To the Graduate Council:

I am submitting herewith a dissertation written by Kathleen G. Broughan entitled "The Differential Expression of Anger by Alcoholics and Heroin Addicts." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Psychology.

Harold J. Fine, Major Professor

We have read this dissertation and recommend its acceptance:

John F. Byrne

Charles P. Calogeras

Leonard Haber

Suzanne B. Kuell

Accepted for the Council:

Hilton A. Smith
Vice Chancellor
Graduate Studies and Research

Thesis
1976
B
cop. 2

A COMPARISON OF THE DIFFERENTIAL EXPRESSION OF ANGER BY ALCOHOLICS AND HEROIN ADDICTS

A Dissertation

Presented for the

Doctor of Philosophy

Degree

The University of Tennessee, Knoxville

Kathleen G. Broughan

August 1976

1288297

ACKNOWLEDGEMENTS

To all who stood by me while I sometimes painfully, sometimes joyfully learned that I could be alone. Special thanks and gratitude to Earl, Charlie, Donna and Norm.

ABSTRACT

Twenty male alcoholics and twenty male heroin addicts were compared for direction of aggression on a hypothetical and on a behavioral level. The Rosenzweig P-F Study was used to assess aggressiveness on a hypothetical level.

Results were:

1. Both the heroin group and the alcohol group were significantly Extrapunitive in response to a hypothetical situation.
2. There was no significant difference in Extrapunitiveness between the heroin and the alcohol group in response to a hypothetical situation.
3. The heroin group was significantly Extrapunitive on the behavioral level.
4. The alcohol group was significantly Impunitive on the behavioral level.
5. In a comparison of performance on the hypothetical and behavioral measures, the heroin group was consistently Extrapunitive.
6. In a comparison of functioning on the hypothetical and behavioral level there was an extreme discrepancy in the performance of the alcohol group.
7. The heroin group was significantly Extrapunitive on both the Ego-blocking items and the Superego-blocking items of the Rosenzweig P-F Study.

8. The alcohol group was significantly Extrapunitive on the Ego-blocking items, but neither significantly Extrapunitive nor Intropunitive on the Superego-blocking items.
9. There was no significant difference between the number of Need-Persistence responses for the two groups on the Rosenzweig P-F Study.

Results were discussed within the context of characterological differences between the groups.

TABLE OF CONTENTS

CHAPTER		PAGE
INTRODUCTION		1
I.	SURVEY OF THE LITERATURE AND THEORETICAL DISCUSSION OF THE HYPOTHESES	2
	The Heroin Addict--Literature Survey	2
	The Alcoholic--Literature Survey	10
	Aggression--Literature Survey	16
	Discussion of the Literature as it Applies to the Present Study and Statement of the Hypotheses	25
II.	METHODOLOGY	32
	The Subject Population and the Issue of Controls	32
	The Hypothetical Situation--The Rosenzweig P-F Study	33
	The Behavioral Measure	37
	Experimental Statement of the Hypotheses	40
III.	RESULTS	42
IV.	DISCUSSION	57
	General Theoretical Considerations	57
	Discussion of the Experimental Findings	58
	A Theoretical Digression on the Differential Use of Anger by Alcoholics and Heroin Addicts	66
	A Note on the Implication for Therapy	69
	Addendum to the Discussion--Recommendations for Further Study	70
BIBLIOGRAPHY		72
APPENDIXES		80
APPENDIX A.	ROSENZWEIG P-F STUDY	81

CHAPTER PAGE

APPENDIX B. NUMBER OF EXTRAPUNITIVE AND INTROPUNITIVE RESPONSES FOR THE ALCOHOL GROUP ON THE ROSENZWEIG P-F STUDY. . 88

APPENDIX C. NUMBER OF EXTRAPUNITIVE AND INTROPUNITIVE RESPONSES FOR THE HEROIN GROUP ON THE ROSENZWEIG P-F STUDY . . 89

VITA 90

LIST OF TABLES

TABLE PAGE

1. Comparison of Mean Number of Extrapunitive and Intropunitive Responses Within Groups 43

2. Comparison of Number of Extrapunitive Responses on the Rosenzweig P-F Study Between Groups 44

3. A Comparison of the Mean Number of Intropunitive and Extrapunitive Responses on the Ego-blocking Items of the Rosenzweig P-F Study 46

4. A Comparison of the Mean Number of Intropunitive and Extrapunitive Responses on the Superego-blocking Items of the Rosenzweig P-F Study 47

5. Relationship Between Ego-blocking and Superego-blocking Items on the Rosenzweig P-F Study 49

6. Comparison of Mean Number of Need-Persistence Responses on the Rosenzweig P-F Study 51

7. Behavioral Measure: Number of "Slips" Per Subject for Alcohol and Heroin Groups 52

8. Comparison of Mean Number of Slips Between Groups 53

INTRODUCTION

The recent trend toward the development of similar treatment approaches and combined treatment programs for the alcoholic and the heroin addict assumes that their basic character styles would be amenable to the same treatment methods. This assumption is apparent in the "lumping together" of both groups of individuals under the rubric of "substance abusers" or "character disorders." In the former it is presupposed that the two groups are similar, if not identical, by virtue of their abuse of an addictive agent. In the latter, the same basic underlying psychological mechanisms are assumed.

It is the intention of the present study to challenge these assumptions by experimentally examining the variable of anger and to illuminate some fundamental differences in the psychological make-up of the two groups. This will be followed by a brief discussion of the implications for therapeutic intervention.

CHAPTER I

SURVEY OF THE LITERATURE AND THEORETICAL DISCUSSION OF THE HYPOTHESES

The Heroin Addict--Literature Survey

A survey of the literature on heroin addiction reflects the tendency for authors to take one of two basic orientations in discussing the personality of the addict. One of these is a more intrapersonal approach which deals with the individual as a psychological entity unto himself or, more interpersonally, with a limited number of significant others. The second approach consists of looking at the behavior of the heroin addict as a viable social expression of his membership in a particular subculture. It is felt that the most accurate, comprehensive and representative clinical picture of the heroin addict lies somewhere in a synthesis of the two approaches. That is, exploring the dynamics, perceptual system and/or characterology of the addict within the context of the subculture of which he is a part, and within the more general cultural context of which the addict subculture is a part set apart. Relatively few studies have addressed themselves to both issues. The following survey of the literature will be an attempt to synthesize a portion of the work done to date.

The heroin addict rejects the traditional values of society, and consciously values socially undesirable behavior. Perceiving himself as lacking the strength and competitiveness to achieve success as defined by society, the heroin addict has redefined success (Cohen, White and

Schoolar, 1971; Schoolar, White and Cohen, 1972). Passivity and suspiciousness are endorsed as values and nonconformity and distrust are the modus operandi. Typically labeled "psychopathic," i.e., incapable of learning from experience and lacking in super-ego development and the capacity to experience guilt (Hill, et al., 1960, 1962), this apparent lack of social conscience is otherwise explained as a functional response to addict life and is an inherent aspect of the role. The role necessitates daily participation in illegal activities in order to support the addict's habit. The addict subculture provides rationalizations for criminal activities. Therefore, the addict does not need to feel guilty. In actuality, respect and admiration is given to the successful criminal addict (Stevens and Levine, 1971). The addict subculture provides a cohesive set of values, norms and behaviors which set it apart from mainstream society. The subculture gives meaning and provides adaptive aspects to the addict life style. It serves immediately as a source of heroin and related knowledge of how to evaluate and administer the drug. It is a reservoir of knowledge pertaining to how to obtain the drug and the money for drugs. It provides peers who can teach criminal skills and/or act as partners in criminal enterprises. The subculture provides a structure for interaction with others and expectations of how others will treat him (including therapists). Above all, the subculture provides the addict with a set of values and norms and gives respect and admiration to those who adhere to them (Stevens and Levine, 1971). It has been hypothesized that the behavior of the heroin addict is partially one of retaliation against a society in which he perceives himself as not fitting. It

provides a way to gain revenge for injustices and deprivations that have been experienced, regardless of whether or not they are based in reality. However, heroin use today by the lower class, primarily minority group persons, does not provide for them a euphoric escape from the psychological and social problems which derive from ghetto life. On the contrary, it provides a motivation and rationale for the pursuit of a meaningful life, albeit a socially deviant one. The activities that these individuals engage in and the relationship that they have in the course of their quest for heroin are far more important than the minimal analgesic and euphoric effects of the small amount of heroin available to them. If they can be said to be addicted, it is not so much to heroin as to the entire career of the heroin user (Preble and Casey, 1969).

This view has been substantiated in a study by Kurtines (1975) using the California Psychological Inventory. He found that heroin addicts scored significantly lower than the nonaddict comparison groups on the Responsibility and Socialization scales, and highest on the Flexibility scale. Persons low on Responsibility and Socialization but high on Flexibility tend to be "irresponsible, careless of rules and conventions, impulsive and self-centered" (Goldstein, Kern, Abel and Morgan, 1970; Hogan, 1970). In addition, the study showed that although the addicts were more hostile, rebellious and irresponsible than comparison groups, they were relatively normal in social poise and self-esteem and seemed "well adjusted," as defined by the Inventory. This suggests that drug use is symptomatic not of neurosis but of "generalized antisocial disposition" (Kurtines,

1975). In an earlier MMPI study, heroin addicts were more willing to admit to social undesirable characteristics than the nonaddicted participants (Gilbert and Lombardi, 1967), and in a study using the Leary it was found that the heroin addict's basic intentionality could be described as socially undesirable and that their basic orientations reflected suspiciousness and a hostile and uncertain stance stemming from a sense of vulnerability and concern about adequacy in coping with external demands (Schoolar, White and Cohen, 1972). Chein (1966) cites anger, suspiciousness and self-doubting as important aspects of the functioning of heroin addicts and discusses that these reflect a basically paranoid character structure.

The heroin addict is action-oriented. Continual feelings of tension combined with characteristically low tolerance for frustration(Tokar et al., 1975; Brill, 1954), propels the addict into perpetual motion. Addicts tend to be sensitive and inclined to "act-out" in the face of difficulties or if subjected to too much pressure (Gilbert and Lombardi, 1967). Relatively little pressure seems to be too much. In their 1971 study Cohen, White and Schoolar discuss their finding of a significant discrepancy in "self-ratings" and "basic intentionality" in Leary records of drug abusers. It appears that the subjective result of this discrepancy is the experience of tension and, typically, a concurrent inability to provide a cognitive scheme or label for it. This discrepancy and its psychological concomitants reflect a severe identity problem of long duration. Because the heroin addict endorses values that counter those of society in general, specifically passivity and suspiciousness, he prefers in his own action-oriented manner not to engage in striving

behavior for which he can be made to take personal or social responsibility (Cohen, White and Schoolar, 1971). A very descriptive example of this is the "hustler."

> All hustlers desire a life of conspicuous wealth, luxury and leisure time. Visible evidence of a hustler's success is communicated by first showing no visible means of income. At the same time, the hustler will drive an expensive car, wear gold watches, diamond rings, alligator skin shoes, mohair and silk suits which are changed twice daily (Sutter, 1966).

Associated with the heroin addict's subjective experience of undefinable tension and his action-orientation is his characteristic movement toward immediate gratification of his needs. Because the delay inherent in planning and organizing activities would involve the tolerance of mounting tension, the heroin addict impulsively moves into action and his infrequent efforts at more achievement-oriented endeavors are premature, poorly organized and inadequate. This type of experience only serves to confirm his feelings about his incompetency in societally-sanctioned enterprises. Hence, the heroin addict exhibits less endurance and/or willingness to complete societally acceptable tasks, but displays a great deal of energy and activity in response to his need to relieve tension via his characteristically action-oriented style (Reith, Crockett and Craig, 1975; Kurtines,1975; Cohen, White and Schoolar, 1971).

The heroin addict lives out a rather paradoxical need for aggression and, concurrently, succorance. This was demonstrated in a study by Reith, Crockett and Craig (1975). Using an objective measure of personality, the addict's high dependency needs and high needs for aggression were demonstrated. A possible interpretation for this seemingly paradoxical combination might cast an explanatory light on the addict's

seemingly inappropriate and frequently contradictory approach to expressing aggressive feelings. Desiring acceptance and recognition, but expecting rejection, indifference or retaliation from peers and significant others, heroin addicts tend to relate in a hostile, critical manner and are readily perceived as self-seeking, antagonistic and argumentative. This typically evokes hostility, competition and/or guilt in the "other" and facilitates the perpetuation of his perception of others and how he reacts to them (Schoolar, White and Cohen, 1972). It has been hypothesized in numerous experimental studies and theoretical treatises that the heroin addict's needs are rooted in early maternal deprivation (Torda, 1968). Heroin addicts tend to see their mothers as strong, dominant and independent. There appears to be a marked deficiency in the empathic nurturant, "sharing intimate behavior" areas of the maternal figures behavior (Schoolar, White and Cohen, 1972), leading to chronic deprivation and resultant feelings of resentment. In fact, according to a study using the Leary System, drug abusers tend to be "disidentified" with their mothers and exhibit significant discrepancy with controls in the assimilation of maternal qualities. The mothers are described as strong, narcissistic and managerial, the "model of efficiency within a prescribed goal direction," but deficient in tender, sensuous aspects of living (Cohen, White and Schoolar, 1971). A study using the Personal Orientation Inventory revealed that male drug users had a negative response toward affectional relationships and/or expressing or receiving affection. Interestingly, the female subjects in the study evidenced more positive expressing and receiving of affection than controls (controls being significantly higher in acceptance of affectional relationships than

male addicts). There were no significant differences in this respect between male and female non-drug users in the study. Perhaps this is an indication of a rather high degree of introjection of socially acceptable sex roles, either by the addict or by the significant family members who have been instrumental in the dynamic development of the individual. At any rate, it is without a doubt an interesting demonstration of conformity to tradition within a decidedly "untraditional" population, and is a promising area for future research.

Other researchers have commented on the heroin addict's difficulty in forming warm and lasting relationships (Gilbert and Lombardi, 1967; Kurtines, 1975; Tokar, et al., 1975; Reith, Crockett and Craig, 1975). This is undoubtedly related to the contradictory behavior that he displays and the emotional response that it pulls from the other. The addict's narcissism, his dominant, critical and rebellious stance, and his self-seeking, immature egocentricity coexist with tremendous needs for nurturance and a passive-dependent approach to the fulfillment of these needs. Making this obviously self-defeating, conflictual combination even more difficult to deal with interpersonally is the heroin addict's high degree of self-acceptance, lack of self-doubt and/or self-abasement (Reith, Crockett and Craig, 1975; Hill, et al., 1960, 1962; Brill, 1954; Cohen, White and Schoolar, 1971; Kurtines, 1975) (sometimes referred to in discussions of psychopathy as lack of conscience or super-ego development). Without a doubt, the heroin addict believes that his experiences have taught him that he cannot trust anybody, especially in the form of openness about his needs or desires. This perceptual system is inimical to the formation of social consciousness and close interpersonal

relationships (Stevens and Levine, 1971). In actuality, there is little discrepancy between the way the addict views himself and the way he wants to be. Although obviously capable of behaving and describing himself in a socially undesirable manner, the addict does not experience discomfort and anxiety about these things (Cohen, White and Schoolar, 1971), and, therefore, feels little reason to change them.

It has been hypothesized that the heroin addict's oppositional behavior may be an attempt to establish a "negative identity" rather than endure the anxiety of having little sense of who he is or what he means to others (Cohen, White and Schoolar, 1971). The subculture provides others in the same position who can consensually validate the feelings of alienation the individual experiences. The addict's anti-social viewpoint allows him to externalize, that is, to feel that society put him in his present situation. He feels that everybody has a game and will give lengthy discourses concerning crooked lawyers, doctors, and businessmen. Unfortunately, he feels, society has chosen to punish his particular game. Based on this "fact," among others, the addict will always doubt the capacity of others to understand him.

Although most do not agree with the addict's perception of things, it appears that addict life provides for the street addict the kinds of rewards that the rest of us seek. As Chein (1966) says,

> The major effect on our urban chronic opiate users, and this I suspect is a major motivational factor in contemporary urban addiction, is that it provides an answer to emptiness. Specifically, the addict gets three things out of his involvement with narcotics. First, he gains an identity, posing little to live up to. Second, he gains a place in a subsociety where he is unequivocally accepted as a peer which is not too demanding a place among his fellow men in a segment of society where he fits and belongs. Third, he acquires a career, at which he is fairly competent.

The Alcoholic--Literature Survey

Alcoholics, typically coming to others' attention not when they are sober,but when they are exhibiting the behavioral consequences of their drinking, have frequently been characterized as uncontrolled, negligent, irresponsible and careless (MacAndrew and Edgerton, 1969). Mental Health professionals are no less guilty of focusing on the intoxicated consequences of the alcoholic's drinking in their conceptualization of such individuals as hedonistic, impulsive, unable to delay gratification and continuously avoiding reality (Blum, 1966; Curlee, 1971). These characteristics do not accurately describe most alcoholic persons or persons who are chronically alcohol-prone, when they are sober.

Contrasting the stereotype of irresponsibility, negligence, disorderliness and indifference, the alcoholic individual when sober is usually highly responsible, conscientious, orderly and cautious. In fact, he is not only a hard worker, he is a driven perfectionist who places inordinately high personal demands upon himself (Tamerin and Neumann, 1975). Rather than being antisocial, it appears that the alcoholic has assimilated the values and standards of society to such a degree that he cannot possibly meet his own expectations. As Bernard Smith, the nonalcoholic legal representative of Alcoholics Anonymous once stated, "the (AA) member was never enslaved by alcohol. Alcohol simply served as an escape from personal enslavement to the false ideals of a materialistic society" (Alcoholics Anonymous, 1957). Obviously, the characteristics of the alcoholic change markedly in the intoxicated state and any attempt

to characterize the alcoholic personality must consider the individual both in a state of intoxication and during sobriety (Partington, 1970).

The alcoholic's basic character style (Shapiro, 1965) is one of compulsivity rather than impulsivity and is characterized by rigidity, the need to maintain control, the avoidance of uncertainty (including the subjective experience of emotions), ambivalence, and heavy reliance on intellectualization (Saltzman, 1968; Shapiro, 1965). Being quite authoritarian, the alcoholic takes the stance of rigid adherence to rules and regulations (Chotlos, 1966). His perfectionism and over-conscientiousness grow out of lofty, self-imposed goals and he typically pushes himself more than society demands or expects. By drinking, the alcoholic does not really escape from the reality of "insane" ideals around him, but from the reality of his own insane premises, which are continually reinforced by the surrounding society (Bateson, 1971).

Reflecting the alcoholic's basically compulsive character style is the "all work, no play" orientation to living. Permitting himself little pleasure without feeling that he is being self-indulgent, feelings of happiness and well-being are immediately suspect due to the pervasive emotional undercurrent of guilt. The alcoholic's feelings of "not being deserving" are linked to his perfectionistic aspirations (Tamerin and Neumann, 1975). It is interesting to note that success and/or recognition for some achievement will often lead to a binge on the part of the alcoholic. In this respect, it appears that drinking and consequent intoxicated behavior facilitate congruence in the alcoholic's image of himself and what is reflected from the outside world. Superimposed on his basic characterology, the alcoholic's way of life engenders even stronger

feelings of shame and guilt as he is highly criticized by the culture and is perpetually taken to task for his behavior.

However, the facilitative aspect of drinking, namely the avoidance of compulsive stress, far outweighs the negative consequences, especially since the alcoholic believes that this time he can limit his drinking through an act of will to "just one" and that intoxication will not follow. By drinking, the alcoholic can control the way he feels and he can temporarily escape the cares and responsibilities of his nondrinking world. Alcohol makes stress, anxiety, pain, or the necessity of living through difficult life situations unnecessary. By chronically using alcohol, the alcoholic never lives difficulties to conclusion. Instead, experience is "short-circuited" by becoming intoxicated. In this way, the alcoholic never comes to know what it is to work through the conflicts and challenges that characterize normal existence. He does not learn that anxiety is a part of life and that pleasure and gratification cannot be attained without conflict and stress (Chotlos, 1966). Acknowledging the alcoholic's rigidly compulsive character style, Bateson (1971) perceives the alcoholic's intoxication as an appropriate subjective correction for the abnormal state inherent in his sobriety. In other words, the alcoholic's surrender to intoxication provides a partial and subjective short-cut to a "correct" state of mind. Conceptualized in this manner, there is a converse matching between intoxication and sobriety and this converse matching (or correction of the subjective state) provides far more than anesthesia for the alcoholic (Bateson, 1971).

In the drunken state the anxieties, resentments and panic vanish as if by magic. Self-control is lessened, but the need to compare himself with others is reduced even further. As the alcoholic feels the physiological warmth of the alcohol in his body (one of the infrequently occurring incidences of experiencing his body as other than an object), in many cases a corresponding psychological warmth towards others develops. "He may become maudlin or angry, but he has at least become again part of the human scene" (Bateson, 1971). Alcohol creates a state in which the possibility of action recedes and the outside world becomes less imposing. The execution of goal-directed behavior may be postponed indefinitely as any sense of urgency is greatly diminished (Chotlos, 1966).

As the alcoholic condition worsens, liquor becomes the organizing point in the external world that helps hold the alcoholic together. Besides adding structure to his deteriorating life, liquor provides directionality in the emerging life project of avoiding pain (Chotlos, 1966). The logical conclusion of this pattern is observable in the flatness and lack of spontaneity of the skid row alcoholic. Before reaching this stage, however, the less chronic alcoholic seeks merely to avoid feelings. He prefers his emotional life neither pleasurable nor painful, but neutral (Tamerin and Neumann, 1975).

Drinking is simultaneously a blow to self-esteem and a grandiose challenge to conquer the near-impossible. Using an information theory approach, Bateson talks about alcoholic "pride" as contextually structured around "I can" rather than "I succeeded." This reflects the compulsive acceptance of a challenge, a repudiation of the proposition

"I cannot." After the alcoholic has been recognized by others or has begun suffering some of the consequences of his alcoholism, the principle of pride is mobilized behind "I can stay sober." However, the achievement of success changes with its achievement. Sobriety, at this point, is no longer the appropriate contextual setting for "pride." The risk of the drink is now challenging and evokes the fatal "I can." The challenge component of alcoholic drinking is linked with risk-taking and the principle might be stated, "I can do something where success is improbable and failure would be disastrous." Obviously, this principle will never serve to maintain continued sobriety, for as success begins to appear probable, the alcoholic must challenge the risk of a drink. The element of "bad luck" or "probability of failure" places failure beyond the limits of the self. Gradually, alcoholic pride narrows the concept of "self," placing what happens outside its scope. The element of "pride in risk" is ultimately near suicidal. Alcoholics Anonymous, in an effort to intervene in this system, asserts over and over again, "Once an alcoholic,always an alcoholic," in an attempt to get the alcoholic to place alcoholism within the self. In contrast, the contextual structure of alcoholic pride places alcoholism "outside" the self in the assertion "I can resist drinking" (Bateson, 1971).

In the nonalcoholic,the body is the center for the experience of anguish, excitement, pain,etc. Its intactness is highly valued, not merely for survival, but in order to maintain self-realization and the fulfillment of potentials. The alcoholic views his physical body as an object. Because his body does not provide a reliable frame of reference for the continuity of experience, his excessive drinking is not, as it

might appear, directed toward the commission of slow suicide. The threat of brain damage and/or loss of life do not have the same meaning for the alcoholic as for the normal adult. The "prospect of death requires the conceptualization of differentiated future, dependent upon immediate involvements." Therefore, the alcoholic does not see himself as committing suicide, but rather is actively engaged in living out his particular kind of life (Chotlos, 1966).

The interpersonal relations of most alcoholics are shallow and superficial and these individuals relate to others in terms of the needs that the other can satisfy (Chotlos, 1966). Superficially self-reliant and in control, the alcoholic actually experiences himself as weak and very much in need of those around him. Wishing to maintain his facade of strength and self-sufficience, the alcoholic frequently uses passive manipulation of others to gain his ends. Paradoxically, it is comforting to him to see others as strong and as having magical qualities, while this very perception facilitates his feelings of inadequacy in meeting the inordinately high standards that he sets for himself. In order to maintain compulsive adherence to societally-acceptable behavior, his need to "keep face," and the perceived necessity of keeping others in a position to provide for him, the alcoholic must avoid the overt expression of anger. Instead, anger is manifested in passive-aggressive ways, passive control being safer than active control in that responsibility for it can always be denied. The alcoholic is a passive manipulator, and his passive behavior is often aimed at inducing others to react extrapunitively toward him. Privately wallowing in self-pity and guilt, the alcoholic provokes enough hostility from others that he can righteously,

and now not so privately, declare that he has paid the price for his behavior plus some, and he is now able to see the other as owing him. As can be expected, this type of behavior evokes only more hostility from the other and the alcoholic, more righteous than before, nestles securely into even greater passivity.

Aggression--Literature Survey

The research concerning aggression has both developmental and cultural implications in respect to the expression of aggression. This section contains a review of the relevant literature on aggression and will be followed by a discussion of the implications of the studies cited here for the present study.

Seminal to the study of aggression is the Frustration Aggression Hypothesis formulated by Dollard, et al. in 1939. The first social psychological analysis of aggression linked aggressive behavior to motivational antecedents, namely frustration. According to the frustration-aggression hypothesis, the greater the strength of the goal response sequence that is blocked, the greater the extent of the interference, and the greater the number of frustrated sequences in a given period of time, the greater will be the tendency toward hostile expression. Later work in the area of frustration and aggression has shown that the theory is plagued by circularity and definitional problems and is "too simple, too sweeping" (Berkowitz, 1969). It is currently regarded as an interesting historical document rather than a definitive statement regarding aggression (Johnson, 1972). Miller's 1941 adaptation of the hypothesis clarified the notion that aggression is not necessarily innate,

but can be learned. This was regarded as a novel and revolutionary idea at that time, but is, of course, routinely accepted today.

In 1941 Barker, Dembo and Lewin conducted a study of frustration and aggression in children. The children were led to a playroom filled with attractive toys. They were not allowed in the room and could only look at the toys through a window (frustration). A nonfrustration control group was allowed immediate access to the room. Observers then recorded the "constructiveness" of the play of the two groups. When finally given access to the playroom, it was noted that the frustrated group frequently smashed toys and were much more destructive. The nonfrustrated control group was significantly more quiet and constructive in their play. Critiques of this particular study (Haner and Brown, 1955; Olds, 1953) and others like it have raised the question of whether the apparent frustration actually led to aggression or whether the resultant behavior was, in fact,a form of regression. In 1961 Buss demonstrated that threats and attack can elicit stronger aggressive responses than frustration.

In a 1966 study by Berkowitz and Green, a stooge acted as experimenter and administered electric shock to subjects for "poor work." Subjects then saw film clips of the movie "Champion" in which Kirk Douglas takes a beating in a boxing match. The control group watched a neutral film of a foot race. The subjects then returned to the learning situation and took turns playing the experimenter who doles out shock. Each group was again subdivided so that for one-half of the subjects the stooge was referred to as "Bob," and for the remaining half "Kirk." The dependent variable was the number of shocks that the subjects administered. The results indicated that the subjects who had been angered by being shocked

in the first stage of the experiment and who had seen the boxing film were significantly more punitive toward stooges named "Kirk" than "Bob." Aggressive behavior was heightened by (a) prior rage, (b) observing aggression, and (c) associating the stooge with the person in the film.

It has been demonstrated that language has a differential effect on the display of aggression. Subjects tend to be more overtly hostile if they have been insulted than in a neutral control condition (Berkowitz, 1965). Additionally,semantic generalization of hostile meanings takes place as measured by GSR, an indicator of autonomic arousal (Lang, Geer and Hnatiow, 1963). Geen and Pigg conducted an experiment in 1970 wherein college students played teacher using an "aggression machine" (Buss, 1961). The subject was led to believe that he was the experimenter and was supposed to teach a task to another subject, who was really a confederate. The confederate appeared to make mistakes and be shocked by the subject. One group was verbally praised for administering punishment while another group was not. The results showed that reinforced subjects delivered more frequent shocks at higher intensities and that subjects who were praised for being aggressive later emitted more aggressive words on a word association test. Loew (1967) rewarded college students for making hostile remarks and later found that the rewarded subjects were more punitive toward others as compared to a control group that was reinforced for verbalizing nonaggressive words. Lovaas (1961) found that if children are rewarded for making hostile remarks they are more likely to select toys which have aggressive functions.

Feshbach (1970, 1971) found that humiliation and threats to self-esteem may be among the most powerful elicitors of aggressive behavior

in humans. In this respect, retaliation appears to be instrumental in patching an injured pride.

Most crime is impulsive rather than premeditated (President's Commission on Violence). The performance of an aggressive response sometimes reduces physical tension, although it does not necessarily have a cathartic effect (Hokanson, 1970). According to Berkowitz (1970), in certain situations,environmental stimuli associated with aggressive reactions can be reinforcing in the sense that they may be sought out. But this may occur only if a person is already angry, and it may be difficult to tell if the reinforcing stimuli actually elicit aggressive behavior or whether they function mainly to reduce inhibitions against expressing it. Hostile "drives" may be learned from childhood as cultural norms, or as Sears (1958) suggests, they may be acquired via secondary reinforcement. For example, if injuring others becomes associated with removing frustrations, the feedback of pain alone may come to maintain the behavior.

Social learning theory and in particular, modeling theory have contributed considerably to the study of aggression. Both children and adults can acquire complex behavioral patterns, emotional reactions, and a variety of attitudes through exposure to models (Bandura, 1969; Flanders, 1968). Bandura and Huston (1961) arranged a "game" in which children watched an adult solve a problem. The adult model made irrelevant responses, including aggressive responses which were directed at a nearby doll. When the children were tested in the same game, they imitated the aggressive behavior although it was unrelated to the solution of the problem. In another study, nursery school children were led into a room

containing a large number of playthings, including a large inflated doll which looked something like a clown. The children were independently rated for interpersonal aggressiveness and were placed in matched experimental groups of about-equal aggressiveness. One group observed adult models punching and kicking the doll, with one-half of the children watching same-sex models,the other half watching models of the opposite sex. The second group observed the same events, but through a television monitor rather than in person. The third group watched an aggressive model dressed as a cat. Several control groups were employed, including one in which the adult model played nonaggressively with various playthings, and another in which the subjects had no previous exposure to models at all (to rule out the possibility that the plaything alone had instigated the aggressive behavior without help from the model). All of the children were subjected to mild frustration and then were led into the playroom where observers recorded their behavior. The major findings indicated that (1) exposure to aggressive models increased the aggressive behavior of the subjects, both verbally and physically, (2) watching the models on T.V. was just as effective in increasing aggressiveness as watching them in person, and (3) when the aggressive model dressed as a cat, it had less influence on the children. Although it was common for them to do so, the children did not always directly imitate the behavior of the model but sometimes displayed novel aggressive behavior of their own. This finding suggests that the function of the model may be simply to release the inhibitions of the subject (Bandura, Ross, and Ross, 1961, 1963a). In a take-off study, Kuhn, Madsen and Becker (1967) determined that it was not necessary to frustrate the children before they were

allowed to play and that the experience of frustration may partially disrupt, rather than facilitate, the influence of the aggressive model.

Punishment may have unusual effects on the expression of aggression. It can eliminate aggressive behavior toward dolls in the modeling play situation, on one hand, but the subject observer may learn to apply punishment against others, or to be more discriminating and confine aggression to situations where punishment is less probable (Hollenberg and Sperry, 1950). The effect of the model depends to some extent on the model's perceived social power and whether the model is rewarded or punished for his aggression (Bandura, Ross and Ross, 1963b; Bandura, 1965). The role of sex differences in the social learning of aggressive behavior will not be taken up on this paper. However, discussions of the subject can be found in Eron, 1963; and Fisher, Kelm and Rose, 1969.

Numerous studies concern the developmental determinants of aggressive behavior. Relating to and confirming the previous discussion of punishment, Feshbach (1970) hypothesizes that no other variable is as strongly related to the development of aggressive behavior than the use of physical punishment. There is strong evidence that even if punishment is administered in an effort to eliminate aggressive behavior, the angry display of the parent may be more influential than the severity of the punishment, and the inhibition may be only temporary. Hoffman conducted one of many correlational studies attempting to test effects of parental punitiveness on children's aggression. He rated the subjects' mothers according to the severity of the discipline that they employed and the extent to which they exerted unqualified power. He found that the

use of such unqualified power significantly correlated with the child's hostility toward other children and his resistance to social influence. Bandura and Walters (1963b) studied punitive and nonpunitive fathers and found that sons of the former revealed more "antisocial values" when they made up stories. Other correlational studies exploring the relationship between parental punitiveness and children's aggressive behavior include Glueck and Glueck, 1950; Bandura and Walters, 1959; and Sears, et al., 1953 .

An extensive study aimed at singling out the factors that are correlated with the development of aggressiveness was performed by Sears, Maccoby and Levin in 1957. The factors that they identified as being significant were (a) the use of physical punishment, (b) parental permissiveness in the expression of aggression, (c) frequent disagreements with parents, and (d) mother's general dissatisfaction with her role in life and, particularly, her low esteem of her husband. In a later study, Bandura and Walters (1959) compared twenty-six boys with a history of delinquency with a comparable sample of nondelinquents. Both groups had average or above average intelligence and were from intact families which did not reside in high delinquency areas. The findings reflected that the groups did not differ significantly in their affection for their mothers. However, delinquent boys exhibited considerable hostility toward their fathers. The mothers of the delinquent boys often displayed a lack of warmth for their husbands, and this feeling was typically reciprocated. The delinquent boys showed less guilt for wrongdoings and their behavior was maintained by fear rather than by moral standards. In general, the socialization of the delinquent boys was

characterized by a lack of modeling after the father and failure to develop a "personal conscience."

In a longitudinal study, 174 nondelinquent boys and parents were studied over a five-year period. It was concluded that "aggressive," "assertive" and "nonaggressive" boys came from radically different backgrounds. The aggressive boys were usually reared by parents who were (a) rejecting, punitive and inconsistent in their guidance, and (b) constantly fighting between themselves and undermining each others' values. Nonaggressive boys came from environments that emphasized (a) warmth, consistency and lack of punitive controls, and (b) social conformity and mutual respect. Assertive boys came from families which were (a) affectionate and nonthreatening, but (b) where parents exerted inconsistent controls with lack of conformity and some open conflict (McCord, McCord and Howard, 1961).

Aggressive character traits tend to appear early and remain relatively stable throughout childhood into adulthood. In young children, aggressiveness may be displaced through a variety of inflexible and stereotyped behavior patterns (Dittman and Goodrich, 1961). Added evidence for the stability of the aggressive style of children over time was demonstrated in a study using the ratings of nursery school teachers. The teachers rated the expression of aggression in children and found that it remains remarkably stable between the ages of three to five, and that aggressive behavior in nursery school is a good predictor of what happens in kindergarten (Jersild and Morkey, 1935; Emmerich, 1966). Kagan and Moss (1962) conducted a longitudinal study of the continuity of aggressive behavior in 36 men and 35 women from birth through

adolescence. They reported that behavioral instability before three years of age was not a reliable indication of later instability. After three years of age, however, it appears that aggressive tendencies tend to stabilize, particularly in males. This trend seems to continue into adulthood, with those boys showing frequent tantrums in school becoming short-tempered adults. As females grow older, they tend to express less aggression, probably due to assimilation of culturally defined sex roles (Sears, Maccoby and Levin, 1957; Maccoby, 1966).

Generally speaking, the developmental process proceeds simultaneously with some level of the socialization process through which children come to internalize and finally practice approved cultural norms. The relativity of the socialization process is evident from a variety of attitudes concerning aggressive behavior found in different cultures. Many subtle (and not so subtle) distinctions in social norms relate to social situations when aggressive behavior is or is not appropriate, against whom it may be directed, by whom and in what intensity. For example, in many cultures the killing of a baby is a serious offense, but in others the first two children are customarily killed. In some cultures children are expected to kill their parents when they get old. In other cultures this would be a capital offense. Killing one's wife or causing accidental death may be considered very lightly or very punitively, depending on the culture in which it occurs.

Stylistic differences of the individuals within a particular culture also play a large part in the particular mode of expression of aggression. Ninson (1972) used the Rosenzweig Picture-Frustration Study on a group of adolescent boys and found that the more "extrapunitive"

the subject, the more aggressive would be his response to frustration. Goldman and Rhoads (1973) discussed four categories of habitual response to frustration, namely, (1) immediate action, (2) deliberating action, (3) accepting nonaction, and (4) anxious nonaction. The habitual modes of responding to annoying situations related to the amount of hostility that was expressed when faced with a frustrating agent. The highest level of expressed hostility occurred in the "immediate action" group.

Discussion of the Literature as it Applies to the Present Study and Statement of the Hypotheses

The literature survey provides a familial, cultural and characterological context from which can be developed hypotheses regarding the differential styles of expression of aggression for both heroin addicts and alcoholics.

The family backgrounds of alcoholics and heroin addicts are typically different. The family of the alcoholic rigidly endorses societal values and feelings of well-being, and positive regard within this system is contingent on the strict adherence to societal standards. The family of the heroin addict tends to be inconsistent in its guidance, rejecting and punitive. Displays of anger are frequent within the home, the mother typically being narcissistic and lacking in warmth and regard for her husband, her spouse typically reciprocating with anger, indifference or absence from the home. As is reflected in the literature, children raised in this type of interpersonal setting tend to experience little guilt for their wrong-doings and their behavior is characteristically

maintained by fear rather than by moral standards. In the home of the heroin addict, anger and hostility are freely expressed. In contrast, the alcoholic learns to fear deviation from socially-sanctioned behavior and dreads the social castigation that he perceives as a certain outcome of the open expression of his anger.

Punishment in the home may situationally eliminate the aggressive behavior of the future alcoholic/heroin addict, but the differential administration of punishment undoubtedly leads to differing long-range consequences for these individuals. For the heroin addict-to-be, inconsistently administered, severe punishment heightens the child's punitiveness towards others and increases his resistance to social influence. Harsh but rigidly consistent punishment for any breach of social conformity, and specifically, the expression of aggression, teaches the future alcoholic to be more discriminating and to confine his aggression to situations where punishment is less probable. This especially facilitates the development of passive-aggressiveness, which greatly reduces the probability of being "held responsible" for being angry. In the family of the alcoholic the expression of anger is generally prohibited and/or one of the parenting figures in despotic fashion retains the sole right to express anger. Again in contrast, the family of the heroin addict, and on a larger scale, the subculture of which the family is a part, provides a vast array of models who freely express their anger. According to the literature, exposure to aggressive models significantly increases aggressive behavior. This is certainly borne out by the modeling opportunities and the behavior of heroin addicts. In addition, since verbal reinforcement of

aggressive behavior and the verbalization of hostile remarks and/or insults increases hostile behavior, it would be expected that heroin addicts would significantly exceed alcoholics in overt expression of hostility.

The literature points out that the effectiveness of the model depends largely on the model's perceived social power and whether or not the model is rewarded or punished for his aggressive behavior. In this regard it is interesting to note the qualities of the typical hero of the recent rash of black exploitation movies, such as "The Mack." In these films prestige and status belong to the individual who succeeds at a life of crime and violence and who is verbally hostile and aggressive. This radically contradicts the ethos of mainstream society, the cultural context of the alcoholic, in which only "good guys" succeed.

Analogs of these differing cultural contexts are differing modes of being within them. The characteristic action-orientation of the heroin addict lends itself to overt displays of aggression, whereas the reflective orientation of the alcoholic facilitates passivity and a tendency toward less readily observable expression of aggression.

In summary, the literature concerning heroin addiction, alcoholism, and the expression of aggression readily lends itself to the development of some hypotheses regarding the differential styles of expression of aggression by heroin addicts and alcoholics. It can be expected that heroin addicts would far surpass alcoholics in overt expression of hostility. The heroin addict belongs to a subculture that values hostility, aggression, and action-oriented, acting-out behavior. The alcoholic, on the other hand, who very much ascribes to the values of

society and tends to associate himself with people who have little tolerance for anything other than rigid compliance with social conformity, is given virtually no reinforcement for the expression of his angry feelings. In fact, significant others in the alcoholic's early years offer only punishment, rejection, or treatment that threatens his feelings of well-being when he is assertive, let alone aggressive.

This leads to the formulation of the following specific hypotheses.

1. Both alcoholics and heroin addicts will respond in a directly aggressive manner (that is, will direct their aggression externally toward the object of their frustration in their environment) to a frustrating hypothetical situation. Both alcoholics and heroin addicts tend to be angry, resentful, and/or aggressive individuals. Frustrating hypothetical situations should evoke a predominately aggressive response from both groups.

2. The heroin addict will be more directly aggressive in response to a frustrating hypothetical situation than the alcoholic. Open expression of hostility appears to be ego-syntonic, that is, a consciously acceptable behavior for the heroin addict. Overt display of aggression is part and parcel of the addict's mode of relating interpersonally, his life style, and the subculture to which he belongs. Although resentful and angry, expression of aggressive feelings is ego-alien to the alcoholic, who experiences such behavior as a threat to the interpersonal system of which he is a part. Perceiving himself

as weak and in need of others, the alcoholic is more likely to passively-aggress than to risk the rejection and/or alienation from those he perceives as powerful and intolerant of direct expression of hostility.

3. The heroin addict will respond in an openly aggressive manner to a frustrating real life situation. The direct expression of hostility being ego-syntonic for heroin addicts, it can be expected that aggressive tendencies will be openly displayed in response to a real life situation as well as a hypothetical situation.

4. Frustrating hypothetical and real life situations will reflect a similar direction and degree of directly expressed aggression for heroin addicts. Since the expression of hostility is an acceptable behavioral alternative on all levels of awareness for the heroin addict, it would be reasonable to expect a similar degree of direct expression of aggression to both a hypothetical and a real life situation.

5. Alcoholics will show significantly less direct expression of hostility to real life situations than will heroin addicts. Avoiding open displays of hostile feelings and relying on passive-aggressive modes of behavior, alcoholics will show less direct expression of aggression on a behavioral level than will heroin addicts.

6. Alcoholics will show a significant discrepancy in expression of aggression in their reactions to frustrating hypothetical situations and frustrating real life situations. The alcoholic's anger and resentment

is more likely to surface on a fantasy level than in a direct demonstration of behavior for which he can be held responsible.

7. Heroin addicts will be directly aggressive in a frustrating hypothetical situation both in response to accusations made against them by others as well as in situations which directly frustrate the immediate gratification of their needs. The heroin addict typically trades hostility for hostility, and incriminations for wrong-doings arouse little guilt, if any at all. There is little tolerance for delay of gratification and the heroin addict characteristically meets such frustrating situations with open anger.

8. The alcoholic will find it difficult to tolerate the frustration of his immediate needs and will react to such situations with direct expression of aggression in response to a hypothetical situation. However, accusations directed toward the alcoholic by another person will characteristically evoke a guilty reaction. The compulsive alsoholic will find it difficult to tolerate the frustration of his immediate needs, both because of his authoritarian attitudes and because of his intolerance for ambiguity. However, being particularly sensitive to the opinions of others, alcoholics are especially responsive to accusations against them and typically react with guilt to such allegations.

9. Heroin addicts will demonstrate more perseverance in behavior aimed at meeting their immediate needs than will alcoholics. Heroin addicts are expert "con men" and are characteristically facile

with a whole repertoire of behavior aimed at serving their needs. Perceiving the frustration of their needs as an affront to their grandiose image of themselves, alcoholics typically respond angrily but then retreat from the situation, feeling powerless to do anything about it and hoping to save face.

CHAPTER II

METHODOLOGY

The Subject Population and the Issue of Controls

The experimental subject pool consisted of 20 male heroin addicts and 20 male alcoholics between 20 and 30 years of age. These individuals had been admitted to a drug abuse treatment ward of a Veterans Administration hospital after being diagnosed as chronic heroin addicts or alcoholics by at least one admitting psychiatrist and were then evaluated by the ward psychiatrist as to the appropriateness of their admission and placement in the treatment program. Participants in the program as well as in the present study, evidenced no incapacitating physical illnesses nor psychotic psychiatric disorders. All had made a personal commitment to a residential treatment program for a 90-day period. A relative similarity in degree of severity of drug abuse can be inferred from the voluntary sacrifice of personal freedom for such a length of time.

The Rosenzweig P-F Study was administered to the subjects between the fifth and tenth working day of their hospitalization. This time limitation was invoked to minimize the influence of treatment effects and to eliminate those individuals likely to withdraw prematurely from the treatment program. Behavioral data was collected during the first week of hospitalization, again to minimize the influence of program treatment effects.

Although it was initially considered, socioeconomic level, intellectual level and educational achievement were not controlled. This decision was based on the findings of recent experimental studies. Kurtines (1975) used the California Psychological Inventory on a group of heroin addicts and found that the scales were "essentially uncorrelated with intelligence and social class." Reith, Crockett and Craig (1975) found no significant differences related to age, educational level, intellectual functioning or home environment in the records of heroin addicts using the Edwards Personal Preference Inventory. Similarly, in another study of the personality of heroin addicts, Reith, Crockett and Craig (1975) found no significant results associated with age and educational factors, reported the negligible effect of covariating out intellectual and environmental background, and "suggest that future research does not have to be overly concerned with controlling for these factors as they do not appear to obscure the addict's response to personality tests."

The Hypothetical Situation--The Rosenzweig P-F Study

The Rosenzweig Picture-Frustration Study, or by its full name, the Picture Association Study for Assessing Reactions to Frustration, was published in 1946. Scoring criteria as well as samples have been critically reviewed by Rosenzweig, Clark, Garfield and Lehndorff (1946).

The Rosenzweig P-F represents a limited projective procedure for disclosing patterns of response to everyday stress. It consists of a series of 24 cartoon-like pictures, each depicting two persons who are involved in a commonly occurring, mildly frustrating situation. The

figure at the left is shown saying certain words which are either frustrating to the other individual or which help describe the frustration inherent in the circumstance. A blank caption box always appears above the person on the right. The drawings are sketchy and facial features and other indications of emotional expression are intentionally omitted from the pictures. The subjects were instructed to examine the cartoon situations one at a time and write the first response that entered their mind in the blank caption box.

Rosenzweig hypothesized that there are two major kinds of situations represented in the study. These he designed as Ego-blocking situations, wherein some obstacle, personal or environmental, interrupts, disappoints, deprives, or otherwise directly frustrates the individual, and Superego-blocking situations, which represent some accusation, charge or incrimination of the subject by someone else. The sixteen Ego-blocking items consist of numbers 1, 3, 4, 6, 8, 9, 11, 12, 13, 14, 15, 18, 20, 22, 23, and 24. There are eight Superego-blocking items, including numbers 2, 5, 7, 10, 16, 17, 19, and 21.

It is an assumed basis of the Rosenzweig P-F Study that the subject being assessed consciously or unconsciously identifies himself with the frustrated individual in each situation and "projects his own basis" in the replies given. The objection that the subject can easily "see through" the test items is a moot point and can be considered as potentially an asset to the measure. Although the subject may "see through" the item, his anticipation of the expectations of the assessor and/or his

reaction to these expectations lend themselves to a conscious choice of inhibition or expression of hostility which is typical of the subject's characteristic style. Therefore, the transparency of the items, or the test itself, would actually tend to intensify the subject's characteristic style of response rather than change it in an atypical direction. In his 1972 study, Ninson found that the Rosenzweig P-F Study did a creditable job in selecting individuals who would display predictable and graded amounts of aggression in response to frustration and stated that "with even very small groups involved, this projective instrument appears to have some real predictive capacity."

Scores are assigned to each response as to the direction of aggression and reaction type. Direction of aggression as defined by Rosenzweig, includes "extrapunitiveness," in which aggression is directed onto the environment; "intropunitiveness," in which the subject directs his aggression at himself; and "impunitiveness," in which aggression is evaded in an attempt to deny or gloss over the frustration.

Reaction types consist of "obstacle-dominance," in which the barrier occasioning the frustration stands out in the response; "ego-defense," in which the ego of the subject predominates; and "need-persistence," in which the solution of the frustrating problem is emphasized. From the combination of the above mentioned six categories, there result nine (9) possible scoring factors for each item, and two variants E and I.

The letters E, I and M are employed to signify respectively the extrapunitive, intropunitive and impunitive directions of aggression

in whatever combination with whatever type of reaction. A prime (') is written over the capital letter E, I or M to indicate obstacle-dominance. The capital letters E, I and M used alone signify the ego-defensive types of extrapunitiveness, intropunitiveness and impunitiveness. Small case e, i and m are employed to indicate need-persistence. Obstacle-dominance is typically written first, ego-defense second and need-persistence third in a three columnar arrangement (O-D/ E-D/ N-P).

The following is a brief description of the eleven scoring factors, including the two variants.

1. E' The presence of the frustrating obstacle is insistently pointed out.
2. I' The frustrating obstacle is construed as not frustrating or as in some way beneficial; or, in some instances, the subject emphasizes the extent of his embarrassment at being involved in instigating another's frustrations.
3. M' The obstacle in the frustrating situation is minimized almost to the point of denying its presence.
4. E Blame, hostility, etc. are turned against some person or thing in the environment.
5. I Blame, censure, etc. are directed by the subject upon himself.
6. I Variant of I. Subject admits guilt but denies any essential fault by referring to unavailable circumstances.
7. E Variant of I. Subject aggressively denies that he is responsible for some offense with which he is charged.

8. M Blame for the frustration is evaded altogether, the situation being regarded as unavoidable; in particular, the "frustrating" individual is absolved.
9. e A solution for the frustrating situation is emphatically expected of someone else.
10. i Amends are offered by the subject, usually from a sense of guilt, to solve the problem.
11. m Expression is given to the hope that time or normally expected circumstances will bring about a solution of the problem; patience and conformity are characteristic.

Based on 33% of the total protocols selected at random, a scorer reliability of 72% initial agreement between two independent scorers was attained. This meets the reliability criteria as set by Challman (1970).

A more detailed description of the Rosenzweig Scoring System, as well as an item by item list of common responses and appropriate scoring, appear in the Revised Scoring Manual for the Rosenzweig Picture-Frustration Study (1947).

For the purposes of this study, aggression on a hypothetical level will be operationally defined as the number of extrapunitive responses on the Rosenzweig Picture-Frustration test.

The Behavioral Measure

The drug treatment program from which the experimental population is taken is a highly structured therapeutic community. Relief of symptomatic drug dependence is secondary to the goal of characterological change, specifically, change in the world-view and/or perceptual system

of the participating individuals. The program is peer-oriented and peer-directed, with the "staff" being composed of select patients, ex-addict counselors, and paid staff (a psychiatrist, psychologist, lay ex-addict program director, social worker, and a number of registered nurses). Treatment planning for all individuals in the program is carried out in daily meetings of the "staff" and individuals are recognized for "programming"(achieving in the program) by being appointed to sequential staff positions. In this way there is a fusion of peer/paid staff roles. With the exception of the basic structure of the program, the largest part of organizing, directing, and monitoring participation is the responsibility of the patient-members. In this way, socially-acceptable behaviors acquire value and meaning as they lead to status and prestige within the peer group. Learning to control hostile behavior, both verbally and physically, and to express justifiable anger appropriately is a major focus of the program. To facilitate this, there are injunctions against any display of hostility, including profanity and "punk" attitudes, at any time other than in the encounter groups. Encounter groups meet at least twice weekly. In order to encounter an individual in the group, the angered individual must have previously "dropped a slip." Centrally located on the ward is a "slip box," a large wooden, locked box with a slit in the top. When an individual becomes angry, or "cops feelings" on the ward, he does not act-out his felt anger on the individual he perceives as being responsible nor on anyone else. Instead, he writes out a slip to the individual for whom he"has feelings." For example, if Brother A forgets to awaken Brother B when it is Brother A's responsibility to do so,

Brother B writes on a slip of paper--For Brother A From Brother B--and places this in the slip box. The morning of the encounter groups, a staff peer sorts through the slip box and organizes the encounter groups. During the groups,individuals are allowed to ventilate their anger in any manner they choose with the exception of physical violence and racially-oriented statements. When the group leader (a staff peer) feels that the individuals have ventilated adequately, he "cuts" the encounter. At this time the individual who dropped the slip explains his feelings to the group in the most rational, persuasive manner he can muster, and the encountered individual must then either take responsibility for his wrong-doings or adequately defend his behavior. As well as overt misdeeds, inappropriate passivity or avoidance of the expression of justifiable feelings also makes one a prime target in the encounter groups. The groups continue until all of the slips are heard and then the process begins again. In this way, participants in the program are aided in learning to appropriately control their anger, as well as to express their feelings in a socially constructive manner.

It frequently becomes apparent that an individual has a "weak area" and that being encountered about his behavior is producing relatively little behavior change. At this point a staff member (peer or paid) will "write him up" and he is given a "haircut." "Haircuts" are ritualistic upbraidings by four peers. The individual who is the object of the community's "concern" stands in the center of a room in which his peers sit in a circular fashion around him. He must face each individual and silently listen to a loud, profane exaggeration of his misconduct. If this procedure does not facilitate

increased awareness and behavioral change, more extreme measures are used. It is important to note that these antisocial behaviors that are associated with status and prestige in the streets now elicit ridicule and lowered esteem in the eyes of peers. Although there is much more to say about the program, its structure and complexities, this brief description should suffice as a context in which to understand the behavioral measure being used.

For the purposes of this study, the operational definition of extrapunitiveness on the behavioral measure will be any number of slips greater than a combined measure of central tendency for both groups.

Experimental Statement of the Hypotheses

1. The mean number of E (extrapunitive) responses on the Rosenzweig Picture-Frustration Study will be significantly greater than the mean number of I (intropunitive) responses for both the alcohol group and the heroin group.

2. The mean number of E (extrapunitive) responses on the Rosenzweig P-F study for the heroin group will be significantly greater than the mean number of E (extrapunitive) responses for the alcohol group.

3. The mean number of slips for the heroin group will be significantly greater than a combined mean number of slips for both groups.

4. The mean number of slips for the heroin group will be significantly greater than the mean number of slips for the alcohol group.

5. In a comparison of performance on the hypothetical and the behavioral measures the heroin group will most frequently be

extrapunitive on the Rosenzweig P-F Study and have greater than the combined mean number of slips.

6. In a comparison of performance on the hypothetical and the behavioral measures the alcohol group will most frequently be extrapunitive on the Rosenzweig P-F Study and will have less than the combined mean number of slips.

7. The mean number of E (extrapunitive) responses to the Ego-Blocking items of the Rosenzweig P-F Study will be significantly greater than the mean number of I (intropunitive) responses to the Ego-Blocking items for the heroin group. The mean number of E (extrapunitive) responses to the Superego-blocking items of the Rosenzweig P-F Study will be significantly greater than the mean number of I (intropunitive) responses to the Superego-blocking items for the heroin group.

8. The mean number of E (extrapunitive) responses to the Ego-Blocking items of the Rosenzweig P-F Study will be significantly greater than the mean number of I (intropunitive) responses to the Ego-Blocking items for the alcohol group. The mean number of I (intropunitive) responses to the Superego-blocking items of the Rosenzweig P-F Study will be significantly greater than the mean number of E (extrapunitive) responses to the Superego-blocking items for the alcohol group.

9. The mean number of Need-Persistence responses on the Rosenzweig P-F Study for the heroin group will be significantly greater than the mean number of N-P responses for the alcohol group.

CHAPTER III

RESULTS

The Hypothetical Situation

Hypothesis 1. A "t" test was used to determine whether the mean number of E (extrapunitive) responses on the Rosenzweig P-F was significantly greater than the mean number of I (intropunitive) responses for both the heroin group and the alcohol group.

Appendix B contains the number of Extrapunitive and the number of Intropunitive responses on the Rosenzweig P-F Study per subject in the alcohol group. Appendix C is a comparable display of Extrapunitive and Intropunitive responses on the Rosenzweig P-F per subject for the heroin group. Table 1 consists of the means, Standard deviations, "t" scores, and p values for both groups. It is apparent that both groups gave a significantly greater number of Extrapunitive than Intropunitive responses to the Rosenzweig stimuli. Therefore, the first hypothesis was confirmed.

Hypothesis 2. A "t" test was used to determine whether the mean number of E (extrapunitive) responses on the Rosenzweig P-F Study for the heroin group was significantly greater than the mean number of E (extrapunitive) responses for the alcohol group.

Table 2 contains a comparison of the mean number of Extrapunitive responses on the Rosenzweig P-F between groups. The "t" value of this comparison is not significant. Therefore, the hypothesis that the

TABLE 1

COMPARISON OF MEAN NUMBER OF EXTRAPUNITIVE AND INTROPUNITIVE RESPONSES WITHIN GROUPS

	df	Extrapunitive X_1	Intropunitive X_2	σ	"t"	p
Alcohol Group	38	14.15	6.10	1.40	5.75	>.01
Heroin Group	38	15.3	6.15	1.34	6.82	>.01

TABLE 2

COMPARISON OF NUMBER OF EXTRAPUNITIVE RESPONSES
ON THE ROSENZWEIG P-F STUDY BETWEEN GROUPS

	df	Heroin $\bar{X}_1$	Alcohol $\bar{X}_2$	σ	"t"	p
# E Responses	38	15.3	14.15	1.61	.71	NS

heroin group would give significantly more Extrapunitive responses to the hypothetical stimuli than the alcohol group was not supported.

Hypotheses 7 and 8. A "t" test was used to determine whether the mean number of E (extrapunitive) responses to the Ego-blocking items of the Rosenzweig P-F was significantly greater than the mean number of I (intropunitive) responses to the Ego-blocking items for the heroin group. Then a "t" test was used to determine whether the mean number of E (extrapunitive) responses to the Superego-blocking items of the Rosenzweig P-F was significantly greater than the mean number of I (intropunitive) responses to the Superego-blocking items for the heroin group. The statistical procedure was comparable for the alcohol group, although the hypothesized expectation was that the mean number of I (intropunitive) responses to the Superego-blocking items would be significantly greater than the mean number of E (extrapunitive) responses to the Superego-blocking items for this group.

Tables 3 and 4 consist of a breakdown of the performance of the alcohol and heroin groups on the Rosenzweig P-F Study into Ego-blocking and Superego-blocking categories. The data in Table 3 confirm the hypothesis that both the alcohol group and the heroin group are significantly more Extrapunitive on the Ego-blocking items than Intropunitive ($p < .001$).

As hypothesized, Table 4 demonstrates that the heroin group is also significantly more Extrapunitive on the Superego-blocking items than Intropunitive ($p < .05$). The alcohol group does not show a significant difference between the number of Extrapunitive and Intropunitive responses on the Superego-blocking items and these results

TABLE 3

A COMPARISON OF THE MEAN NUMBER OF INTROPUNITIVE AND EXTRAPUNITIVE RESPONSES ON THE EGO-BLOCKING ITEMS OF THE ROSENZWEIG P-F STUDY

	df	$\bar{X}$ Extra.	$\bar{X}$ Intro.	σ	"t"	p
Alcohol	38	9.65	2.60	.86	8.19	$<.001$
Heroin	38	10.3	2.60	.88	8.75	$<.001$

TABLE 4

A COMPARISON OF THE MEAN NUMBER OF INTROPUNITIVE AND EXTRAPUNITIVE RESPONSES ON THE SUPEREGO-BLOCKING ITEMS OF THE ROSENZWEIG P-F STUDY

	df	$\bar{X}$ Extra.	$\bar{X}$ Intro.	σ	"t"	p
Alcohol	38	4.55	3.70	.67	1.26	NS
Heroin	38	5.00	3.70	.59	2.20	.05

do not support the hypothesis that the alcohol group would be significantly more Intropunitive on the Superego-blocking items than Extrapunitive. However, although not significantly Intropunitive as hypothesized, the observation can be made that the alcohol group is not significantly Extrapunitive on the Superego-blocking items, as it is on the Ego-blocking items. Therefore, either chance factors are operating or there is some level of discrimination implying a differential impact of the Ego-blocking and Superego-blocking items for the alcohol group. As expected, this does not appear to be the case for the heroin group, which is consistently Extrapunitive at a significant level in response to both Ego-blocking and Superego-blocking items.

In an attempt to examine the nature of these relationships more closely, correlations were run between the Ego-blocking and the Superego-blocking items for both groups. Table 5 shows that there is virtually no difference in magnitude between the coefficients for the two groups. If the original hypotheses had been supported, a high positive correlation between Ego-blocking and Superego-blocking would have been expected for the heroin group and a much lower or negative correlation between Ego-blocking and Superego-blocking would have been anticipated for the alcohol group. The correlational data is inconclusive in terms of reflecting any differential responsivity to the Ego-blocking and the Superego-blocking items for the two groups.

Hypothesis 9. A "t" test was used to determine whether the mean number of Need-Persistence responses on the Rosenzweig P-F for the heroin group was significantly greater than the mean number of N-P responses for the alcohol group. A comparison of the mean number of

TABLE 5

RELATIONSHIP BETWEEN EGO-BLOCKING AND SUPEREGO-BLOCKING ITEMS ON THE ROSENZWEIG P-F STUDY

		Slope	Intercept	χ^2	p
Alcohol Group	Extrapunitiveness	.382	.866	.610	NS
	Intropunitiveness	.664	1.974	.615	NS
Heroin Group	Extrapunitiveness	.368	1.195	.689	NS
	Intropunitiveness	.654	1.932	.641	NS

Need-Persistence responses on the Rosenzweig between groups is contained in Table 6. There is no significant difference between the mean number of Need-Persistence responses for the heroin and alcohol groups, and, therefore, the hypothesis was not supported.

The Behavioral Measure

Hypotheses 3 and 4. A "t" test was used to determine whether the mean number of slips for the heroin group was significantly greater than the mean number of slips for the alcohol group.

Table 7 shows the number of slips per subject for the alcohol and heroin groups. Table 8 reflects a significant difference in the mean number of slips between groups. The hypothesis that the heroin group would have significantly more slips than the alcohol group was supported.

Figures 1 and 2 were devised to display the extreme differences that occur when performance on the hypothetical measure is compared to performance on the behavioral measure. It was hypothesized that the heroin group would be Extrapunitive both in response to a hypothetical situation and on the behavioral measure and that the alcohol group would be Extrapunitive on a hypothetical level, but Impunitive on the behavioral level. Statistical analysis is inappropriate here, due to the small sample size, large amount of variance inherent in the behavioral measure, and the independence of the two measures ($r=.312$). Considering that it has already been shown that both groups have a significantly Extrapunitive response style on the Rosenzweig P-F, the graphic representation of the obvious differences between the

TABLE 6

COMPARISON OF MEAN NUMBER OF NEED-PERSISTENCE RESPONSES ON THE ROSENZWEIG P-F STUDY

	df	$\bar{X}$ Number Alcohol	$\bar{X}$ Number Heroin	σ	"t"	p
N-P	38	6.15	7.60	1.08	1.34	NS

TABLE 7

BEHAVIORAL MEASURE: NUMBER OF "SLIPS" PER SUBJECT FOR ALCOHOL AND HEROIN GROUPS

Alcohol Subject #	# Slips	Heroin Subject #	# Slips
1*	0	1	0
2*	0	2	9
3*	0	3	3
4*	3	4	5
5*	0	5	9
6*	2	6	4
7*	0	7	9
8*	0	8	4
9*	0	9	2
10*	0	10	7
11*	1	11	1
12*	3	12	2
13*	2	13	3
14*	0	14	1
15*	2	15	0
16*	0	16	2
17*	0	17	1
18*	3	18	1
19*	0	19	2
20*	1	20	6
	$EX_* = 17$		EX= 71

* denotes alcohol group subject

TABLE 8

COMPARISON OF MEAN NUMBER OF SLIPS BETWEEN GROUPS

	df	Alcohol $\bar{X}$	Heroin $\bar{X}$	σ	"t"	p
# of Slips	38	.85	3.55	.22	12.27	.001

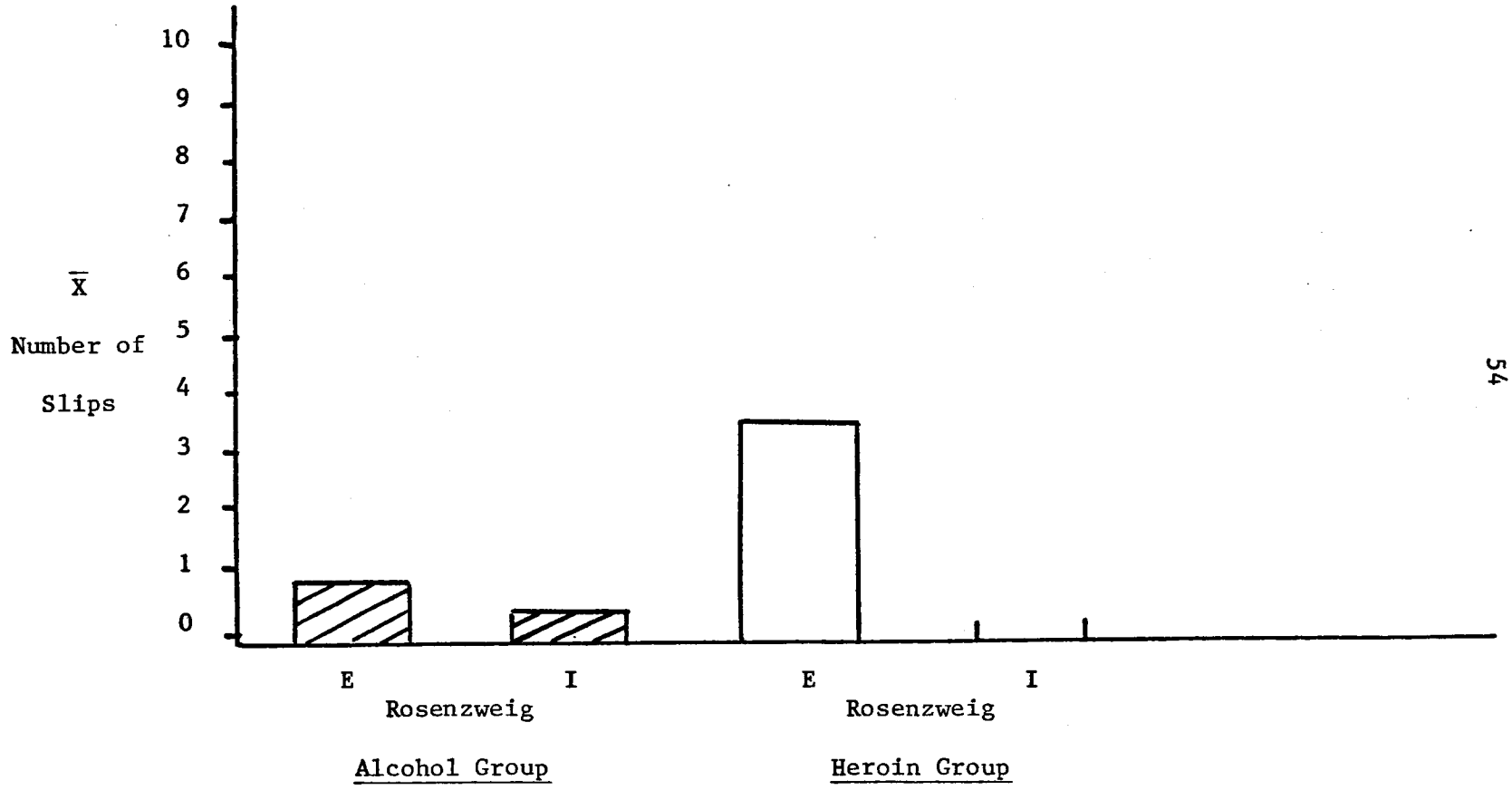


FIGURE 1

COMPARISON OF HYPOTHETICAL AND MEAN BEHAVIORAL MEASURES FOR BOTH GROUPS

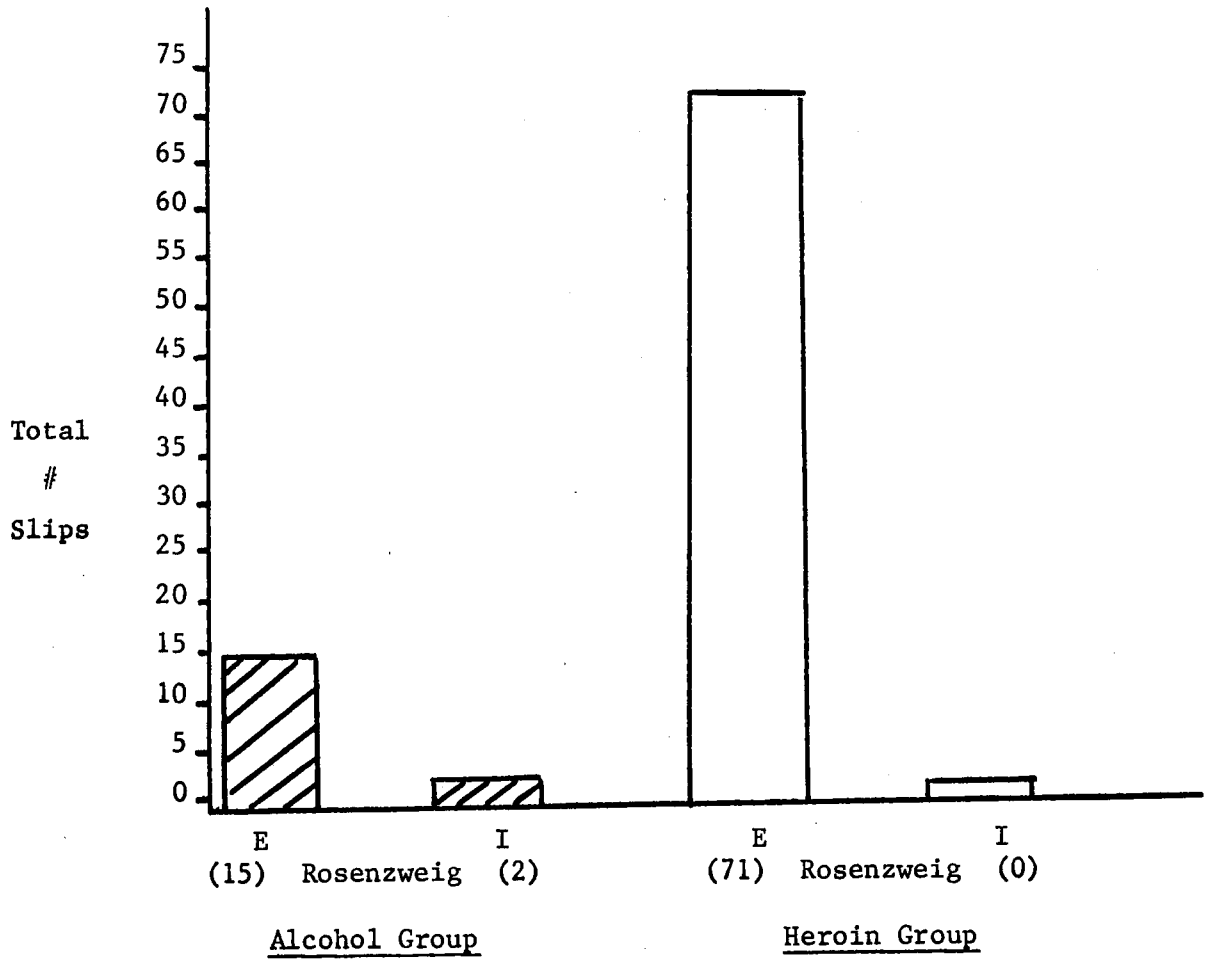


FIGURE 2

COMPARISON OF HYPOTHETICAL AND BEHAVIORAL MEASURES FOR EACH GROUP

groups in their behavioral expression of anger appears to be quite sufficient. Figure 1 shows the mean number of slips for each group within the appropriate Rosenzweig category. Figure 2 shows the total number of slips for each group within the Rosenzweig category. Obviously, the hypotheses were supported.

CHAPTER IV

DISCUSSION

General Theoretical Considerations

It has already been suggested that there are important characterological differences and concomitant perceptual differences that influence the behavior of alcoholics and heroin addicts. The heroin addict endorses values which counter those of society. Perceiving himself as lacking the strength and competitiveness to achieve success as defined by society, he prefers to redefine success. Characteristically impulsive and action-oriented, he chooses not to engage in striving behavior for which he can be made to take personal or social responsibility. Instead, he "becomes" a particular role, accoutering himself in noncomformity and maintaining a stance of distrustful, hostile rebelliousness as his only armor in the "game" of life. The alcoholic, on the other hand, responds to societal values with rigid conformity. True to his compulsive style when sober, he is highly responsible, conscientious, orderly and cautious. In contrast to the heroin addict's narcissistic brand of irresponsibility, the alcoholic is a driven perfectionist who places inordinately high personal demands upon himself. Viewing himself as far less than the perfect individual that he expects himself to be, the alcoholic continually experiences anxiety and guilt over his perceived shortcomings and rarely gains relief unless intoxicated. In essence, the alcoholic has assimilated the values and standards of society to such a degree that he cannot possibly meet his own rigid expectations.

Discussion of the Experimental Findings

The following section of the discussion will deal with the experimental results of the present study within the context of the alcoholic's and heroin addict's differing characterology. The variable of anger, considered as a particular mode of expression of stylistic functioning, is particularly differentiating of the two groups and will be the primary focus of discussion.

The Hypothetical Situation

As was hypothesized, both the heroin group and alcohol group responded in a directly aggressive manner to a frustrating hypothetical situation. The heroin group was not significantly more Extrapunitive, as defined by the Rosenzweig P-F Study, than the alcohol group in response to the hypothetical stimuli. If the Rosenzweig P-F is accepted as a valid indicator of "private" hostility and/or anger, it can be inferred from the data that both groups are composed of individuals that are "angrier" than normals and are capable of expressing their hostility with similar magnitude regardless of group.

The Behavioral Measure

Congruent with their performance on the hypothetical measure, the individuals composing the heroin addiction group were directly aggressive on the behavioral measure. The alcoholic group was remarkably Impunitive on this measure. In fact, the number of "slips" collected from the heroin group far surpassed the number of slips collected from the alcohol group ($p < .001$). This, of course,

was expected. The direct expression of hostility is ego-syntonic for the heroin addict and it follows that aggressive tendencies would be openly displayed in response to a real life situation as well as a hypothetical situation.

Comparison of the Hypothetical and Behavioral Measures

As predicted, there was a significant discrepancy in the alcohol group between performance on the hypothetical measure and the behavioral measure. Having far below the mean number of slips than the total experimental population, it appears that the individuals in the alcohol group are unwilling to air their anger publicly as they have been shown to do privately. As was hypothesized, the anger of the alcoholic is more likely to surface on a hypothetical level than in a direct demonstration of behavior for which he can be held responsible. In addition it should be remembered that the slips actually become the agenda for the biweekly encounter groups at the facility in which this research was done. Therefore, "dropping" a slip not only invites a loud, angry encounter with the object of the slip, but guarantees an actively participating audience. The heroin addict, aimed with his highly developed verbal skills, is quite facile at the encounter enterprise and readily approaches the opportunity to ventilate his "feelings." The alcoholic, however, has very carefully learned to avoid saying anything that would directly affront others and is typically lacking in the verbal facility in this regard to take a position and to stand his ground against a maligning verbal onslaught. Instead, he frequently appears to take his adversary's comments to heart and becomes increasingly passive and resistant as

the encounter progresses. A more detailed discussion relating to these stylistic differences will appear later in this chapter.

Ego-blocking, Superego-blocking Items

Rosenzweig's definition of Ego-blocking and Superego-blocking have already been stated in the Methodology chapter, but to refresh the reader's memory and to clarify the issues they will be briefly reiterated in this section. Rosenzweig hypothesized that there are two major kinds of situations represented in the Rosenzweig P-F. In the Ego-blocking situation some obstacle, personal or environmental, interrupts, disappoints, deprives, or otherwise directly frustrates the individual. Superego-blocking situations represent some accusation, charge or incrimination of the subject by another individual. As was hypothesized, the heroin group was directly aggressive both in response to hypothetical accusations made against them by others as well as in hypothetical situations which directly frustrated the immediate gratification of their needs. That is, they were directly aggressive (Extrapunitive) in response to both the Superego-blocking items and the Ego-blocking items of the Rosenzweig P-F. Hostility directed at the heroin addict typically evokes a hostile rebuttal and accusations of wrong-doing arouse little guilt, if any at all. Having little tolerance for unmet needs, the heroin addict characteristically meets such frustrating circumstances with open anger.

The alcohol group was significantly Extrapunitive on the Ego-blocking items, but were neither Extrapunitive nor Intropunitive to a significant degree on the Superego-blocking items. It was hypothesized

that the alcoholic,being particularly sensitive to the opinions of others and prone to guilty reactions, would be differentially responsive to the two types of fantasy situations and would respond Intropunitively on the Superego-blocking items. The case can be made that although the data on the Superego-blocking items for the alcoholic group did not reach significance in the expected direction, these items did seem to have a differential impact on the alcohol group in that they were not responded to in a significantly Extrapunitive direction as were the Ego-blocking items for this group. It may be "significant" in this respect that there was no statistical significance in the Extrapunitive direction in response to the Superego-blocking items as there would have been had there been no difference between the experimental groups. A second explanation involves the previously demonstrated difference in the expression of anger in response to a hypothetical situation and in a real life situation for the alcohol group. It has been shown that the alcoholic is quite capable of directly expressing his hostility in a private situation, as in response to hypothetical stimuli. His behavior is radically different in a real life situation, however. In this setting there is little direct evidence of his anger. Based on these findings, it is reasonable to speculate that the differences expected for the alcohol group on the Ego-blocking, Superego-blocking items could more readily be seen in response to a real life situation on a behavioral level. In other words, clinical observation would have been a more appropriate methodology than was the use of a projective instrument. Clinical experience supports this idea, as it readily be observed in a real life situation that the alcoholic characteristically

answers incriminations against him with promises to make amends and/or promises to repent and to give up his shameful ways forever. Such promises are in fact efforts to salve the irritated interpersonal situation and they infrequently find resolution in action.

Need-Persistence

One of the Rosenzweig P-F scoring categories consists of a measure of "need-persistence," that is, any response to the hypothetical stimulus that emphasizes solution of the frustrating problem. It was initially hypothesized that the heroin addiction group would give significantly more need-persistence responses than the alcohol group. This hypothesis was based on the clinical observation of the heroin addict's well developed talent as a "con man." This includes the verbal facility inherent in the "hustler" role as described in the survey of the literature as well as a repertoire of behavior aimed at serving the addict's needs. A closer look at the Rosenzweig scoring system as well as the nature of the instrument itself might account for the experimental results concerning need-persistence. First, the statistical comparison was run between the total number of N-P responses for each group, regardless of the particular direction of the response. As in the other scoring categories, the N-P "reaction type" can be analyzed on the basis of three possible directions of aggression. They are defined as follows:

1. /e/ a solution for the frustrating situation is emphatically expected of someone else.
2. /i/ amends are offered by the subject, usually from a sense of guilt, to solve the problem.

3. /m/ expression is given to the hope that time or normally expected circumstances will bring about a solution to the problem; patience and conformity are characteristic.

It is reasonable to speculate that the alcohol group and the heroin group would respond differentially in terms of direction of N-P response. Considering their basic character style, it seems likely that the individuals in the heroin group would most frequently give N-P responses that fall in the /e/ category, with the possibility of some /i/ responses (although these would probably be motivated by an attempt at manipulation rather than a genuine expression of guilt). Due to their authoritarian attitudes and compulsive need for control, the subjects in the alcohol group would also probably give a number of /e/ responses. This is particularly true due to the private/hypothetical nature of the Rosenzweig P-F and the fact that in responding to the projective instrument in the manner that it was administered, the alcoholic is not faced with the interpersonal/dynamic impact of interacting with another human being in a real life setting. It would be expected that in a real life situation the alcoholic's direct demands on others would be far less than in response to self-administered, projective stimuli. A further discussion of this topic appears in The Differential Use of Anger section of this chapter. Returning again to the Rosenzweig P-F scoring system, it could also be anticipated that the alcoholic group would also have a number of /i/ and /m/ type responses. This expectation is based on the alcoholic's characterological passivity, his need for conformity and his propensity for guilty reactions.

This lengthy discourse has been made in an effort to show that the differences that were hypothesized between the groups on the need-persistence items are more likely to be of a qualitative nature and were probably masked by the methodology of counting only the total number of N-P responses for each group.

Limitations of the Study

There appears to be three main limitations to the present study lying in the areas of experimental methodology, the subject population, and the particular use of the Rosenzweig P-F Study. First, the use of a projective instrument in the experimental exploration of certain variables (as addressed in the discussion of the Ego-blocking, Superego-blocking results) has already been questioned as perhaps not being the most appropriate methodology. In retrospect it is the opinion of the author that clinical observation of actual situational behavior by a team of trained observers would have been more efficacious for this particular study.

Second, although the experimental population comprising the heroin group is felt to be fairly representative of the characterology of heroin addicts in general, the alcohol group consists of a narrower population that is not as representative. Within the total population of alcoholics there appear to be marked characterological differences concomitant with age and chronicity of alcohol abuse. The experimental population, all of whom were Vietnam veterans, consists of what could be considered "the younger generation" of alcoholics. Having a more acute

nature to their alcoholism within the cultural context of increased liberalism, the experimental population is not felt to be representative of an older, chronic alcoholic population.

The third main limitation of the study is specific to the use of the Rosenzweig P-F Study as a "projective" instrument. There are inherent difficulties in the Rosenzweig P-F as enumerated by Challman (1970). It is difficult to score and even though extensive examples are offered in the manual as an aid to scoring, the distinctions between some of the responses placed in different categories are often difficult to understand. There is a loss of relevant data inherent in using the Rosenzweig P-F as a self-administering, paper and pencil test. An oral response to the test stimuli would have permitted a scoring judgment based on tone of the voice or additional remarks of the subject and would have facilitated clarification of responses which were too brief and/or too ambiguous to score. Oral responses would also have permitted some assessment of self-censorship as a function of response time. Of course, an oral procedure would also have introduced new variables of an interpersonal nature.

A fundamental problem in interpreting performance on the Rosenzweig P-F Study is assessing the projective level on which the subject approaches the measure. Another imperfection appears to be the tacit assumption that response to mild frustration is predictive of a response to strong frustration, especially when a threat to the personaltiy is involved. There is an absence of any assessment of intensity of reaction, although one might expect that to be quite important in a differential sense. Again, and finally, it is emphasized that there is a built-in lack of

clarity in the interpretation of the Rosenzweig results after they have been obtained. For example, are individuals who fall in the "impunitive" category typically kind, gentle and helpful people or are they restrained and cold? There is no way to distinguish this from the Rosenzweig P-F Study.

A Theoretical Digression on the Differential Use of Anger by Alcoholics and Heroin Addicts

It has been shown that alcoholics and heroin addicts express anger in significantly different ways. This section is designed to discuss the meaning and the dynamic importance of these differences within the context of differing character styles.

The Heroin Addict

Numerous theoretical and experimental studies have emphasized the early maternal deprivation that is consistently found in the development of the heroin addict. Emotionally healthy mothers are empathic, attentive and nurturant in response to the emotional and physical needs of their babies and engender a rudimentary sense of trust and security in the infant. The mothers of heroin addicts, however, show a marked deficiency in the empathic, nurturant aspects of mothering. This, of course, leads to a form of chronic deprivation and resultant feelings of resentment. Such a relationship stifles normal emotional development and fosters a particular sort of perceptual system, interpersonal style, and consequent life experiences. This understanding of the basic maternal relationship and the repetition of involvement in relationships of a similar interpersonal/dynamic nature explains what appears to be a contradiction between

the heroin addict's great dependency needs and his high need for aggression, as well as his inappropriate and contradictory approach to expressing aggressive feelings. Desiring acceptance and recognition but expecting rejection, indifference or retaliation from peers and significant others, the heroin addict tends to relate in a hostile, critical manner and is readily perceived as self-seeking, antagonistic and argumentative. This evokes the hostility and competition in others that he fears, but with one important difference--he can feel that he has directly caused their reaction to him. It is he who has pushed them away, not them rejecting him. In this manner, the heroin addict uses his anger to secure some degree of control over his feelings of interpersonal distance. The crucial issue is his sense of vulnerability and concern about his adequacy in coping with external demands.

The Alcoholic

The early childhood experiences of the alcoholic lead to the development of a characteristically compulsive character style. The developmental and phenomenological aspects of the compulsive character are extensively presented in Saltzman (1968) and Shapiro (1965). In contrast with the heroin addict's socially undesirable intentionality, the alcoholic is a societal conformist. He perceives his own internalized demands as societal expectations and experiences continual stress as he strives for perfection.

The interpersonal relations of the alcoholic are characteristically shallow and superficial and he typically relates to others in terms of the needs that they can satisfy for him. Superficially self-reliant

and in control, the alcoholic actually perceives himself as weak and very much in need of those around him. In an effort to maintain his facade of strength and self-sufficience the alcoholic avoids direct, autonomous action and frequently employs passive manipulation of others to gain his ends. More specifically, the alcoholic must avoid the direct expression of anger in order to maintain compulsive adherence to socially acceptable behavior, to "keep face," and probably most important from a dynamic vantage point, to keep others in a position of providing for him. A consequence of this is that anger is manifested in passive-aggressive ways, passive control being safer than active control in that responsibility for it can always be denied. The alcoholic becomes an accomplished passive manipulator. Interestingly, his passive behavior is often aimed at inducing others to act extrapunitively toward him. Privately wallowing in self-pity and guilt before the fact, the alcoholic provokes enough hostility from others that he can righteously, and now not so privately, declare that he has paid more than the price for his behavior. Given his characterologically skewed sense of equity, and having absolved himself long ago with the magical words "I'm sorry" and promises that he will never do "it" again, he is now able to perceive the other as owing him. Obviously, this type of behavior evokes even more hostility from the individual with whom he is interacting, and the alcoholic, more righteous than before, nestles into greater passivity and often pours himself a drink as small compensation for what he must put up with.

A Note on the Implication for Therapy

It is common to find alcoholics and heroin addicts lumped together under the rubric of "substance abusers" or "character disorders" both in the minds of many practitioners (regardless of DSM II changes) and, increasingly, in the treatment programs of many hospitals and mental health facilities. It is assumed that either the two groups are similiar, if not identical, by virtue of their abuse of an addictive agent, or that they are similiar in terms of equivalent underlying psychological mechanisms. The present study has shown that these assumptions are erroneous and misleading. This is not to say that the idea of combined treatment programs is necessarily a faulty one, but to point out the advisability of focusing on the characterological makeup of the populations when designing or participating in a combined program. This, of course, holds true for single population programs as well.

Addendum to the Discussion -- Recommendations for Further Study

It is hoped that the study presented here has provided some basic information regarding the differing character styles and concomitant behavior of heroin addicts and alcoholics. At this point it is pertinent to briefly state some of the theoretical

questions that have evolved from this research and to offer these as relevant areas for future study.

A critical observation is made in the Discussion section that the alcoholic's passive behavior is often armed at inducing others to act extrapunitively toward him. This raises the following question: If the alcoholic has "trouble" with anger towards significant others and if this is indeed a reflection of a rather tenuous line between self and world, is the alcoholic actually inducing anger from the other as a means of identifying himself with another and, therefore, a) vicariously expressing his own anger and b) maintaining self-world enmeshment? The question of whether the alcoholic is overidentified or under-identified within the paradoxical context of anger reducing distance while simultaneously creating it is also intriguing.

Another question which directly addresses the significant issues of the alcoholic individual is what would be expected if the focus was on what the alcoholic did not do, or if drinking itself were ignored?

Finally, the comparison of the hypothetical and behavioral measures for the alcoholic group raises the question of whether there is a greater ability on the part of the alcoholic to be angry when there is no particular person to be the target of the anger. This is speculated to be the case and further exploration

is recommended along the lines of whether this would reflect a lack of responsibility or an exaggerated sense of responsibility for the alcoholic.

BIBLIOGRAPHY

BIBLIOGRAPHY

Alcoholics Anonymous. Alcoholics Anonymous Comes of Age. New York: Harper, 1957, P. 279.

Bandura, A. Influence of model's reinforcement contingencies on the acquisition of imitative responses. Journal of Personality and Social Psychology, 1965, 1, 589-595.

Bandura, A. Principles of Behavior Modification. New York: Holt, Rinehart and Winston, 1969.

Bandura, A., Grusec, J. E., and Menlove, F. L. Observational learning as a function of symbolization of incentive set. Child Development, 1966, 37, 499-506.

Bandura, A., and Huston, A. C. Identification as a process of incidental learning. Journal of Abnormal and Social Psychology, 1961, 311-318.

Bandura, A., Ross, D., and Ross, S. A. Transmission of aggression through imitation of aggressive models. Journal of Abnormal and Social Psychology, 1961, 63, 575-582.

Bandura, A., Ross, D., and Ross, S. A. Imitation of film-mediated aggressive models. Journal of Abnormal and Social Psychology, 1963a, 66, 3-11.

Bandura, A., Ross, D.,and Ross, S. A. A comparative test of the status-envy, social power and secondary reinforcement theories of identificatory learning. Journal of Abnormal and Social Psychology, 1963b, 67, 527-534.

Bandura, A., and Walters, R. H. Adolescent Aggression. New York: Ronald Press, 1959.

Bandura, A., and Walters, R. H. Aggression. In National Society for the Study of Education, Child Psychology. Chicago: 1963a.

Bandura, A., and Walters, R. H. The Social Learning of Deviant Behavior: A Behavioristic Approach to Socialization. New York: Holt, Rinehart and Winston, 1963b.

Barker, R. G., Dembo, T., and Lewin, K. Frustration and regression: An experiment with young children. University of Iowa Studies in Child Welfare, 1941, 18, 1-314.

Bateson, Gregory. The cybernetics of "self": A theory of alcoholism. Psychiatry, 1971, 34(1), 1-18.

Benensohn, H. S., and Resnik,H. L. A jigger of alcohol, a dash of depression and bitters: A suicidal mix. Annals of the New York Academy of Sciences, 1974, 233, 40-46.

Berkowitz, L. Some aspects of observed aggression. Journal of Personality and Social Psychology, 1965, 2, 359-369.

Berkowitz, L. Roots of Aggression. New York: Atherton, 1969.

Berkowitz, L. The contagion of violence: An S-R mediational analysis of some effects of observed aggression. In W. J. Arnold and M. M. Page (Eds.) Nebraska Symposium on Motivation. Lincoln: University of Nebraska Press, 1970.

Berkowitz, L., and Green, R. G. Film violence and the cue properties of available targets. Journal of Personality and Social Psychology, 1966, 3, 525-530.

Blum, E. M. Psychoanalytic views of alcoholism: A review. Quarterly Journal of the Study of Alcoholism, 1966, 27(6), 259.

Bowlby, J. Attachment and Loss: Vol. 1 Attachment. New York: Basic Books, 1969.

Brien, R. L., Kleinman, J., and Ersinman, R. Personality and drug use: Heroin, alcohol, methadrine, mixed drug dependency and the 16 PF. Corrective Psychiatry and the Journal of Social Therapy, 1972, 18(4), 22-28.

Brill, L. Some notes on dynamics and treatment in narcotic addiction. Journal of Psychiatric Social Work, 1954, 23, 67-81.

Buss, A. H. The Psychology of Aggression. New York: Wiley, 1961.

Carothers, C. A discriminatory analysis of personality characteristics of the intemporate and the rehabilitated alcoholic. Dissertation Abstracts International, 1971, 32(4-13), 2393.

Challman, R. C. The Rosenzweig P-F Study. In Buros (Ed.) Personality Tests and Reviews. The Gryphon Press, 1970.

Chein, I. Psychological, social and epidemiological factors in drug addiction. In Rehabilitation of the Narcotic Addict. Washington, D.C.: Vocational Rehabilitation Administration, 1966.

Chotlos, J. W. The alcoholic. Review of Existential Psychology and Psychiatry, 1966, 6(1), 71-83.

Cohen, C. P., White, E. H., and Schoolar, J. C. Interpersonal patterns of personality for drug-abusing patients and their therapeutic implications. Archives of General Psychiatry, 1971, 24, 353-358.

Curlee, J. Attitudes that facilitate or hinder the treatment of alcoholism. Psychotherapy: Theory, Research and Practice, 1971, 8(1), 68-70.

Dittman, A., and Goodrich, D. A. A comparison of social behavior in normal and hyperaggressive preadolescent boys. Child Development, 1961, 32,315-327.

Dollard, J. C., Doob, L., Miller, N., Mowrer, O., and Sears, R. Frustration and Aggression. New Haven: Yale University Press, 1939.

Dudley, D. L.,Roszell, D. K., Mules, J. E., and Hague, W. U. Heroin vs. alcohol addiction: Quantifiable psychosocial similarities and differences. Journal of Psychosomatic Research, 1974, 8(5), 327-335.

Emmerich, W. Continuity and stability in early social development: II. Teacher Ratings. Child Development, 1966, 37, 17-28.

Eron, L. Relationship of T.V. viewing habits and aggressive behavior in children. Journal of Abnormal and Social Psychology, 1963, 67, 193-196.

Feldman, H. W. Ideological supports to becoming and remaining a heroin addict. Journal of Health and Social Behavior, 1968, 9, 131-139.

Feshbach, S. Aggression. In P. H. Mussen (Ed.) Carmichael's Manual of Child Psychology, Vol. II. New York: Wiley, 1970.

Feshbach, S. Dynamics of morality of violence and aggression: Some psychological considerations. American Psychologist, 1971, 26, 281-291.

Fisher, D. G., Kelm, H., and Rose, A. Knives as aggressive-eliciting stimuli. Psychological Reports, 1969, 24, 755-760.

Flanders, J. P. A review of research on imitative behavior. Psychological Bulletin, 1968, 69, 316-337.

Geen, R. G., and Pigg, R. Acquisition of an aggressive response and its generalization to verbal behavior. Journal of Personality and Social Psychology, 1970, 15, 165-170.

Gibbons, R. J., et al. (Eds.) (Addiction Research Foundation, Toronto, Canada) Research Advances in Alcohol and Drug Problems: II. New York, New York: John Wiley and Sons, 1975, P. 348.

Gilbert, J. G., and Lombardi, D. N. Personality characteristics of young male narcotics addicts. Journal of Consulting Psychology, 1967, 31, 536-538.

Glueck, S., and Glueck, E. Unraveling Juvenile Delinquency. Cambridge: Harvard University Press, 1950.

Goldman, M., and Rhoads. Frustration response categories and level of hostile expression. Journal of Psychology, 1973, 85(2), 329-338.

Goldstein, Kern, Abel and Morgan. Interpersonal exchange and functioning at a residential drug addict treatment center. Proceedings of the 77th Annual Convention of the APA, 1970, Pp. 449-450.

Goodman, L., and Gilman, A. Pharmacological Basis of Therapeutics. Chicago: Saunders, 1966.

Haner, C. F., and Brown, P. A. Clarification of the instigation to action concept in the frustration-aggression hypothesis. Journal of Abnormal and Social Psychology, 1955, 51, 204-206.

Hill, H., Hartzen, C., and Glaser, R. Personality characteristics of narcotic addicts as indicated by the MMPI. Journal of Genetic Psychology, 1960, 62, 127-139.

Hill, H., Hartzen, C., and Davis, H. An MMPI factor analytic study of alcoholics, narcotic addicts, and criminals. Quarterly Journal of the Study of Alcoholism, 1962, 23, 411-431.

Hoffman, M. Power assertion by the parent and its impact on the child. Child Development, 1960, 31, 129-143.

Hogan, R. Personality correlates of undergraduate marijuana use. Journal of Consulting and Clinical Psychology, 1970, 35(1), 58-63.

Hokanson, J. E. Psychophysiological evaluation of the catharsis hypothesis. In E. I. Megargee and J. E. Hokanson (Eds.) The Dynamics of Aggression. New York: Harper and Row, 1970.

Hollenberg, E., and Sperry, M. Some antecedents of aggression and effects on doll play. Journal of Personality, 1950, 1, 32-34.

Jersild, A. T., and Morkey, F. Conflicts between preschool children. Child Development Monograms, 1935, No. 21.

Johnson, R. N. Aggression in Man and Animals. Philadelphia: W. B. Saunders Co., 1972.

Jones, K. L., Shainberg, L. W., and Byer, C. O. Drugs and Alcohol. New York: Harper and Row, 1969.

Kagan, J., and Moss, H.A. Birth to Maturity: A Study in Psychological Development. New York: Wiley, 1962.

Key, J. C., Cutter, H. S., Rothstein, E., and Jones, W. C. Alcohol, power and inhibition: A factor analytic evaluation of McClelland's hypothesis with a construct validation of factors. Journal of Health and Social Behavior, 1972, 13(4), 337-346.

Kirchner, J. H., and Mazolf,S. S. Personality of alcoholics as measured by Sixteen Personality Factor Questionnaire and H-T-P Color Choice characteristics. Psychological Reports, 1974, 35(1, Pt. 2) 627-642.

Kuhn, D. Z., Madsen, C. H., Jr., and Becker, W. C. Effects of exposure to an aggressive model and "frustration" on children's aggressive behavior. Child Development, 1967, 38, 739-745.

Kurtines, W. Personality dynamics of heroin abuse. Journal of Abnormal Psychology, 1975,84(1), 87-89.

Lang, P. J., Geer, J., and Hnatiow, M. Semantic generalization of conditioned autonomic responses. Journal of Experimental Psychology, 1963, 65, 552-558.

Loew, C. A. Acquisition of a hostile attitude and its relation to aggressive behavior. Journal of Personality and Social Psychology, 1967,65, 552-558.

Lovaas, O. I. Effect of exposure to symbolic aggression on aggressive behavior. Child Development, 1961, 32, 37-44.

MacAndrew, C., and Edgerton, R. B. Drunken Comportment. Chicago: Aldine, 1969.

Maccoby, E. E. (Ed.) The Development of Sex Differences. Stanford: Stanford University Press, 1966.

McCord, W., McCord, J., and Howard, A. Familial correlates of aggression in nondelinquent male children. Journal of Abnormal and Social Psychology, 1961, 63, 493-503.

Miller, N. E. The Frustration-Aggression Hypothesis. Psychological Review, 1941, 48, 337-342.

Ninson, R. A. Aggressive reaction to frustration in relation to the individual level of extrapunitiveness. Journal of Personality Assessment, 1972, 36(1), 50-54.

Nyswander, M. The Drug Addict as a Patient. New York: Grune and Stratton,1951.

Oas, P. C. Drug use as related to expressing or receiving affection and anger. Dissertation Abstracts International, 1971, 32(3-B), 1855.

Olds, J. The influence of practice on the strength of approach drives. Journal of Experimental Psychology, 1953, 46, 232-236.

Partington, J. T. Dr.Jekyll and Mr. High: Multidimensional scaling of alcoholics self-evaluations. Journal of Abnormal Psychology, 1970, 75(2), 131-138.

Platt, J. J. "Addiction-proneness" and personality in heroin addicts. Journal of Abnormal Psychology, 1975, 84(3), 303-306.

Preble, E., and Casey, J. J., Jr. Taking care of business--the heroin user's life in the streets. International Journal of the Addictions, 1969, 4, 1-24.

Reith, G., Crockett, D., and Craig, K. Personality characteristics in heroin addicts and nonheroin addicted prisoners using the Edwards Personality Preference Schedule. International Journal of the Addictions,1975, 10, 97-112.

Roebuck, J. B. The psychological approach to the understanding of alcoholism. In J. G. Gull and R. E. Hardy (Eds.) Alcohol Abuse and Rehabilitation Approaches. Springfield, Illinois: Charles C. Thomas, 1974.

Rosenzweig, S. The picture-association method and its application in a study of reactions to frustration. Journal of Personality, 1945, 14, 3-23.

Rosenzweig, S., Clark, H. J., Garfield, M. S., and Lehndorff, A. Scoring samples for the Rosenzweig Picture-Frustration Study. Journal of Psychology, 1946, 21, 47-72.

Rosenzweig, S., Fleming, E., Clark, H. Revised Scoring Manual for the Rosenzweig Picture-Frustration Study. Provincetown, Mass.: The Journal Press, 1947.

Sackett, G. P. Some persistent effects of differential rearing conditions on pre-adult social behavior of monkeys. Journal of Comparative Physiological Psychology, 1967, 64, 363-365.

Saltzman, L. The Obsessive Personality. New York: Jason Aronson, Inc., 1968, P. 274.

Schoolar, J. C., White,E. H., and Cohen, C. P. Drug-abusers and their clinic-patient counter-parts: A comparison of personality dimensions. Journal of Consulting and Clinical Psychology, 1972, 39(1), 9-14.

Sears, R. R. Personality development in the family. In J. M. Seidman (Ed.) The Child. New York: Holt, Rinehart and Winston, 1958.

Sears, R. R., Maccoby, E., and Levin, H. Patterns of Child Rearing. Evanston,Illinois: Row, Peterson, 1957.

Sears, R. R., Whiting, J. W. M., Nowlis, V., and Sears, P. S. Some child-rearing antecedents of aggression and dependency in young children. Genetic Psychological Monograms, 1953, 47, 135-236.

Shah, S. A., and Weber, G. H. The problem of individual violence. Report submitted to the National Commission on the Causes and Prevention of Violence, 1968

Shapiro, D. Neurotic Styles. New York: Basic Books, Inc., 1965.

Shuntich, R. J., and Taylor, S. P. The effects of alcohol on human physical aggression. Journal of Experimental Research in Personality, 1972, 6(1), 34-38.

Skinner, H. A., Jackson, D. N., and Hoffman, H. Alcoholic personality types: Identification and correlates. Journal of Abnormal Psychology, 1974, 83(6), 658-666.

Stevens, R., and Levine, S. The "street addict role": Implications for treatment. Psychiatry, 1971, 34, 351-357.

Stimmel, B. Heroin Dependency: Medical,Economic and Social Aspects. New York: Stratton, Intercontinental Medical Book Corp., 1975.

Sutker, P. B., and Allain, A. N. Incarcerated and street heroin addicts: A personality comparison. Psychological Reports, 1973, 32, 243-246.

Sutter, A. G. The world of the righteous dope fiend. Issues in Criminology,1966, 2, 177-222.

Tamerin, J. S., and Neumann, C. P. Psychological aspects of treating alcoholism. Alcoholic Health and Research World, 1975.

Teasdale, J. The perceived effect of heroin on the interpersonal behavior of heroin dependent patients, with a comparison of stimulant dependent patients. International Journal of the Addictions, 1972, 7(3), 533-548.

Tokar, J. T., et al. Determining what heroin means to the heroin addict. Diseases of the Nervous System, 1975, 36(2), 77-81.

Torda, C. Comments on the character structure and psychodynamic processes of heroin addicts. Perceptual and Motor Skills, 1968, 27(1), 143-146.

Williams, A. F. Causes of alcohol abuse. In J. G. Gull and R. E. Hardy (Eds.) Alcohol Abuse and Rehabilitation Approaches. Springfield, Illinois: Charles C. Thomas, 1974.

APPENDIXES

APPENDIX A

ROSENZWEIG P-F STUDY

Name _____ Age _____ Birthday _____

Address _____ Education _____

Institution _____ Present date _____

ROSENZWEIG P-F STUDY

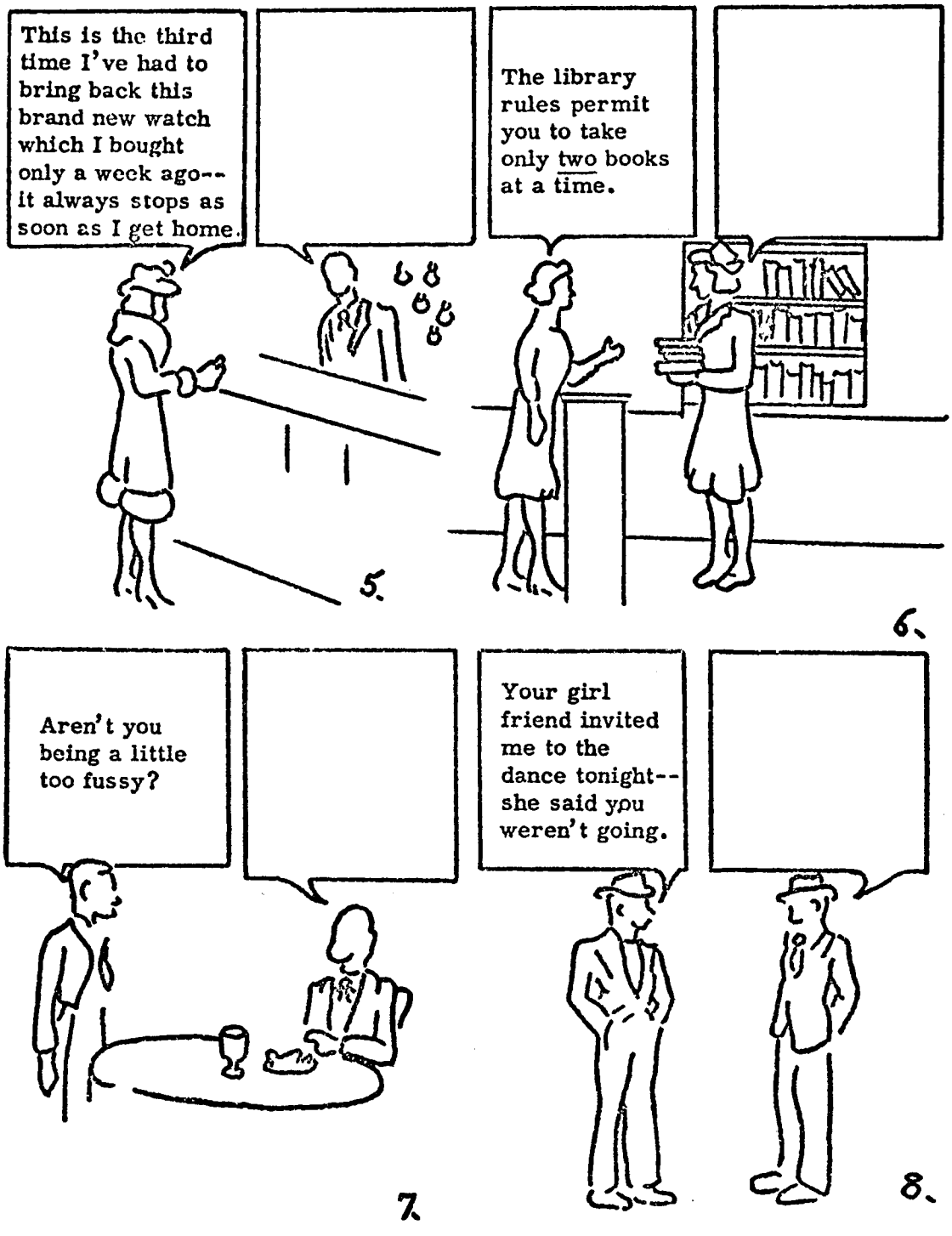
(Revised Form for Adults)

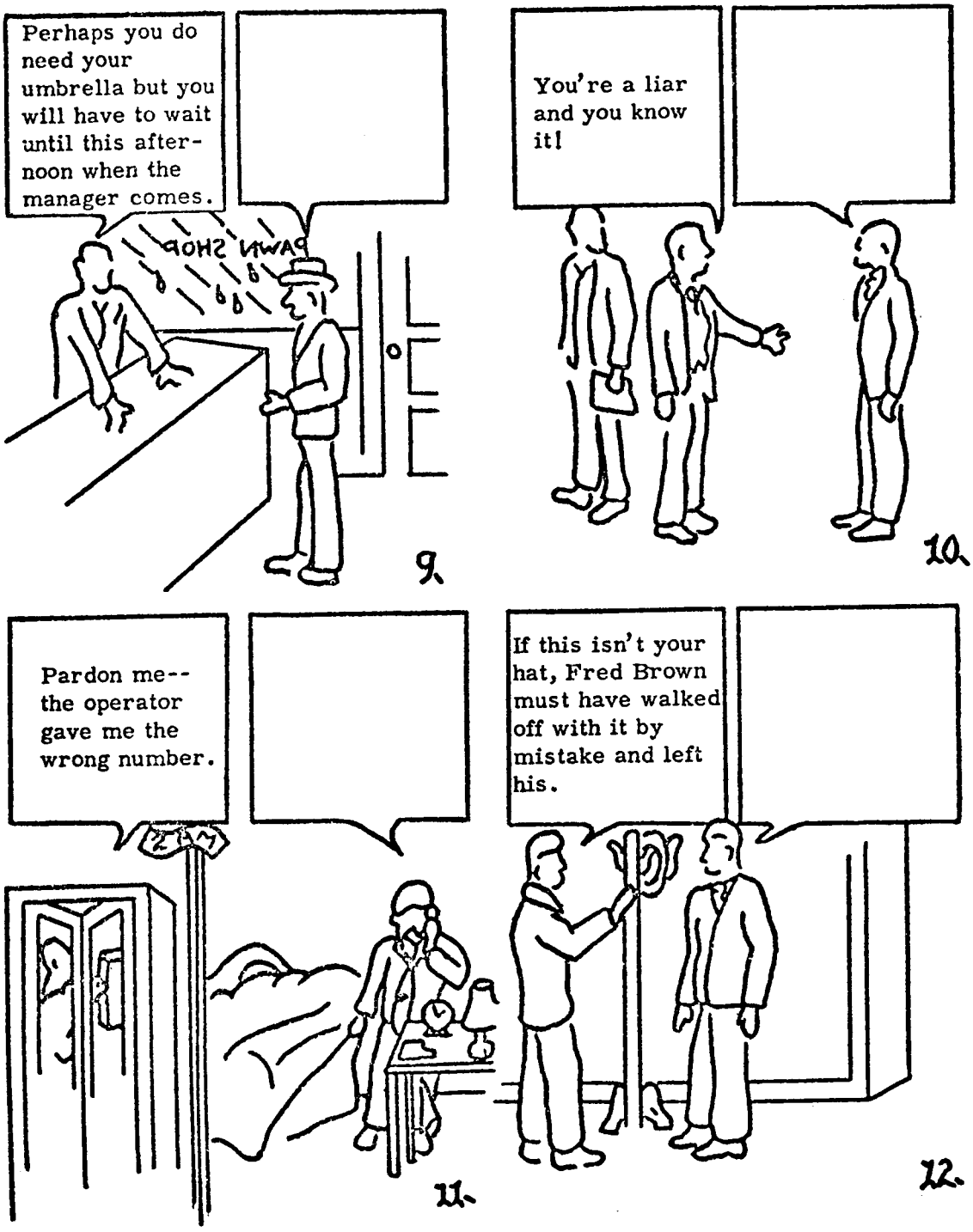
Instructions

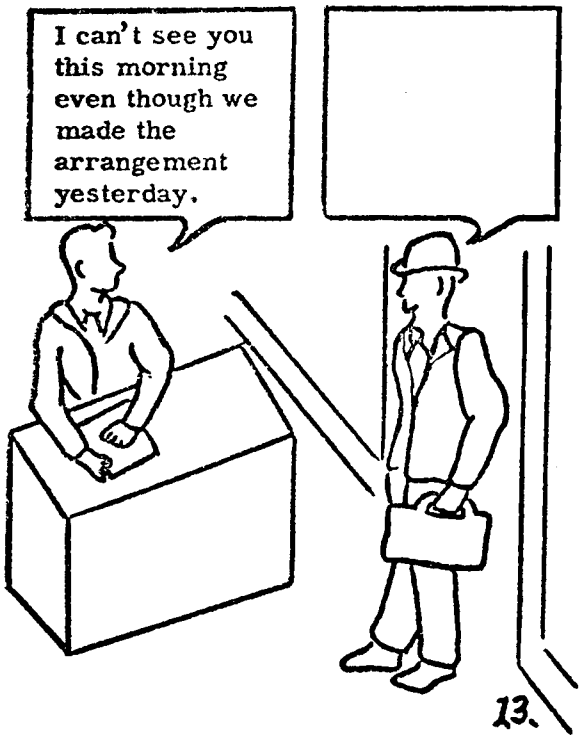
In each of the pictures in this leaflet two people are shown talking to each other. The words said by one person are always given. Imagine what the other person in the picture would answer and write in the blank box the very first reply that comes into your mind. Work as fast as you can.

Copyright, 1948, by Saul Rosenzweig


I'm very sorry we splashed your clothing just now though we tried hard to avoid the puddle.
1.
How awful! That was my mother's favorite vase you just broke.
2.
You can't see a thing.
3.
It's a shame my car had to break down and make you miss your train.
R.R.STA
4.


This is the third time I've had to bring back this brand new watch which I bought only a week ago--it always stops as soon as I get home.
5.
The library rules permit you to take only two books at a time.
6.
Aren't you being a little too fussy?
7.
Your girl friend invited me to the dance tonight--she said you weren't going.
8.

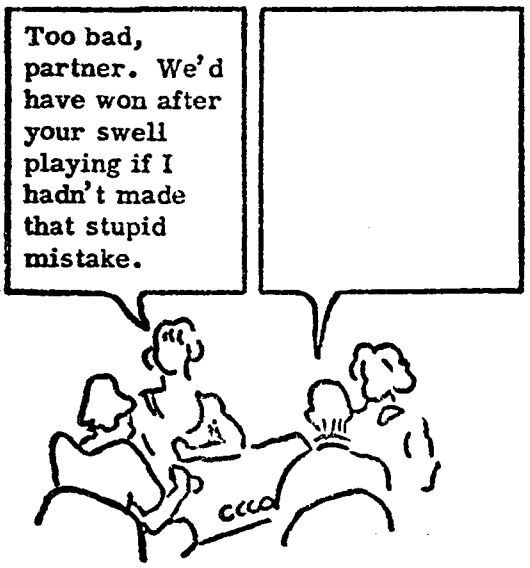

Perhaps you do need your umbrella but you will have to wait until this afternoon when the manager comes.
9.
You're a liar and you know it!
10.
Pardon me--the operator gave me the wrong number.
11.
If this isn't your hat, Fred Brown must have walked off with it by mistake and left his.
12.


I can't see you this morning even though we made the arrangement yesterday.

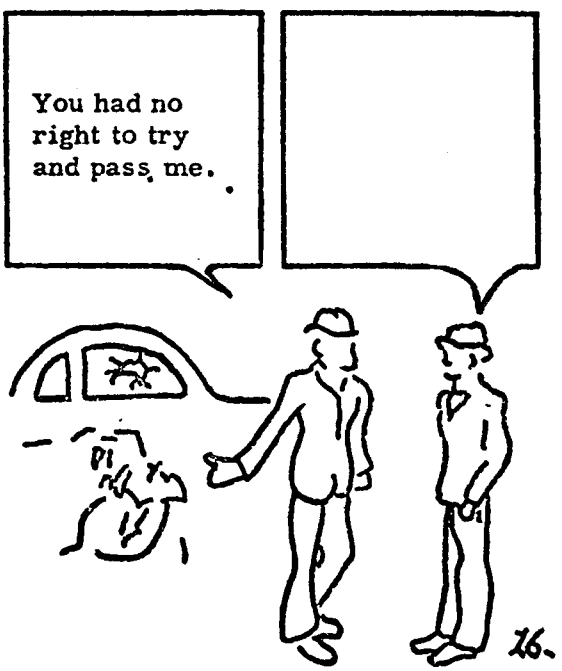
13.


She should have been here 10 minutes ago.

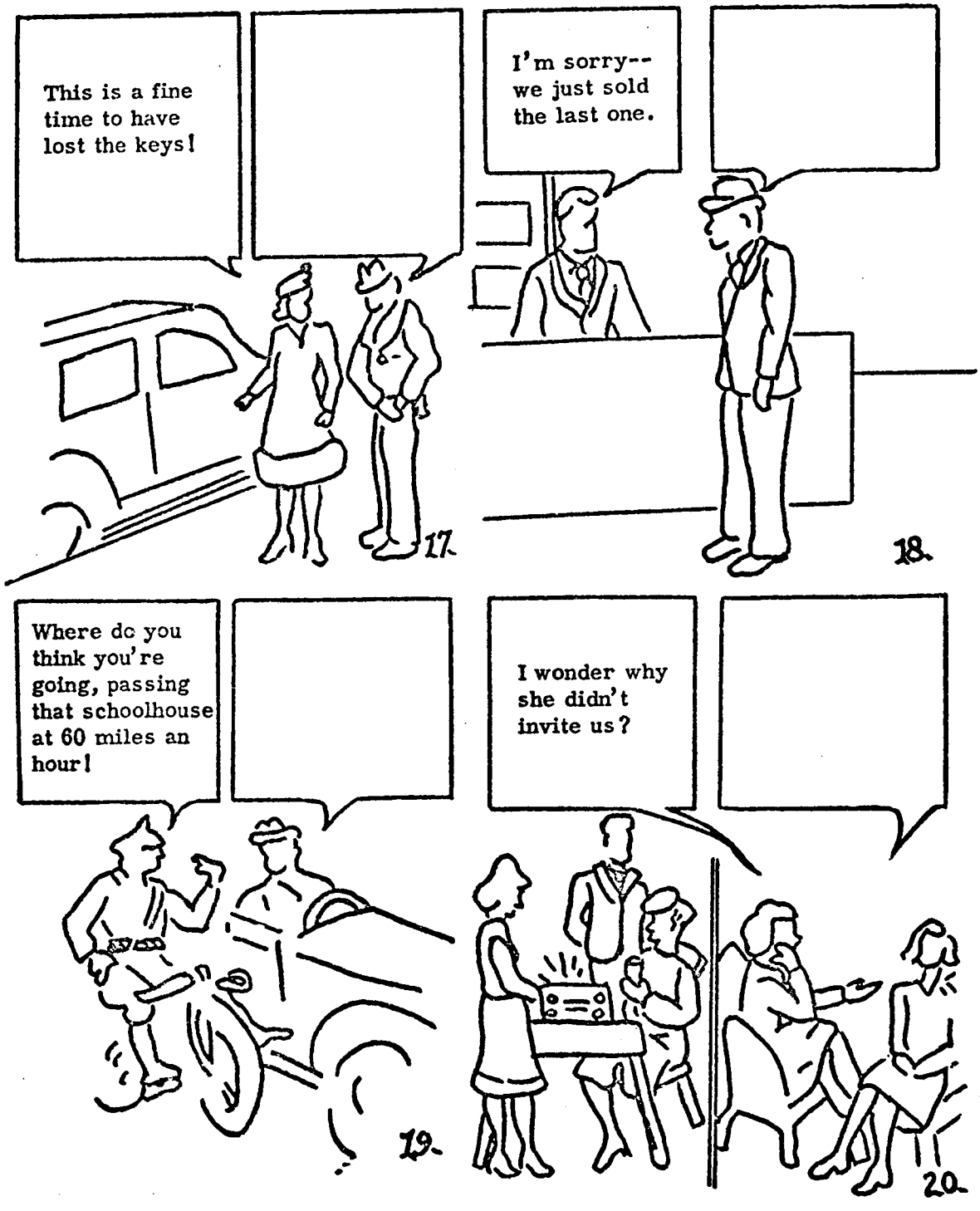
14.

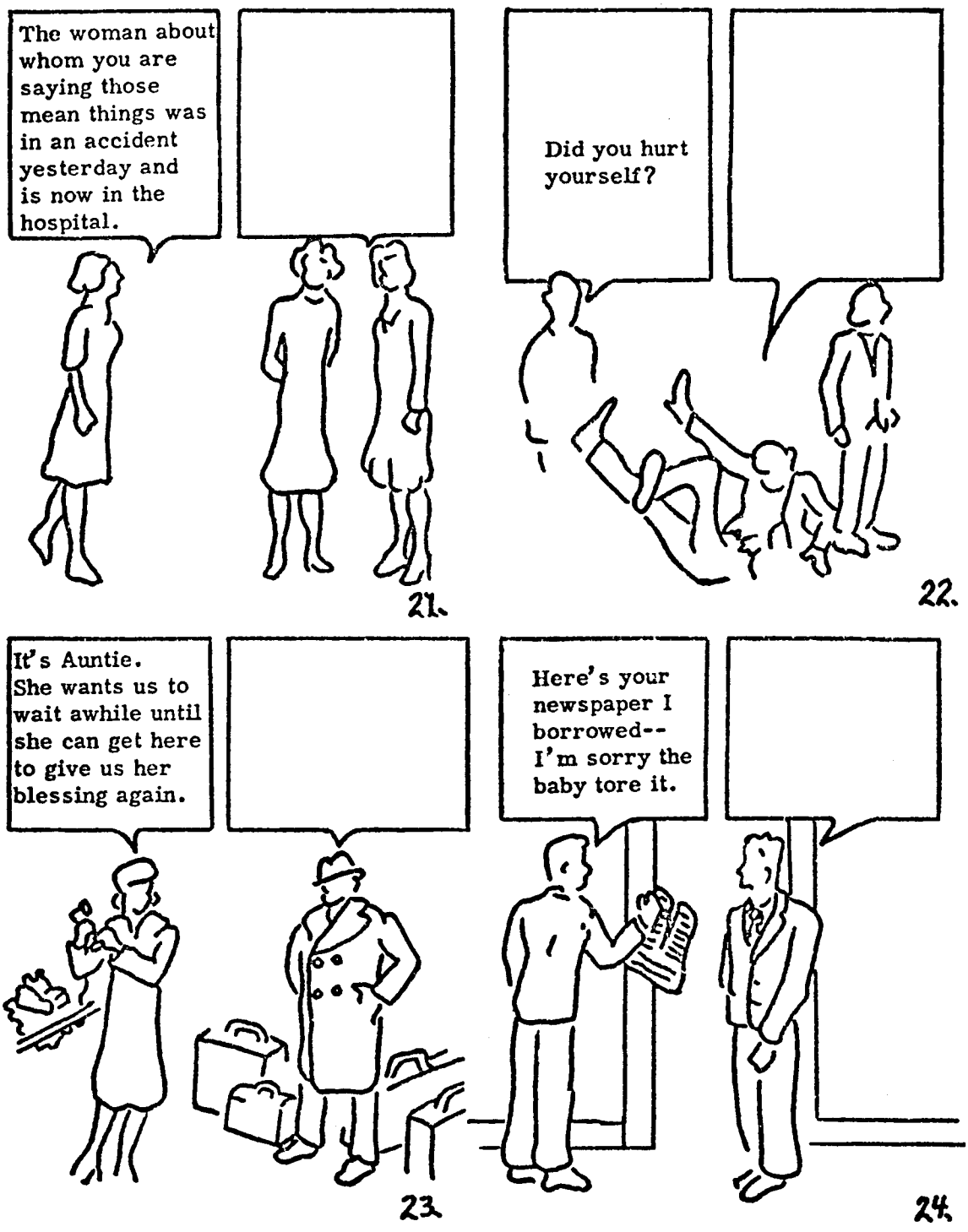

Too bad, partner. We'd have won after your swell playing if I hadn't made that stupid mistake.

15.


You had no right to try and pass me.

16.


This is a fine time to have lost the keys!
17.
I'm sorry-- we just sold the last one.
18.
Where do you think you're going, passing that schoolhouse at 60 miles an hour!
19.
I wonder why she didn't invite us?
20.


The woman about whom you are saying those mean things was in an accident yesterday and is now in the hospital.
21.
Did you hurt yourself?
22.
It's Auntie. She wants us to wait awhile until she can get here to give us her blessing again.
23.
Here's your newspaper I borrowed-- I'm sorry the baby tore it.
24.

APPENDIX B

TABLE 1A

NUMBER OF EXTRAPUNITIVE AND INTROPUNITIVE RESPONSES FOR THE ALCOHOL GROUP ON THE ROSENZWEIG P-F STUDY

Subject Number	# E Responses X_1	# I Responses X_2
1	13	4
2	24	0
3	20	2
4	6	4
5	17	7
6	14	4
7	13	8
8	14	5
9	11	16
10	5	12
11	11	6
12	13	4
13	20	2
14	8	12
15	10	11
16	17	5
17	20	5
18	16	4
19	16	6
20	15	5
	EX_1= 283	EX_2= 122

APPENDIX C

TABLE 2A

NUMBER OF EXTRAPUNITIVE AND INTROPUNITIVE RESPONSES FOR THE HEROIN GROUP ON THE ROSENZWEIG P-F STUDY

Subject Number	# E Responses X_1	# I Responses X_2
1	13	5
2	12	11
3	17	4
4	22	4
5	9	6
6	10	8
7	13	4
8	15	9
9	20	3
10	27	2
11	9	7
12	12	7
13	12	11
14	16	9
15	10	6
16	15	9
17	27	5
18	13	8
19	17	3
20	18	2
	EX_1= 307	EX_2= 123

VITA

The author, daughter of John and May Broughan, was born in Cleveland, Ohio on February 1, 1948. After her father's transfer to the West Coast in 1952 she received her primary and secondary education in California, graduating from South San Francisco High School in 1966.

She attended California State University, San Luis Obispo campus for two years and received a Bachelor of Arts degree in Psychology from California State University, Sacramento campus in 1971. The following September she began studying for the degree of Doctor of Philosophy in Clinical Psychology at The University of Tennessee. Her internship in Clinical Psychology was done at the Veterans Administration Hospital in Memphis, Tennessee from July 1975 to June 1976. She received her Doctor's degree from The University of Tennessee in August 1976. Her outside interests include training and showing Quarter and Appaloosa horses, and gourmet cooking.