has omitted, distorted, or inadequately expressed some portion of the statement while having demonstrated adequate understanding of another portion of it; (b) the response is vague, so that one cannot clearly determine whether the examinee had adequate or inadequate understanding; (c) some surplus meaning is attached to an otherwise adequate response, spoiling it because its meaning has been changed; (d) the response contains one (but no more than one) verbatim use of a phrase in the consent statement in question.

No credit is assigned to: (a) responses which demonstrate clearly inaccurate understanding of the consent statement; (b) situations in which the examinee can offer no interpretation of the consent statement.

### Specific Scoring Criteria

For each of the consent statements, criteria are provided below for 2-, 1-, and 0-point credits. In most cases there are several ways to obtain the various credits, and these are presented as lettered subclasses. For example, under the 2-point classification in the first consent statement, a response which satisfies either Criterion A or Criterion B receives the 2-point credit.

The scoring criteria below do not provide information on the scoring of responses in which examinees employ verbatim one of the critical phrases from the consent statements and fail to paraphrase it. These critical phrases are underlined in the scoring criteria. A response cannot be given a 2-point credit if any of these phrases appear verbatim in the response and were not paraphrased during inquiry, even if the response meets the other criteria of a 2-point response. A response can receive no more than a 1-point credit if any one critical phrase was used verbatim and was not paraphrased during inquiry. A 0-point credit must be assigned to any response which, after inquiry, contains two or more critical phrases used verbatim without having been paraphrased by the examinee. The scoring system appears below.

1. All information and records obtained in the course of evaluation, examination or treatment shall be kept confidential. Information and

records may only be disclosed to individuals to whom you or your parents have given informed consent to have the information disclosed.

2 Points -- An understanding of the basic idea of confidentiality of records and the necessity of providing consent or permission in order to have records released. The examinee does not have to state that parents' permission is required, but the response does need to indicate an understand of consent as a procedure requiring written permission.

1 Point -- An understanding of either the idea of confidentiality or the idea of consent, or a vague understanding of both concepts.

0 Point -- Stated lack of understanding; erroneous paraphrases, misunderstanding about aspects of confidentiality or consent process such as who can see records, i.e., "only parents," "only the patient."

2. You are entitled to initiate a complaint or a grievance procedure which must be acted upon by the clinically responsible staff in at least seven days.

2 Points -- The idea that residents have the right to register a complaint about conditions with which they are dissatisfied, and that the clinical staff members must respond within a week. The examinee must show evidence of knowledge that this is a formal complaint procedure, not just the type of complaining about conditions that residents do on an everyday basis.

1 Point -- A vague understanding of the right to make a complaint and the need for staff members to respond, or a clear understanding of one but not both of these elements.

0 Point -- Stated lack of understanding; erroneous paraphrases.

3. You are entitled to individual space for your private use for your clothing and personal belongings subject to reasonable inspection conducted solely for the purpose of confiscating illegal or dangerous articles.

2 Points -- An understanding of the right to privacy for one's belongings and of the right of staff members of the institution to search one's room in order to find and remove items such as drugs and/or weapons. The

examinee does not have to name the items that could be seized, but in order to achieve a two-point score, the examinee should indicate knowledge of the nature of these articles, i.e., "harmful," "dangerous," "contraband," "illegal," "stuff you're not supposed to have." (On this item I often asked the meaning of "reasonable inspection" because it was seldom mentioned spontaneously and I was interested in their understanding of the phrase. I have not included their understanding as part of the scoring criteria, however).

1 Point -- A vague understanding of the basic idea of the sentence, or a clear understanding of either the idea of the right to privacy or the right of the staff members to conduct inspections/confiscate articles.

0 Point -- Stated lack of understanding; erroneous paraphrases. Responses which do not address the issue of room searches should receive a zero.

4. You will not be subjected to seclusion or mechanical or pharmacological restraints except in case of emergency for your safety or the safety of others or as a part of a written plan of treatment prepared by your physician in consultation with the treatment team.

2 Points -- An understanding of the basic idea that a resident cannot be placed in seclusion/restrained at the whim of staff members, but rather that this type of action should take place only in emergency situations. The examinee does not need to mention both seclusion and restraints in the response. The examinee can mention permission of physician/therapist/ treatment team as an adequate condition. It is not necessary for the examinee to know the meaning of "mechanical and pharmacological" in order to receive 2 points of credit, but the examinee should know the meaning of restraints.

1 Point -- a response that indicates understanding of the use of restraints/seclusion in emergency situations, without the understanding that the patient has a right not to be restrained unless such a situation exists or there is permission by responsible staff members. The examinee may not fully understand the meaning of "seclusion" or "restraint," but understands the idea that these are emergency procedures designed to bring an individual under control.

0 Point -- Stated lack of understanding; erroneous paraphrases.

5. It is your right to inquire about and receive accurate information concerning the professional staff members responsible for your care, the nature of that care, the procedures & treatment which you are or will be receiving.

2 Points -- An understanding of the idea that a resident has the right to ask for and receive information about his/her treatment and the people who will be providing that treatment. In order to receive a two point response, the examinee should mention at least one specific type of information that relates to effectiveness/adequacy/safety of treatment, such as training of staff or treatment methods

1 Point -- An understanding of the basic idea of the sentence, without an indication that the examinee is aware of issues that are crucial to effective/adequacy/safety of treatment. For example, the examinee might mention scheduling concerns, or might give a vague response about getting correct information without being specific.

0 Point -- Stated lack of understanding; erroneous paraphrases.

### Procedure for Scoring

(a) Read through the whole response before attempting to match it with any scoring criteria; (b) Review the response to isolate essential and nonessential phrases; (c) Review all of the scoring categories for the consent statement in question; (d) Begin matching the response to scoring criteria, starting with 2-point criteria. Attempt to discover the essential criteria within the response to be scored, but do not "read between the lines"; (e) Even if the response appears to satisfy 2-point criteria, proceed to review the response in relation to 1-point criteria. Likewise, even if it appears to meet 1-point criteria, continue to review it in relation to 0-point criteria; (f) Record the final score arrived at for the response. An examinee's CRS sum score is the total of the scores obtained on the five consent statements, and may range from 0 to 10.

As stated above, it is important not to "read between the lines" when examining a CRS protocol. In addition, the scorer should avoid being biased by the quality of verbal or grammatical style in a response when deciding on a score. Very unsophisticated verbalizations may possibly contain a correct sense of the meanings conveyed in the consent statement. Further, highly sophisticated and intellectualized responses sometimes are found to be "empty" regarding the essential meanings to be understood.

## APPENDIX H

### COMPREHENSION OF RIGHTS STATEMENTS, TRUE OR FALSE (CRS-TF) -- INSTRUMENT AND SCORING PROCEDURES

#### Introduction to the Instrument

Instructions to the subject are as follows: Now I am going to show you the sentences we have just been talking about. After I read a sentence to you, I will read three more statements. Each statement means either the same thing or not the same thing as the first sentence. I want you to tell me whether each statement is the same or different from the sentence on the card.

These instructions are followed immediately by the examples: Here are two examples so that you know what to do. (Put example A card on table.) This sentence says "I am currently participating in research." Now look at this card. (Put example item A1 card on table and read.) "I am taking part in a research study right now." Now, does that card say the same thing or something different from the first sentence? (If subject says "same," remove card A1, leave card A, and proceed to second example. If subject says "different," explain why they are the same, and go on to second example.) Here is the next card. (Put example item A2 card on table beside example A.) "I am going to be part of a research project tomorrow." Is that the same as the first sentence (point to example A card) or something different? (If "same," discontinue test. If "different," proceed to CRS-TF items.)

To begin the CRS-TF items, a card bearing the first consent statement is placed before the subject. The examiner then proceeds through the three related CRS-TF statements in the manner shown in the examples but does not give feedback regarding correctness of answers. After the three item statements, the examiner proceeds to the second consent statement, and so on.

## CRS-TF items

The following are the consent statements, their corresponding CRS-TF items, and the correct response for each item (in parentheses).

1. All information and records obtained in the course of evaluation, examination or treatment shall be kept confidential. Information and records may only be disclosed to individuals to whom you or your parents have given informed consent to have the information disclosed.
  - a. The information in your chart such as test results and descriptions of treatment sessions will not be shown to just anybody who wants to read them. Only people who work at \_\_\_ or other people who have the permission of you or your parents will be able to receive the information. (Same, or true)
  - b. Only the employees of \_\_\_, your teachers, your relatives, and the police are allowed to receive information about your treatment at \_\_\_\_\_. (Different, or false)
  - c. The only people who can receive information about your treatment at \_\_\_ are the people who work there and people who have the permission of you or your parents. (Same, or true)
2. You are entitled to initiate a complaint or a grievance procedure which must be acted upon by the clinically responsible staff in at least seven days.
  - a. If you are dissatisfied with something about your treatment at \_\_\_, you are allowed to make a complaint. The staff members responsible for your treatment must respond to this complaint within a week. (Same, or true)
  - b. You can complain to the people at \_\_\_ about the things you are dissatisfied about, and they are required to make changes to satisfy you before seven days have passed. (Different, or false)
  - c. There is a procedure at \_\_\_ for making complaints about important things that are interfering with your treatment. The staff members at \_\_\_ are required to take these complaints seriously and to act on these

complaints within seven days. (Same, or true)

3. You are entitled to individual space for your private use for your clothing and personal belongings subject to reasonable inspection conducted solely for the purpose of confiscating illegal or dangerous articles.
  - a. You are allowed to have a private room at \_\_\_ if staff members decide that it might be dangerous for other patients to be in the same room with you, or if you are known to steal the personal belongings of other patients. (Different, or false)
  - b. Staff members at \_\_\_ are allowed to enter your room and search the room if they are worried that you might have drugs or weapons somewhere in your room. (Same, or true)
  - c. The people at \_\_\_ feel that it is important for you to have a feeling of privacy in your bedroom. Sometimes it is necessary for staff members to check your room for things that are dangerous or against the law. (Same, or true)
4. You will not be subjected to seclusion or mechanical or pharmacological restraints except in case of emergency for your safety or the safety of others or as a part of a written plan of treatment prepared by your physician in consultation with the treatment team.
  - a. The staff members at \_\_\_ cannot lock you in a room by yourself, place bands around your arms and legs to keep you still, or give you drugs to calm you down, unless you are out of control and your doctor gives permission for these actions to be taken. (Same, or true)
  - b. The use of seclusion or restraints for emergency situations is never discussed by \_\_\_ physicians and treatment team members before it is used. (Different, or false)
  - c. If you become violent toward staff members or other patients it may be necessary to take serious action to bring you under control so that you don't hurt yourself or anyone else. Your doctor and members of the treatment team will decide about the best thing to do if this happens. (Same, or true)

5. It is your right to inquire about and receive accurate information concerning the professional staff members responsible for your care, the nature of that care, the procedures and treatment which you are or will be receiving.
- a. You can decide which staff members will be responsible for your care and what your treatment will be like. (Different, or false)
  - b. You can ask for information about the training of the people who work at \_\_\_\_\_. You can also ask for information about the treatment you will be receiving here. This information cannot be kept away from you. (Same, or true)
  - c. You are able to receive information about what will be happening to you while you are at \_\_\_\_\_. You can also receive information about the qualifications of the people who participate in your treatment.

#### Scoring the CRS-TF

Items correctly identified as "same" or "different" are scored one point, while incorrectly identified items are scored zero points. The total score on the CRS-TF can range from 0 to 15.



## APPENDIX I

### HYPOTHETICAL TREATMENT DILEMMAS

#### (TRMT-DIL) -- INSTRUMENT, INQUIRY

#### RULES AND SCORING PROCEDURES

##### Introduction to the Instrument

The examiner begins by asking the examinee the meaning of the words "risk" and "benefit." Regardless of the level of understanding of the examinee, the examiner furnishes the following definitions to the examinee: "A risk is a possible danger or a chance that something bad might happen. For example, if I decide to plant seeds in my garden right before it rains, I'm taking a risk that the seeds will be washed away by all of the water. A benefit is something useful or good that might happen. For example, if I decide to plant seeds in my garden right before it rains, the rain might be a benefit to me because it might help the seeds grow."

The examiner should then ask the examinee the meaning of the words again, and give further explanation until the examinee understands the concepts. Next, the examiner gives the following instructions to the examinee: "I will be showing you some cards with some brief stories on them. When I show you one, I will read the story to you. Then I will ask you some questions about what the person in the story should do, and why. It's okay to imagine yourself in the situation of the person in the story. This might help you to decide what decision is the best one to make. Now can you explain to me again what it is I would like you to do?"

If the examinee does not understand, repeat the instructions slowly or answer specific questions. When understanding seems to have been accomplished, the examiner hands to the examinee a card on which a story has been typed, and says: "This first card is for practice so you can get used to what I want you to do. Here is the card. It says, 'Bruce was trying to decide about whether to petition the treatment team for permission to move to the next level. He has gotten some zeroes on his point sheet during the

past week. Now tell me, what decision should Bruce make about petitioning the treatment team for the next level? Why should he make that decision? What are the risks that might result from his decision? What are the benefits that might result from his decision?

The primary reason for the use of a practice story is to "teach" the examinee to get used to the process before actual scoring begins. During this practice story it is permissible for the examiner to encourage the examinee to respond if he/she is hesitant. The examiner proceeds to the scored stories after the examinee has demonstrated an ability to respond to the questions associated with the practice story. No feedback regarding correctness of response is given from this point on.

The remainder of the administration procedure consists of presenting each of the stories in the above fashion. Each story is presented on a separate card, and an examinee's responses to one story (as well as any necessary inquiry) is completed before proceeding to the next story.

### Inquiry Rules

During each response by the examinee, the examiner focuses on the need for any inquiry. The objective of inquiry is: (a) to maximize the examinee's chances of manifesting whatever understanding might exist, but without providing cues which might supplement the examinee's understanding; and (b) to allow the examiner to understand clearly what the examinee is attempting to express. Inquiry generally occurs when the examinee's verbal confusion, double negatives, contradictions, grammatical inconsistencies, or slang render the response confusing or difficult for the examiner to understand (the examiner should say "Please explain what you mean" or "What do you mean by \_\_\_\_\_").

### Scoring the TRMT-DIL

#### General Scoring Criteria

Responses to each dilemma may be scored 3, 2, 1, or 0. The scoring system appears below.

3 Points -- In order to achieve a 3-point score the response must meet the 2-point criterion of stating at least one risk and one benefit. In addition to this basic requirement, the response must meet at least one of these additional criteria:

1. The examinee states more than one risk or more than one benefit when specifically asked to name them. Even if the initial portion of the response contains mention of additional risk or benefits, these are not scored, as it is difficult to determine whether the examinee recognized them as such.
2. The response includes a suggestion on something the person in the story could do to enhance the benefit or modify the potential risk; for example, suggesting a compromise so that both people will benefit, practicing before trying out for a team, learning more before making a decision, etc.

The response indicates that the examinee is weighing and considering various aspects of the situation by stating at least one alternative manner of approach to the decision.

2 Points -- Demonstration of recognition of a benefit and a risk, without the attempt to balance and weigh the factors involved, and without the mention of factors to enhance benefit/modify risk.

1 Point -- Demonstration of an awareness of only one dimension of the dilemma (e.g., recognition of the risk, but no acknowledgement of the balancing benefit). A one-point score should be assigned if only one dimension can be named, even if the examinee demonstrated the ability to weigh various aspects of the situation. Sometimes the examinee will name a risk or benefit in the initial portion of a response, but be unable to respond when asked specifically about risks. The response should still be scored one point.

0 Point -- No response, don't know, or a response that confuses risk/benefit.

### Procedure for Scoring

(a) Read through the entire response before attempting to match it with any scoring criteria; (b) Review all of the scoring categories; (c) Begin matching the response to scoring criteria, starting with 3-point criteria. Attempt to discover the essential criteria within the response to be scored, but do not read between the lines; (d) Even if the response appears to satisfy 3-point criteria, proceed to review the response in relation to 2-point

criteria. Likewise, even if it appears to meet 2-point criteria, continue to review it in relation to 1- and 0-point criteria: (e) Record the final score arrived at for the response. An examinee's score on the TRMT-DIL instrument is the total of the scores obtained on the four treatment dilemmas, and may range from 0 to 12.

### Treatment Dilemmas

1. Jeff (Jill) and his(her) parents have been in family therapy for three sessions. His(Her) parents have always argued a lot, and this makes him(her) upset. Nobody has talked about it in family therapy.

What decision should Jeff(Jill) make about whether or not to talk about the arguing in family therapy?

Why should he(she) make that decision?

What are the risks that might result from his(her) decision?

What are the benefits that might result from his(her) decision?

2. Martin (Melissa) is trying to decide if he(she) should tell a staff member that one of the other residents has stolen something from her room. The other boy(girl) is one of the most popular people on the unit.

What decision should Martin(Melissa) make about telling the staff member?

Why should he(she) make that decision?

What are the benefits that might result from his(her) decision?

What are the risks that might result from his(her) decision?

3. Tony (Tanya) broke a mirror in the bathroom when he(she) was angry, and now everyone on the unit has been grounded until someone admits that they did it. Tony(Tanya) is trying to decide about whether or not he(she) should speak up about it.

What should Tony (Tanya) decide to do about admitting he(she) broke the mirror?

Why should he/she) make that decision?

What are the risks that might result from his/her) decision?

What are the benefits that might result from his/her) decision?

4. Alex (Amy) thinks that arts and crafts are stupid, but his/her) therapist says that doing arts and crafts will be helpful to him/her).

What should Alex (Amy) decide about doing arts and crafts?

Why should he/she) make that decision?

What are the benefits that might result from his/her) decision?

What are the risks that might result from his/her) decision?

## APPENDIX J

### HYPOTHETICAL SOCIAL DILEMMAS (S-DIL)

#### -- INSTRUMENT, INQUIRY RULES, AND SCORING PROCEDURES

##### Introduction to the Instrument

The examiner begins by giving the following instructions to the examinee: "These stories are like the ones we have just been doing. I will be showing you some cards with some brief stories on them. When I show you one, I will read the story to you. Then I will ask you some questions about what the person in the story should do, and why. Remember, it's okay to imagine yourself in the situation of the person in the story. This might help you to decide what decision is the best one to make. This first card will give you some more practice at this type of story. Here is the card. It says, 'Jane was trying to decide about whether to enroll in band next year. She has been in band for three years and is thinking of taking art instead.' Now tell me, what decision should Jane make about enrolling in band? Why should she make that decision? What are the risks that might result from her decision? What are the benefits that might result from her decision?"

The primary reason for the use of a practice story is to "teach" the examinee to get used to the process before actual scoring begins. During this practice story it is permissible for the examiner to encourage the examinee to respond if he/she is hesitant. The examiner proceeds to the scored stories after the examinee has demonstrated an ability to respond to the questions associated with the practice story. No feedback regarding correctness of response is given from this point on.

The remainder of the administration procedure consists of presenting each of the stories in the above fashion. Each story is presented on a separate card, and an examinee's responses to one story (as well as any necessary inquiry) is completed before proceeding to the next story.

## Inquiry Rules

During each response by the examinee, the examiner focuses on the need for any inquiry. The objective of inquiry is: (a) to maximize the examinee's chances of manifesting whatever understanding might exist, but without providing cues which might supplement the examinee's understanding; and (b) to allow the examiner to understand clearly what the examinee is attempting to express. Inquiry generally occurs when the examinee's verbal confusion, double negatives, contradictions, grammatical inconsistencies, or slang render the response confusing or difficult for the examiner to understand (the examiner should say "Please explain what you mean" or "What do you mean by \_\_\_\_\_").

## Scoring the S-DIL

### General Scoring Criteria

Responses to each dilemma may be scored 3, 2, 1, or 0. The scoring system appears below.

3 Points -- In order to achieve a 3-point score the response must meet the 2-point criterion of stating at least one risk and one benefit. In addition to this basic requirement, the response must meet at least one of these additional criteria:

1. The examinee states more than one risk or more than one benefit when specifically asked to name them. Even if the initial portion of the response contains mention of additional risk or benefits, these are not scored, as it is difficult to determine whether the examinee recognized them as such.
2. The response includes a suggestion on something the person in the story could do to enhance the benefit or modify the potential risk; for example, suggesting a compromise so that both people will benefit, practicing before trying out for a team, learning more before making a decision, etc.

The response indicates that the examinee is weighing and considering various aspects of the situation by stating at least one alternative manner of approach to the decision.

2 Points -- Demonstration of recognition of a benefit and a risk, without the attempt to balance and weigh the factors involved, and without the mention of factors to enhance benefit/modify risk.

1 Point -- Demonstration of an awareness of only one dimension of the dilemma (e.g., recognition of the risk, but no acknowledgement of the balancing benefit). A one-point score should be assigned if only one dimension can be named, even if the examinee demonstrated the ability to weigh various aspects of the situation. Sometimes the examinee will name a risk or benefit in the initial portion of a response, but be unable to respond when asked specifically about risks. The response should still be scored one point.

0 Point -- No response, don't know, or a response that confuses risk/benefit.

### Procedure for Scoring

(a) Read through the whole response before attempting to match it with any scoring criteria; (b) Review all of the scoring categories; (c) Begin matching the response to scoring criteria, starting with 3-point criteria. Attempt to discover the essential criteria within the response to be scored, but do not "read between the lines"; (d) Even if the response appears to satisfy 3-point criteria, proceed to review the response in relation to 2-point criteria. Likewise, even if it appears to meet 2-point criteria, continue to review it in relation to 1- and 0-point criteria; (e) Record the final score arrived at for the response. An examinee's score on the G-DIL instrument is the total of the scores obtained on the four treatment dilemmas, and may range from 0 to 12.

### Social Dilemmas

1. David (Diana) was trying to decide how to spend his(her) afternoon. He(She) really wants to see a movie, but his(her) friend wants to go for a bike ride instead.

What decision should David (Diana) make about what to do this afternoon?

Why should he/she make that decision?



What are the risks that might result from his(her) decision?

What are the benefits that might result from his(her) decision?

2. Sam (Sue) is trying to decide about how he(he) should spend the money he(he) has saved. He (She) might spend it on a new pair of jeans that he(he) saw in a catalog. Or he(he) might use it for a bus ride to visit his(her) friend in another city.

What decision should Sam (Sue) make about how to spend his(her) money?

Why should he(he) make that decision?

What are the benefits that might result from his(her) decision?

What are the risks that might result from his(her) decision?

3. Brian (Betty) is trying to decide about whether he(he) should try out for the track team. He(She) tried out last year and wasn't quite fast enough.

What should Brian (Betty) decide about trying out this year?

Why should he(he) make that decision?

What are the risks that might result from his(her) decision?

What are the benefits that might result from his(her) decision?

4. Karl (Karen) is trying to decide about whether he(he) should take a job at a restaurant in town. He(She) has never had a job before.

What should Karl (Karen) decide about the restaurant job?

Why should he(he) make that decision?

What are the benefits that might result from his(her) decision?

What are the risks that might result from his(her) decision?

APPENDIX K

FEEDBACK AND DEBRIEFING STATEMENT

We're finished with the work we had to do. I really appreciate your participation in this study. You really worked hard and helped me out a lot.

As I said before we got started, the purpose of this study was to find out what people your age know about the rights and responsibilities of patients in institutions such as \_\_\_\_\_ . I'm going to compare the answers of people your age with the answers of people of other ages to learn more about what children and adolescents can understand about inpatient treatment.

Do you have any questions about what we've done today? (Give opportunity for questions.)

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Did we do anything today that you don't understand? (Give opportunity for questions.)

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Do you have any feelings you'd like to express about what we've done here today? (Give opportunity for expression of feelings, discussion.)

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If you don't have any (more) questions, we're through. Thanks again for helping me out.

APPENDIX L  
CORRELATION MATRICES

TABLE I  
PEARSON  $r$  CORRELATION COEFFICIENTS BETWEEN  
COMPREHENSION MEASURES

	CTV	CTS	CTS-TF	CRV	CRS	CRS-TF
CTV	1.00	.7998*	.2869	.7243*	.6815*	.5806*
CTS		1.00	.3035	.7696*	.7561*	.5787*
CTS-TF			1.00	.4813*	.3630 <sup>†</sup>	.5048*
CRV				1.00	.8649*	.6678*
CRS					1.00	.5666*
CRS-TF						1.00

\*  $p < .01$

<sup>†</sup>  $p < .05$

TABLE II  
 PEARSON  $r$  CORRELATION COEFFICIENTS BETWEEN  
 COMPREHENSION MEASURES AND  
 DEMOGRAPHIC/COGNITIVE  
 MEASURES

	CTV	CTS	CTS-TF	CRV	CRS	CRS-TF
AGE	.2982	.4792*	.2050	.4148*	.3015	.4846*
GENDER	.2055	.2230	.1986	.0904	.1887	.2656
IQ	.3697'	.3204'	.3238'	.6013*	.6391*	.2310
READ COMP	.2819	.3116	.3446'	.5242*	.5270*	.2945
ABS REAS	.3454'	.3451'	.5057*	.6142*	.5766*	.3271'
OUTPT TRMT	.3413	.1262	.0018	.2977	.2155	-.0018
INPT TRMT	.0839	.1110	-.1829	-.0285	.0338	.1293
SES	.1518	-.1197	.0389	.2224	.1533	.1966
SDIL	.5673*	.5939*	.1566	.5760*	.6361*	.4373*
TRMT DIL	.5450*	.6047*	.2449	.6467*	.6052*	.4792*

\*  $p < .01$

'  $p < .05$

TABLE III  
 PEARSON  $r$  CORRELATION COEFFICIENTS BETWEEN  
 DEMOGRAPHIC AND COGNITIVE MEASURES

	AGE	SEX	SES	IQ	READ	ABST	OUTPT	INPT
AGE	1.00	.0942	-.1328	-.1537	-.1114	.0061	-.2190	.0224
SEX		1.00	-.0649	-.1184	.0021	.0207	.0383	-.0514
SES			1.00	.4639*	.4432*	.5461*	.2448	-.1659
IQ				1.00	.7629*	.7316*	.3063	-.0862
READ					1.00	.7897*	.2679	-.2276
ABST						1.00	.4365†	-.1281
OUTPT							1.00	.1021
INPT								1.00

\*  $p < .01$

†  $p < .05$

## APPENDIX M

### RESULTS OF QUALITATIVE ANALYSES

The terms and sentences in the various instruments were chosen because of their wide use in the setting where research was conducted. Although several of the items seemed simple, they were chosen in order to assess the limits of understanding of some of the younger subjects and those with lower IQ's. Misunderstanding of some or several of the items could lead a patient to feel confused about various aspects of treatment, simply because of inability to understand the jargon. Indeed, some of the subjects mentioned bewilderment at some of the words; their misunderstandings will be summarized in the following sections.

#### Measures of Comprehension of Treatment Terminology

##### Comprehension of Treatment Vocabulary (CTV)

The CTV instrument consisted of ten words that the subject was asked to define. The words that were defined accurately by over half of the subjects were: Behavior, Peers, Goal, Positive Relationship, and Self-esteem. The words that were defined accurately by less than half of the subjects were: Resident, Feedback, Authority Conflicts, Therapy, and Respect. The responses to these words are summarized below, in order from least difficult to most difficult.

"Behavior," a frequently mentioned term in an inpatient setting, was an easy term for most subjects, with 87.5% giving a response that was some variation on "how you act." Five percent of subjects gave more vague responses, such as: "Something you should do all the time. You should behave. You should be good, on good behavior," or "good and bad habits." Seven-and-a-half percent of subjects had clear difficulty in defining the word, as in this response: "Something that you use at the dinner table and the house; something that is serious."

Most of the subjects (85%) were able to correctly identify "peers" as people in equal standing with themselves, people in their own age group. A

much smaller percentage (12.5%) could only state that peers are other people, without recognizing that they are individuals of one's own status or age. One subject incorrectly stated that adults such as parents are included as peers.

All of the subjects were able to provide some sort of definition for the word "goal," with the majority (72.5%) able to give a response that conveyed the idea of some sort of end toward effort is directed, or something which is to be achieved or accomplished. A few of the subjects related the term to their work at the institution, mentioning participation in treatment and the achievement of a higher level in the levels system as examples of goals. A smaller percentage of respondents (27.5%) conveyed that a goal is the terminal point of a process, but were not able to include the idea of effort being involved.

The phrase "positive relationship" seemed to be easily understandable by most of the subjects; 67.5% were able to clearly convey that this is a beneficial alliance or connection between individuals, and many were able to state characteristics of such an alliance, such as lack of involvement in drugs. Twenty percent of the subjects gave an accurate yet more vague response, while 12.5% were unable to define the phrase.

Sixty-two-and-a-half percent of subjects got full credit for their response to the word "self-esteem," conveying the idea that it is akin to feelings or thoughts and opinions about oneself. One respondent described it as "a source of power that you have that you need," while another called it "your self-confidence-type stuff." Ten percent of subjects gave a more vague response, able to state that it was something positive or negative or that it was a feeling, without relating these aspects. Twenty-seven- and-a-half percent gave incorrect answers, such as "it's how you participate in something," "how you express yourself," or "when you get mad and keep it inside and beat on things." One individual stated that he had been in a self-esteem group just that morning, stating: "I hear people talking about that all the time. Some guy said what it was, but I couldn't understand it. I couldn't explain it." This response is significant in how it illustrates the reluctance of some adolescents to clarify confusing information, preventing them from gaining maximum benefit from their treatment stay.

Some of the items were responded to correctly less than half of the time. The term "feedback" is an example of one of these more difficult items. It is often used in the context of group settings, where residents are encouraged to interact with each other, confront each other, and give various kinds of feedback about what is said. Forty-seven-and-a-half percent were able to convey the meaning of evaluative or corrective information given by



others about one's demeanor or actions, for example: "data, like if you're doing something wrong, then feedback would be somebody telling you that you're doing something wrong and trying to explain how to do it better." Twenty-five percent gave an accurate response that failed to convey information about the evaluative nature of feedback, for example: "like communication, people talking back and forth." Twenty-seven -and-a-half percent

of subjects were either unable to make a guess or gave inaccurate responses; for example, one such individual defined the word "flashback" instead, while another defined feedback as "results." Another subject stated: "if you put something into something, you get something back out of it."

The term, "resident," was correctly identified by 47.5% of subjects as the name for an individual staying in an inpatient treatment facility. Thirty percent of subjects were able to state that a resident is someone who lives someplace, but did not relate the meaning to inpatient treatment. Twenty-two-and-a-half percent were unable to state the meaning, or mistakenly defined the word "residence" instead. In a setting where patients are constantly referred to as "peers" or "residents," failure to understand the meaning of these terms could lead to confusion on the part of adolescents in treatment.

The phrase "authority conflicts" was correctly defined by 45.5% of the subjects, while 30% provided vague or partially accurate responses and 22.5% gave inaccurate responses. Those who responded accurately were able to convey the sense of residents having conflicts with adult authorities as a result of not wanting to obey their rules. Those who were unable to respond accurately often surmised that the term was referring to conflicts between two authorities.

The word "therapy" would seem to be a rather important term for inpatients to understand; 45% of subjects in this study were able to convey the idea that therapy consists of meeting together individually or in groups in order to work out problems or come to greater insight by talking, interacting with others, and/or performing activities designed to be therapeutic, with the patient as an active participant in the process. Most of the respondents who got full credit for their responses mentioned the discussion of problems as one of the central features of therapy, for example: "like discussions and treatment for your problems, talking them out and stuff." Others mentioned suggestions from the therapist as a salient feature. Fifty-two-and-a-half percent of respondents gave accurate yet vague responses that failed to recognize the active role played by the patient in a therapy relationship, or that failed to convey an understanding of therapy as a unique relationship, different from some other sort of interaction.

Examples of these responses: "something to help you get your confidence up, get to know yourself better," "help with your problems," and "where you try and resolve problems in a peaceful manner by talking it out." Two-and-a-half percent of subjects were unable to define therapy accurately, with one stating: "it's kind of like an evaluation."

The term "respect" is used frequently in inpatient settings, as in "respecting rules," or "respecting others." This was a difficult term for many of the subjects, who stated that they had a sense of its meaning but experienced difficulty putting the meaning into words. Twenty percent of subjects were able to state a meaning that conveyed the idea of treating someone with high regard, taking another person's rights and needs into account, or treating another person as one wishes to be treated, such as the following response: "like I respect the staff members. . . and I treat them the way I want to be treated when I'm older." Fifty-five percent of subjects were able to state an accurate, yet more vague definition, for example: "like you don't spit on somebody's grave," "don't be rude," and "being nice to someone." Twenty-five percent of subjects gave inaccurate responses, with most of these giving definitions that were more appropriate for the word "obey," while others stated: "what you think about another person," and "give back."

### Comprehension of Treatment Statements (CTS)

The CTS Instrument consisted of five sentences that included the treatment vocabulary words and required subjects to be able to accurately paraphrase the meanings of some sentences describing realities about inpatient treatment. These were sentences written for the purpose of this study, but they were similar to statements found in a written description of treatment at the institution and were consonant with the types of statements made about treatment in the milieu setting. Assessment of the comprehension of these statements was designed to determine patients' ability to understand the purposes of treatment and the rationale for participating in the requirements of the inpatient setting. Summaries of responses to the sentences are presented in order from least to most difficult.

The sentence: "Some of the residents at \_\_\_ are learning to talk out their problems instead of misbehaving or communicating in an indirect way," was adequately paraphrased by 60% of the subjects. One subject stated that this sentence means: "Acting up to get attention. Sometimes the girls or guys build up their anger so much that we call it a spas out. They hit walls and throw things, something you wouldn't do if you had talked about it. This

sentence is talking about how people are learning to come out and say how they feel instead of using their body to express their feelings." Another subject illustrated how the sentence can relate to suicidal behavior: "We're learning about how not to keep something inside, like last night I was playing around with the wires, saying that I was going to kill myself and stuff. And they took it seriously. And I myself was doing bad, and I was going to keep it inside myself, but in the meeting I just blurted it out and told everything and told everybody I was sorry." Thirty percent of the subjects gave a less complete explanation of the sentence; examples are: "It means that they're keeping their cool instead of knocking someone's block off" and "They're trying to talk it out instead of taking it out with anger." A smaller percentage of subjects, only 10%, had difficulty paraphrasing this sentence, with most of them drawing a blank and one stating: "To try and keep your feelings inside when you get angry," indicating that he had gleaned the opposite of the true meaning from the sentence.

The sentence: "Sometimes personal growth is difficult because it requires admitting problems and expressing feelings that may be hard to talk about," was adequately paraphrased by 40% of the subjects. An example of one of these responses follows: "A person may not be able to open up about their problems, because it might scare them. It might bring bad thoughts and memories. But yet when they're able to, they might feel better about it. They might grow up a little bit and become more mature when they talk about it and let out some of the bad feelings and bad memories and say that they're able to work on them now." Another said: "A lot of times I don't like to face reality because it hurts. But we have to, and that's what personal growth is. You have to learn to talk about your feelings so that you can change and feel better." Other subjects who achieved a 2-point responses variously defined "personal growth" as: "increasing your self-esteem," "how far along you can get in treatment," "becoming mature," and "growing more inside instead of staying stagnant." Twenty-two-and-a-half percent of subjects gave partially accurate responses, such as: "You have to learn how to open up and share your feelings and your problems so that you can get better. You have to express it and let it all out in the open"; "Sometimes growing up is hard. Sometimes it's hard to let all your feelings out"; and "That's like stuff you might be embarrassed about. Getting it out in the open instead of clamming up about it." Thirty-seven-and-a-half percent of subjects seemed to have difficulty understanding the sentence and gave this type of response: "Peer pressure. Like when you're little, you don't think about drugs. The way I see it is like I'm growing, and things are coming to me from all different directions. It's a problem" and "It's about growing up, I don't know." One of the most unusual responses of the entire study was

given in response to this statement, when a subject stated that it meant: "Like if you've been deformed, like if you're born with one finger, or one finger big huge. . . Like if you're born retarded, or with one ear, or like Cyclops, that would be hard to talk about if you had five or six fingers. That would be real hard. Or ten toes along one foot." It is difficult to determine how this individual developed such an inaccurate idea of the meaning of this sentence; one supposition is that he translated the phrase "personal growth" to mean some type of physical growth or deformity. This response clearly illustrates that there are few limits to the type of misconception that some children and adolescents in treatment settings can develop about the information that is presented to them.

When asked to paraphrase the sentence: "During inpatient treatment, residents have the opportunity to work on authority conflicts by learning to live within limits and respect other people's rights," 30% of subjects were able to give an adequate paraphrase indicating understanding that following rules and/or respecting others relates to the resolution of problems with authority. An example of such a response is: "You're able to work on learning how to cope with authority and learning how to do what they say. You're learning how to not argue every time you have to do something. And you're able to accept that you have to do that until you turn the age that you don't have to do that." Twenty-seven-and-a-half percent of subjects gave partially accurate paraphrases to this phrase; they were able to interpret one aspect of the sentence but misinterpreted or did not include information about other aspects of the sentence. An example of this type of response would be: "Like during treatment, learn to respect people, and to follow by the rules." Forty-two-and-a-half percent of subjects failed to have adequate understanding of the sentence. One subject interpreted "live within limits" to mean "live behind locked doors," illustrating the problem of various words and phrases being interpreted in a concrete or overly literal manner. One subject interpreted the phrase "authority conflicts" to mean "leadership problems," while another said it means "a conflict between two peers." The following are examples of other responses that indicate inadequate understanding: "During therapy, you learn authority and . . . I don't know. I know what those words mean, but when you put them all together, it's tough"; "Like you can have a goal to work on your conflicts, or your respect, or stuff like that"; "I guess it means to fulfill your treatment because you're getting along better with everybody, I don't know"; "I guess they learn to live with themselves"; and "While you're admitted, you work on your problems." These responses illustrate the difficulty that many subjects experience in extracting specific meanings from what appears to many adult

readers as a relatively simple and straightforward sentence.

The sentence: "Some \_\_\_ residents have a goal of learning how to build positive relationships with their peers and with adults," was paraphrased this way by one of the 30% of subjects who gave accurate responses: "Some people come in here because they just don't get along with peers, they don't get along with adults, and that's what they're in here for. They come in so that they can learn how to get along with people and life." Another subject said: "Maybe they've been sexually abused or something like that, and it's hard for them to get close to people, so they're trying to learn how to, how to build good relationships." The 40% of subjects who gave partially accurate responses had more vague ideas about the meaning of the sentence, for example: "I guess being a role model for your peers, being a good example, not just messing around all the time" and "I guess try to get along with your mom and your friends, try to have respect for them." Thirty percent of subjects gave inadequate paraphrases of the sentence, such as: "They're here for drugs, family problems"; "Learning how to cope with people"; "Just try to get along with people better"; "It means be nice, to try not to do bad things"; and "Be good, don't get in trouble, and just talk, don't be mean." One subject stated: "I have no idea, really. I don't understand these things. These sentences are so long that it really blows my mind. If the sentences were shorter, I could do it." This type of comment indicates the importance of brevity and clarity of information when writing verbal material to be consumed by adolescents.

The sentence: "Residents at \_\_\_ can improve their self-esteem by learning to accept responsibility for their own behavior," was adequately paraphrased by 25% of subjects. An example of such a response is: "If you do something wrong, own up to it. Don't blame it on somebody else. Go tell somebody about it. It helps you to know what you're capable of doing. You're capable of helping yourself and helping other people." Thirty-five percent of subjects gave partially accurate responses, able to state only one aspect of the sentence, such as these two responses which fail to address the "self-esteem aspect" of the statement: "Accepting something you did instead of saying 'I didn't do it'" and "Learning from their mistakes, and just realizing that we have responsibilities in life and we have to do certain things." Forty percent of subjects failed to understand the meaning of the sentence, with one subject defining "self-esteem" as "self-gratification," and another stating that "improve self-esteem" means "to let there be more will power." Another subject stated that accepting responsibility for one's own behavior could be equated with learning a task such as sewing. Other inaccurate responses follow: "Residents at \_\_\_ try to learn responsibility; that's all I can think of"; "If you hold yourself responsible, it shows that you

have higher self-esteem, if you can worry about yourself instead of everybody else"; "Like you're supposed to do what you're expected to do"; "To accept what they've done"; "Like don't show your feelings when you're mad"; and "Take care of your stuff."

## Measures of Comprehension of Rights Terminology

### Comprehension of Rights Vocabulary (CRV)

The CRV instrument consisted of thirteen words that the subject was asked to define. The words that were defined accurately by over half of the subjects were: Responsibilities and Confidential. The words that were defined accurately by less than half of the subjects were: Entitled to, Evaluation, Mechanical Restraints, Disclosed to, Confiscate, Seclusion, Pharmacological Restraints, Consultation, Rights, Informed Consent, Grievance Procedure. The responses to these words are summarized below, in order from least difficult to most difficult.

The word "responsibilities" was adequately defined by 82.5% of the subjects, indicating that most of the participants understood this term. An example of such a response is the following, where the subject conveys the idea that a responsibility is an action for which one is held accountable: "Something that is yours to do, that you are responsible to do and not somebody else. It's not one of those pass-the-buck things." Some of the subjects mentioned that failure to carry out responsibilities brings with it consequences, and one response included the idea that having responsibilities can bring benefits. The subjects who gave partially accurate responses often gave answers like: "something that you have the responsibility to do, like chores"; they could give an example, but were unable to elaborate on what it means to have a responsibility. The few subjects who earned no credit on this item, 7.5% of subjects, were only able to say "being responsible" without including elaboration of any kind.

The word "confidential" was adequately defined by 70% of the subjects, who were able to state that it relates to information that is to be shared only by certain individuals. One subject related the word to the research situation in which he was participating: "It is not to be revealed, like what you said about what we say in here, it's not to go out of this room, and the tape will be confidential." Another subject related the word to therapy: "Like if you're in therapy and you and your therapist are the only ones who hear what is said in there and no one else is allowed to hear those things or repeat any of it." Some of the subjects addressed the issue of keeping



records in a certain location where not everyone has access to them, and one person mentioned that "not just anyone off the street" is able to see records. The 15% of subjects who gave partially correct responses tended to define the word accurately by saying that it means "secret" but were unable to elaborate upon that response. Fifteen percent of subjects gave inaccurate responses; two of those thought that the word meant "confident."

Forty-seven-and-a-half percent of the subjects gave accurate responses for the phrase "entitled to", being able to convey the notion of being qualified or deserving to do something, and having the right to do something. Those who gave partially correct responses tended to say that it means one "can have something" or is "allowed to do something" without conveying the notion of rights being involved. One of the subjects who earned no credit on this item stated that entitlement was equivalent to ownership, while another said that it was the same as responsibility.

Forty-five percent of the subjects gave accurate responses for the word, "evaluation," indicating the ability to convey the idea that it is a process of appraisal or judgment, ending in a decision about the value or significance of a certain aspect, as in the use of testing. One subject stated that an evaluation is: "when someone asks you a bunch of questions and then gives you a score or decides what's wrong with you." Many of the subjects seemed to have an accurate idea of what such an evaluation entailed, including information about a person's "psychological state"; "how smart you are"; "how you react to certain situations" or "if you're ready to be discharged." Those 30% of subjects who gave partially accurate responses were able to recognize that an evaluation is a process of appraisal or that some decision is made, without relating the two aspects of the meaning. For example: "It's kind of like a test; they see how you act, how you do things, just kind of get to know you." Another subject seemed to have a general idea about evaluations, stating: "it's when they watch you and see what your actions are" but then stated: "it's like therapy," suggesting some confusion. Those subjects (25%) who earned no credit for their responses seemed truly confused about the nature of an evaluation; one stated: "Finding out where you are; you're already in the evaluation when you come here." This response probably stems from the fact that many inpatients are told that they are being admitted for a short-term evaluation of their behavior and/or their need for further treatment, but this subject seemed to have a vague idea of what this means. This seemed to be the case with another subject, who said: "like somebody new coming in, and they have to have an evaluation, somebody going koo koo on you, and they evaluate them, but I don't understand what happens."

Thirty-five percent of subjects were able to state that mechanical restraints are physical means such as leather bands used to keep a person under control. One subject stated: "It's where they tie you down. If you get to the point where you're so out-of control that they have to restrain you, they'll tie you down." The subjects who earned 1-point responses (42.5%) were able to describe restraints but did not include information about the reason for using restraints. Some of the 22.5% of subjects who earned no credit misunderstood the connotation of "mechanical" in this sentence, assuming that it must have something to do with a type of machinery with cranks on it that is used to strap a person down.

The phrase "disclosed to" was a difficult one for many subjects. Thirty-two-and-a-half percent of the subjects gave adequate responses, 17.5% gave partially accurate responses, and 50% were unable to correctly define the phrase. The most common misconception was the belief that "disclosed to" means "closed to" or "kept from someone"; this response earned no credit. Several other people understood that information that is disclosed is "given," but attached a surplus meaning, stating that it is given to someone but meant to be kept private. For example: "I think it means that the person it's disclosed to is the only person who read it. It's something for her eyes only." A few subjects initially gave the wrong meaning, but immediately changed it to the correct meaning, and one of the subjects was able to correct herself when she read the word in the context of the CTS sentence. Because many consent statements contain the phrase "disclosed to" when referring to a patient's records, it is clear that adolescents' rights may not be adequately protected if they misunderstand the meaning of these words. Some patients could sign a paper intending that information be kept from someone, not realizing that their signature means it will be given to that person.

The word "confiscate" was adequately defined by 27.5% of the subjects; these individuals were able to convey that confiscation takes place when a rule is broken by having possession of contraband or forbidden property. For example, one subject stated: "Like if you do something wrong by having something you're not supposed to have here, they'll take it away." One of the 67.5% of subjects who gave a partially correct response understood that it meant to take something away, but mistakenly stated that some confiscated items are melted down. Only 5% of subjects were unable to give any type of response to this item, likely because the confiscation of contraband is a topic of much discussion on the units, and because the belongings of each patient are searched upon admission.

Twenty-seven-and-a-half percent of the subjects clearly understood the meaning of "seclusion," able to convey that it is involuntary separation from others. An example of such a response is: "Isolation-type thing, where



they keep you away from everybody." The 42.5% of subjects who gave partially correct responses conveyed the idea of isolation or privacy, but did not include the idea of involuntary separation from others. Thirty percent of subjects were unable to define "seclusion."

Twenty-five percent were able to state that pharmacological restraints are drugs used to sedate a person in order to achieve control over their behavior. One such response: "They use medicine as a type of restraint, like give you an injection. Like a shot to help you calm down." Several subjects used specific words such as sedatives, tranquilizers, or the names of drugs such as Haldol to describe the medications. The 15% of subjects who gave partially correct responses understood the general meaning of restraint, or were able to state that they are drugs, but could not relate the two aspects of the definition. A rather large percentage, 60%, were unable to provide a definition for the term.

The word "consultation" was adequately responded to by only 22.5% of the subjects, who were able to convey the idea of information or advice being provided or sought, as in this response: "It's where a person talks to you about problems and may give you suggestions on how to handle them." Thirty percent gave responses that indicated recognition that discourse is involved, but did not include the notion of aid, advice, or mention of directed use of the discourse, as in: "It's where you sit down with somebody and talk about something." A rather large percentage, 47.5%, were unable to define the word "consultation."

Twenty-two-and-a-half percent of the subjects were able to give a correct definition for the word "rights." One of the subjects who earned two points for his response was able to recite the Miranda rights verbatim, as a result of his arrest experiences. In order to earn full credit for their response, it was necessary for subjects to convey an understanding of rights as protected, inalienable privileges. Examples of such responses are: "They're like certain privileges that you get just because you're human"; "Rights are something that you have that someone can't take away from you, that gives you a way of being able to do something"; and "Things that are undeniable, things that you have no matter what." Subjects who gave partially correct responses conveyed the notion of rights as privileges without being able to state that these are protected privileges, as in this example: "Rights are the things you have, things that you get, like being able to go down to the cafeteria, and not being on AWOL precautions." This type of response put too much emphasis on rights as earned privileges rather than granted privileges, understandable in an inpatient setting where there is so much emphasis on earning the privileges that come with earning points

through good behavior. Some subjects mentioned the Constitution, but did not seem to truly understand the meaning of the Constitution and how it results in rights being protected; it seemed almost as though this was something they had heard in school without internalizing the lesson and what it means for their lives. Others used the words "entitled to," but when asked to elaborate on the meaning of that phrase, did not seem to include the notion of protection of rights in that definition. Others had difficulty giving an actual definition, but could give examples of rights they had within the inpatient setting. Sixty-five-and-a-half percent of subjects were unable to give definitions for rights that were at least partially accurate; one of these subjects confused "rights" with "responsibilities."

When asked to define "informed consent," most subjects had difficulty. Ten percent of subjects, however, were able to give accurate definitions, such as: "It's like a person is giving their okay for something after they know what it's all about" and "It means giving someone the right to do something, and reading about what you need to know about it before you agree." One of the 40% of subjects who gave a partially correct answer understood the meaning of consent, but thought that informed meant "ahead of time." Some of the subjects understood that "informed" refers to some sort of information passing back and forth between patient and practitioner, but misunderstood that it is the patient or guardian that is given the information on which to base a decision of consent. Another subject misunderstood the type of information that is consented upon, stating: "My parents informed the people here that I was OK to be here." One subject stated that it is called informed consent because "you have to sign a certain form," and another said that "informed" means "detailed." Yet another misconception about the word "informed" was that it means "spoken" as opposed to written consent. One of the 50% of subjects who earned no credit stated: "It means they'll tell us if we mess up again we'll get thrown in ICU," and another said: "when you're waiting for some information to come in, you're consent because you don't know if it's going to come in." Many of those giving zero-point responses to this term were unable even to make a guess.

Most of the subjects had difficulty with the term "grievance procedure." Only 7.5% were able to clearly state that a grievance is the formal process of initiating a complaint or grievance about some type of injustice. For example: "A grievance would be where you've been treated wrong and you write up a grievance report and start your grievance procedure by filling out the forms and turning it in for someone in authority to do something about." One subject conveyed knowledge about the seriousness of the procedure by stating that: "it's like pressing charges," and another subject gave an example of the type of situation in which it would

be used, "like if a member of the staff hit you." The 7.5% of subjects who gave partially correct responses understood that a grievance is a complaint, but were not able to convey that it is related to an injustice or that it is part of a formal procedure. Many of the 85% of subjects who earned no credit were simply unable to make a guess about the meaning, but several believed that grievance procedure related to death, as in this response: "I guess it could be to help people understand about death, and stuff like that. How to grieve for the people that died."

### Comprehension of Rights Statements (CRS)

The CRS Instrument consisted of five sentences that included the rights vocabulary words and required subjects to be able to accurately paraphrase the meanings of some sentences taken from a statement of rights and responsibilities. Assessment of the comprehension of these statements was designed to determine patients' ability to understand this document, which is commonly given to them upon entering the institution. Summaries of responses to the sentences are presented in order from least to most difficult.

The CRS sentence that was easy for the largest number of subjects is: "You are entitled to individual space for your private use for your clothing and personal belongings subject to reasonable inspection conducted solely for the purpose of confiscating illegal or dangerous articles." Fifty-seven-and-a-half percent of respondents were able to give an accurate response to this item, indicating understanding of both the "privacy" aspect of the statement and the right of staff members to reasonably search for forbidden articles. They were also able to describe the nature of these articles. One individual stated: "That means it's your own space. You get part of your room or half of a room to share with someone. And reasonable inspections are conducted, not very often, because they inspect everything we bring in. It's not like a strip search or anything, and they don't go through all your drawers all the time. And sometimes when they do the inspection, they confiscate illegal and dangerous articles, like cigarettes, knives, or booze." This individual and two others in this sample referred to strip searches being inappropriate, indicating a somewhat more sophisticated knowledge of the potential violations of patients' rights in inpatient settings. Many of the respondents referred to the confiscated articles as "contraband," a commonly used term on the unit. One subject indicated an understanding of the term "reasonable inspection" by stating "they would look through things reasonably, not tear them up. And do it at a reasonable time." The high

percentage of correct responses to this item is likely reflective of the intense interest in the issue of confiscation by the residents, possibly because adolescence is a time when privacy issues become significant. Thirty-two-and-a-half percent of respondents received partial credit for their responses to this CRS item. Some of these responses included a lack of understanding of the issue of "room search," phrasing their responses as if the search in question was only of the person. One respondent misunderstood the meaning of "reasonable inspection," stating that "the clothes you wear have to be decent; they don't want clothes with bad stains or foul language written on them." Another subject was only able to state: "I guess taking stuff away from you that you're not supposed to have," indicating a lack of understanding of the "privacy" aspect of the statement. A similar response was one that stated: "if the staff wants to go through your stuff, they can go through it." Another subject stated that the sentence addressed the right for "time to oneself," rather than private space for one's belongings. Very few of the respondents, only 10%, gave responses that failed to earn any credit. One subject was only able to say: "that means if you have something sharp you get it taken away," and another stated "nobody else can get into your stuff besides the staff members."

The next CRS sentence is: "You will not be subjected to seclusion or mechanical or pharmacological restraints except in case of emergency for your safety or the safety of others or as a part of a written plan of treatment prepared by your physician in consultation with the treatment team." Fifty-two-and-a-half-percent of the respondents were able to give an accurate response, one that adequately addressed the issue of the right not to be restrained or put in isolation unless necessary due to one's dangerous and/or out-of-control behavior. These responses also mentioned the need for a physician's permission in order to carry out seclusion and restraints. One subject was able to state the meaning of the sentence simply and clearly: "They can't put you off in a room by yourself or use restraints on you unless you're out of control, and they have to have the doctor's permission to do it." Several of the respondents were able to state the nature of the behavior that would constitute reasonable cause for restraint or seclusion, such as: "if I was really going crazy and just hitting at everybody or if I had a gun or a knife." Several of these respondents were able to indicate a complete understanding of the nature of the two types of restraints, although this was not necessary for the achievement of full credit. Mechanical restraints were most commonly defined as "straps used to hold you down," and pharmacological restraints were described as "shots used to calm you down" or used "to get your behavior under control." The most common error for the 25% of subjects who earned partial credit for this item was the failure to state that

the patient has a right not to be restrained unless his/her behavior warrants such action. An example of this type of response follows: "If you get out of hand they're gonna restrain you, with drugs, or they'll strap you on the bed." Failure to explain the necessity of having doctor's permission was also a common reason that some of the subjects did not achieve full credit on this item. Twenty-two-and-a-half percent of subjects received no credit for their responses to this item; perhaps the most blatant misconception was that "it means that if there's a fire then they consultation and then the staff or something would escort you, they would restrain you and take you somewhere where it's safe, like if a tornado came or something." Another individual seemed to extract a similar meaning from the sentence, stating: "if there's an emergency they'll work with your physician to make sure that you're safe and that other people are safe." Another equally inaccurate response was: "I guess you can't get your hair dryer or your medicine for your safety and the safety of others unless your doctor says you can. Another individual stated that "it might mean about when you get hurt, something about when you get hurt, I don't know," and another said: "it means that if you get hurt or feel bad you get to go home."

The next CRS sentence is: "It is your right to inquire about and receive accurate information concerning the professional staff members responsible for your care, the nature of that care, the procedures and treatment which you are or will be receiving." Forty-two-and-a-half percent of respondents were able to accurately define this statement, indicating an understanding of the patient's right to be informed about treatment as well as the nature of the information one might like to know. Such information included treatment plans, procedures one might be asked to go through, scheduling information, projections about length of stay, qualifications of staff members, and reasons behind certain treatment procedures. An example of this type of response: "I have the right to know what everybody's job is; I have the right to know about them and see what type of care I'm going to be receiving. They can't just decide one day that giving me shock therapy is a good idea, and then give it to me. I have to know something about it." The 22.5% of respondents who gave partially accurate responses to this item were able to state a vague notion of asking questions about treatment, but were unable to elaborate on what types of information they might need to know. One of the 35% of respondents who gave inaccurate responses stated that the sentence meant, "If you don't like something they're doing, you can tell them."

Seventeen-and-a-half percent of subjects were able to correctly paraphrase the item: "All information and records obtained in the course of

evaluation, examination or treatment shall be kept confidential. Information and records may only be disclosed to individuals to whom you or your parents have given informed consent to have the information disclosed." Those who earned the highest points for their responses were able to grasp not only the idea of confidentiality of records, but also understood that it is necessary for signed permission to be given in order for that information to be released to outside parties. An example of an adequate response is the following: "That means that the records that are kept on us while we're residents here can't be given out, except if our parents sign a piece of paper that says they can be given out." Those who gave partially accurate responses (60%) were able to comprehend either the "confidentiality of records" aspect of the item or the "signed permission" aspect, but were not able to accurately comprehend the item as a whole. The idea of confidentiality was most commonly understood by respondents in this category, with fewer respondents understanding the nature of the mechanism that gives permission to others to obtain the information. An example of this type of response was: "At your stay at a place, whatever they record about you, like whatever you do each day, how you acted that day, can only be given out to certain people. Only your parents should know about it, and who the people at the place where you're staying think should know about it." This response indicates an inaccurate understanding of the parents' right to release records to whomever they desire, instead placing that right in the hands of the institution. It also mentions the idea that only the patient's family should be allowed to see the records; this was a common misconception, indicating that many patients lack understanding of the broader implications of release of records to other individuals or institutions. Those respondents who earned no points for their answers (22.5%) had erroneous ideas about the meaning of the sentence, as in the following responses: "It means your records are not going to be shown to anybody except for your parents," and "All information is to be kept to yourself . . . and your parents can give it to other people, only if the other people say that they won't tell anybody." One individual thought that the statement meant that the institution was not allowed to give out the reason for the patient being placed in treatment, indicating comprehension of only a very specific aspect of confidentiality of records. Another individual thought the statement meant that "your parents have the right to say that you can be taken out of treatment."

The next CRS sentence is: "You are entitled to initiate a complaint or a grievance procedure which must be acted upon by the clinically responsible staff in at least seven days." This was clearly the most difficult of the CRS statements, with none of the forty respondents able to give answers that

indicated understanding of the type of problem that might lead to a grievance being filed, the process of filing a grievance, who must act on the complaint, and the time limit for responding. Most of the 40% of respondents who received partial credit for their responses were able to state the basic meaning of the sentence, but did not indicate an understanding of the serious nature of an incident that might lead to a grievance; for example, one answer stated that "a stopped-up toilet" would be grounds for the filing of a grievance. Many of the respondents seemed to believe that the sentence related to the type of complaining that inpatient adolescents often do on a daily basis, as in the following response: "You're able to say if you don't think something they're doing is right, or that you don't want to go through with it, you don't have to, if you tell them ahead of time of when it was supposed to happen." Another example of this type of response is: "If one of the staff gives you a zero or does something you didn't like or you didn't deserve, or you're accused without them considering the other consequences, you can tell the doctor or nurse about it." One of the respondents who received one point for his explanation of the sentence did understand the nature of the situation that would engender a grievance, "if you're attacked by staff or something," but misunderstood the results of the complaint, stating: "if it's not acted upon in a week, then you have the right to get out of here." Various phrases in the statement gave difficulty to certain of the respondents; for example, one individual interpreted "clinically responsible staff" to mean "the staff that's responsible for the treatment or what went wrong." This phrase was frequently a difficult one for the individuals in this study, with another person stating that it meant "capable staff at the clinic." The meaning of the seven-day limit during which the complaint is supposed to be addressed was misinterpreted by a few of the respondents; the most common misconception was that the patient was required to have the complaint filed within seven days of the incident. More than one of the 60% of respondents who earned no credit had rather unusual misconceptions of the meaning of the sentence, for example: "You're able to choose between a complaint or a grievance procedure, and you have seven days to choose it, or you can choose one of them and do that for seven and change to the other one." When this person was asked to elaborate on the meaning of grievance procedure, the response was: "I think it might be like we're able to take time out for a short period of time, like you're able to go to your room if you don't feel good, or maybe you're just really mad and want to calm down or something." Another respondent stated: "I am entitled to complete my level one, which is my orientation level, in seven days. In seven days, I'm supposed to be familiar with all the rules and regulations and stuff. A

**grievance procedure is the procedure of training a new person who has come to a place, familiarizing them with the rules and regulations and such."**

**Another response was: "That means you need to move on to bigger and better things instead of staying at the same place. Like move on to a higher level, a bigger goal."**



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Doctor of Philosophy

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