SOCIAL DEPERSONALIZATION AS A FUNCTION OF SOCIAL SETTING: A STUDY OF THE SOCIAL EFFECTS OF MECHANIZED APPROACHES IN HIGHER EDUCATION

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TABLE OF CONTENTS

Chapter Page

Chapter Page

LIST OF TABLES

CHAPTER I

INTRODUCTION: THE PROBLEM

Introduction

It is the purpose of this paper to explore a little known concept in social theory. Though the idea is alluded to in a variety of the literature (philosophical, popular and scientific) it has been dealt with very little in a specific way. The author refers to a concept that he chooses to call "social depersonalization." The reason for this particular choice of terms will be dealt with later in this paper.

There is an apparent gap in the research literature. One of the purposes of this paper is to address itself to that apparent gap. The gap is the one that exists between the discussion in the literature of alienation on the one hand and integration into society on the other. The literature tends to point to either alienated or non-alienated persons. It tends to point to either anomic societies or integrated societies. This paper will focus on some specific social settings in society that produce temporary feeling states in individuals. The feeling state is not alienation (Dean, 1961) and the social setting is not anomic (Durkheim, 1951).

Definition

For purposes of clarity, "depersonalization" is defined early in

this paper. Its use by others will be discussed in the second part of this paper under the review of literature section.

For the purpose of this study, "social depersonalization" will be defined as a temporary feeling state brought on by specific social conditions which are of such nature as to reduce the individual to a psychological state where he perceives himself as being treated as a non-entity or non-person. Another way of stating this is that depersonalization is a particular feeling state, temporary in nature, that exists when certain perceived undesirable social conditions exist. This feeling state manifests itself in sensing that one is not important, that he is not taken into account as a person, that he is an object, a number, or that he is being treated as a non-entity. When the individual moves out of that undesirable social condition, or when it is removed from him, the feeling state disappears. The socially depersonalized individual will feel that he is not being treated as a person and that other individuals are responding to him as an object rather than a person.

There is only one study known to this writer that approximates the general idea for research in depersonalization as it is defined here. In a study of 31 bank employees, Dean Champion (1967:77) introduced the idea of depersonalization as it is used here. He points out that as a concept, it is discussed only in a limited way: "This conception has been discussed in the literature in a limited fashion, and to date, no known attempts have been made to define it operationally."

Research Interest

Interest in this concept grew out of several personal experiences

this writer had while teaching Introductory Sociology by television for five and one-half years on the East Central University campus in Ada, Oklahoma.

Though the effect of television teaching on academic learning has been researched rather extensively, the question arose whether students were being negatively or positively affected by the impersonal nature of television instruction. Constant contact with the students in the television courses on the East Central campus revealed certain emergent attitudes expressed by them. Briefly, most students (including both those who had TV courses and those who had not had them) expressed a distinct dislike for the courses taught by television (Quiett, 1972:38).

One might assume that since students did not like the TV method of taking courses that the TV courses were more difficult. This proved not to be the case. Not only did students score as well in TV as in conventional classes in a previous study (Quiett, 1972:46), but they also did equally well in other studies (Klapper, 1951; Tumin, 1957; Polito, 1965; Salatina, 1960). Hoult (1958:99) found that students enrolled in TV, radio, and standard conventional classes all did equally well on tests.

A more impressive study, from the standpoint of research, was that done at Penn State University. The most important outcome, after having educational television at Penn State University for 10 years, is that comparing the results of students taught conventionally with the results of those taught over television by the same teachers shows no significant differences in learning (Willcocks, 1965:826).

Since no differences in test scores appeared between students in TV and non-TV taught classes, one is forced to look elsewhere for an explanation of their dislike for the TV method of instruction. The

author of one study says, "Apparently, the most influential factor contributing to unfavorable attitudes toward television is the lack of intercommunication between teachers and students" (Neidt and French, 1962:343). There is no doubt that television cuts into personal interaction and conversation of people in general (Winick, 1965:262). Further, Hoult (1958:97) feels that a two way process is necessary for good education and that having a "live classroom" is important.

In a study that this writer made, a semantic differential instrument based on the Osgood technique was used to measure student attitudes in three major areas. The areas include (1) concepts to determine attitudes of students toward various methods of instruction, (2) concepts to determine attitudes of students toward sociology as a course, and (3) concepts to determine attitudes of students toward themselves, life, and the educational process in general. Though significant differences were minor (two out of 15 concepts were significantly changed between the two groups), students continued to verbalize their dislike for the TV instructional method (Quiett, 1972).

Sussman (1958:104-105) found that TV has its drawbacks socially as well as educationally. TV makes no allowances for the fast and the slow learner. The professor has no way of knowing if the students are getting the material. The student is in no position to ask the professor to repeat what he said when it is unclear or ambiguous. "Moreover, the professor does not have the intimate relationship with students that he can develop in the classroom . . ."

One researcher accentuates the depersonalizing nature of educational TV instruction by summarizing his entire study with this sentence:

> . . . although high school students prefer conventional classroom instruction to television-correspondence instruction, it is not because they perceive the characteristics of the teacher differently in the two situations, but because of factors inherent in the instructional television situation (Neidt and French, 1962:343-344).

This writer's interest in the problem caused him to pursue other avenues to explaining the fervent dislike of the TV method of instruction. On one occasion the researcher taped a day's lecture and had the technicians play it over the closed circuit system while he went from one classroom to another across the campus watching his students react to the lecture that they thought was being broadcast live. Some were taking notes as the researcher expected; others appeared bored, one or two slept, while still others were engaged in some alternate activity such as reading the daily newspaper. The writer interrupted the classes, one after another, and got the surprised students to express what they were feeling, what they were experiencing while the taped program was playing. Their responses gave the researcher a great deal of insight. Some of the phrases included responses like: "I don't think anybody knows I'm alive in here;" "I don't feel I count;" "I'm just another number on the roll;" "This is so damned impersonal."

The information gathered from this approach was supported by individual interviews with several students who volunteered to talk at length about their feelings in the TV class.

The common thread running through many of the responses was the idea that somehow in the social setting of a TV classroom, students were perceiving themselves as being treated as a number or an object. With this insight the author began looking for other social situations that might produce the same kinds of feelings. Some of these situations

will be explored in depth in later sections of this paper.

Conceptual Development

The purpose in this segment of the paper is to develop the concept of depersonalization from several directions. Though this portion will draw on several sources in the literature and support the points from the works of a variety of writers, a review of the literature will be more fully developed in Chapter II of this work, Theoretical Framework: A Review of the Literature.

In one way, social depersonalization may just be "personalization" gone wrong. It is possible that depersonalization may be a failure of the person in the developmental process to become the person he wants to become or feels he should become. Though this thought is not in the major drift of this work, it is mentioned here as a possibility and is in harmony with our basic view of the subjective nature of social depersonalization.

One focus seems important at the outset: the "situational" nature of social depersonalization. Here, it is important to make the distinction between personality traits and situational traits. Behavioral scientists are becoming more interested in studying social settings than they have been in the past. There is a growing dissatisfaction with describing all behavior only in terms of personality traits. Behavior is also now being considered in terms of situational variables (Moos, 1972). This is specifically important when considering the non-permanent status of depersonalization.

The temporary nature of depersonalization seems particularly important when developing it as a concept. Social depersonalization is

not a permanent feeling. It comes and goes as one moves in and out of depersonalizing social situations. Unlike some other feeling states (for example, see the discussion of alienation in the "Theoretical Framework" section), it is dependent on the social setting for its existence. If the social setting is not depersonalizing in nature, it is not likely that any of the people in the particular social setting will feel depersonalized. Social depersonalization is unlike personality traits (e.g.) that are more permanent in nature and tend to be present in the individual--no matter in what type of social setting the individual may find himself. Research supports this general nature of persons changing feelings and even behavior from one group to another. Several studies have demonstrated that the behavior of the same individual may differ significantly from one social situation to another (Barker and Gump, 1964). Of one aspect that may be depersonalizing, namely mass society, Wilensky (1964) argues that mass behavior in one sphere may not become mass behavior in another. Behavior affected by mass society may change when moving from one social condition to another.

In developing the concept further, this writer has discovered what appears to be a dual nature. Depersonalization appears to be both subjective and objective. In its subjective sense, the person who feels depersonalized may feel that he is an object himself and, therefore, may treat himself as an object, hence: "In this situation, I'm not a person; I see myself only as an object." He may feel that others are also objects and treat them accordingly, hence: "I see others as objects, not as persons in this situation."

George Bach (1970:76) in his book, Pairing, makes a neat distinction between these two forms of subjective depersonalization. He uses "symbolizing" or "imaging" to describe the person who perceives himself as a non-person and "thinging" to describe the person who perceives someone else as a non-person. "When someone 'things' another person, he sees that person principally as an object."

Bach (1970:75) labels people who present themselves as symbols and not as persons, "imagers." People usually exchange symbols on first meeting. These would include symbols like "executive," "glamour girls," "hippie."

When people present themselves to other people only in terms of a symbol, they have not interacted as a whole person and have only revealed a segment of themselves. When they present only a segment of themselves, they invite others in the social setting to respond to the segment (an object of the self, not the self).

> A common reason given for the dislike of cocktail parties is, 'They are phony' (dehumanizing). The insight is accurate. They <u>are</u> dehumanizing. They are made so because typically it is not people who are sipping the drinks, but impersonal symbols. For the core fact about symbolizing oneself is that, in doing so, one does not present oneself as a person (Bach, 1970:75).

The interesting part of this subjective side of social depersonalization is that it produces a segmentalizing effect on both sides. When one "images" himself to another in a symbol, he restricts the part of himself that he gives away and projects only a segmented part of himself. The reverse is true when a person "things" someone else. Bach (1970:76) says:

> In a technical paper, the senior author of this book has described this mode in human relationships as <u>thinging</u>. When

> a person is thinged, only one aspect, or group of aspects, of his existence is recognized as real.

Still another way of viewing the subjective nature of depersonalization is the way Tounier differentiates between the "personage" and the "person." The "personage" is a mask each of us wears. It is the observable external facet of our being. It is the image of ourselves that we peddle. It is in the main what psychological tests measure. The "person" is the real us behind the mask. It is our true self. When we engage in intimacy ("dialogue" is the term Tounier uses), we share the precious and all important secret of the self. Those who seldom ever reveal themselves are the truly depersonalized individuals. "The tension that always exists between the person and the personage is one of the conditions of our life, and we must accept it" (Tounier, 1957:83).

In concluding the discussion of the subjective nature of depersonalization, it seems apparent that the subjective nature of depersonalization is a two-sided coin; that is, when a person perceives himself as an object, he is likely to perceive others in the same social setting in the same way or vice versa. If he views others as objects in a particular social setting, he is likely to view himself the same way. Bach (1970:77) agrees with this view when he says: "Finally, a most provocative phenomenon. When someone things another, he also automatically things himself."

Having looked at the subjective nature of depersonalization, the focus now is on its objective nature. This will be the principle focus of the balance of this paper. In its objective sense, the person who feels depersonalized will feel as though others are treating him as an

object. They are viewing him as a non-person. He fails to feel self worth in a social setting where he perceives that other people do not take him into account. It is of little importance whether people actually do take him into account or not. What is important is that he perceives that they do not take him into account. It is the contention of this dissertation that some social settings actually foster specific feelings of being treated as non-persons and that few people can be in those social settings without some perception that they are not being taken into account. It is the purpose of this research to explore the idea empirically.

When considering the difference between the objective and subjective forms of social depersonalization, consider the following example. Instead of feeling "I'm a fine example of nothingness," as a result of subjective depersonalization, the person experiencing the objective depersonalization feels "I am an important human being, but in (a given situation) they treat me like I am a nobody."

There are several aspects of objective depersonalization. In the first place, the development of the concept will be explored in terms of a "moving away from." In this sense social depersonalization will be viewed as a movement away from these four elements: (1) community, (2) wholeness (whole person), (3) recognition (strokes), and (4) intimacy.

Social depersonalization is the sense of temporary loss of personal involvement in the community. "We are communal beings. The communion of friends, the experience of honest citizenship are as necessary to us as air and water (Rozak, 1972:193). When an individual experiences social depersonalization he experiences an aloneness (a loneliness,

except for its temporary nature, not at all unlike the loneliness of the social isolation variant of alienation). The individual feels isolated in the group and senses that the other group members are experiencing the same thing. One student described his feelings of being in a TV sociology class: "I don't feel a part of this class. My other classes are not like this. We are all in here together, but it's like there isn't any group to this class at all." It may be interpreted that this person is experiencing a loss of community in the midst of a group of people.

Social depersonalization is temporarily experiencing the sense of not being whole or complete. A great deal has been said about wholeness by the people in the mainstream of humanistic psychology. One of the early founders of humanistic psychology, Abraham Maslow (1966:102), says, "Briefly stated, my thesis is this: If you love something or someone enough at the level of Being, then you can enjoy his actualization of himself." The socially depersonalized person is in a social situation where he does not perceive himself as taken into account at the level of "Being."

A movement in humanistic psychology, Gestalt Psychology, focuses on the whole person, not the fragmented or "shell" person. The Gestalt therapy that has grown out of this movement uses the group as a focal point for getting people back together again (Pearls, 1969). The depersonalized person is not experiencing wholeness even though he is in a group setting.

Another movement in humanistic psychology has been the upsurge of Transactional Analysis (TA) in the United States in the past few years. As a theory of social intercourse, TA was first written about by Eric

Berne (1961) in his first major work. Berne is considered to be the father of the TA movement.

One basic idea in the theory of Transactional Analysis is that of "recognition hunger." It is the "grown-up" adult counterpart of infantile stimulus-hunger. Emotional deprivation in infants can have very detrimental effects including, in more drastic forms, death. "An allied phenomenon is seen in grown-ups subjected to sensory deprivation. Experimentally, such deprivation may call forth a transient psychosis, or at least give rise to temporary mental distrubances" (Berne, 1964:13).

Recognition hunger can only be satisfied by strokes. "A stroke may be used as the fundamental unit of social action. An exchange of strokes constitutes a transaction, which is the unit of social intercourse" (Berne, 1964:15). When one views a stroke as fuel or food for social and psychological survival, being deprived of strokes takes on a new significance in light of socially depersonalizing situations. Berne, (1964:14) refers to it in survival terms: "Indeed, not only biologically but also psychologically and socially, stimulus-hunger in many ways parallels the hunger for food."

One idea this writer posits as plausible is that social depersonalization is the absence of all strokes, both positive and negative. The feeling that is produced is one of being deserted or rejected even when one is in the midst of a crowd. When a person is in a social situation in which he is treated as a non-person--a number, an object--then he is suffering from recognition-hunger. This feeling is brought about not because he has been experienced as a person and rejected but because he has not been experienced as a person at all. The ideal social experience is that one in which a person becomes aware that

others are experiencing him as a person and are pleased about it. This can be expressed in the generalized phrase: "We know you are there and it makes us happy."

There are times when a person experiences the more realistic social experience in which he becomes aware that others are experiencing him as a person and are displeased about it. This can be expressed in the generalized phrase: "We know you are there and it makes us unhappy." An important point is that even though one social situation is positive and the other is negative, both produce an awareness for the person that he is being experienced as a person. The depersonalizing social situation is one in which the person becomes aware that others are not experiencing him as a person at all; or if they are, they are only experiencing some segment of him, such as a role, a status, or a label. This can be expressed in the generalized phrase: "We know you are there but you are not a real person. You are a thing;" or worse, the phrase: "We don't know you are there at all."

The person caught in a depersonalizing social situation is much like a man on a raft in the ocean who needs water to drink. There is "water, water everywhere and nary a drop to drink." The person is perceiving himself in the depersonalized situation as a non-person (an object) and he cannot get "stroke" recognition from people who only give strokes to people, not objects.

Social depersonalization is temporary and it is this writer's view that the effects are primarily temporary. If the depersonalization becomes permanent, the effects become severe. Berne (1964:13) says that social deprivation has drastic effects on individuals condemned to long periods of solitary imprisonment. Contrary to prison, the person

experiencing social depersonalization will probably move out of the social setting if the pain of stroke starvation becomes strong enough.

Another contribution made by the TA literature is the concept of "OKness" (Harris, 1973). In this format, four basic existential life positions are posited:

I'm not OK--You're OK

I'm OK--You're not OK

I'm not OK--You're not OK

I'm OK--You're OK

Careful perusal of these will reveal that the person is being taken into account (even if negatively) in three out of the four. However, in the third position, "I'm not OK--You're not OK," the person is not taken into account. In this basic life position, the person feels that his world is a bad place to be. Even though this is a basic existential life position, there are those whose life positions are different but who feel very "not-OK" in certain social settings.

Finally, viewed as a "movement away from," we turn our focus on intimacy. Social depersonalization may be viewed as a movement away from intimacy. It is not difficult to view intimacy as the opposite of depersonalization. Intimacy means dealing with another person in a warm, open, trusting relationship. Social depersonalization refers to dealing with another person as a thing in a closed, fearful, non-trusting setting. Thinging, in Bach's terms, is the opposite of intimacy. Intimacy requires the acceptance of another as a whole person. Thinging means treating the person as an object and one cannot be intimate with inanimate objects (Bach, 1970:75).

Chartier (1968:3-4) gets close to this lack of intimacy with his third of four depersonalizing factors. In this third factor, which he labels "self-inflicted depersonalization," he points out that this kind of depersonalization involves the individual's refusal to involve himself with other persons as human beings.

Social depersonalization occurs in a cold social setting; intimacy occurs in a warm social setting.

> Intimacy is made possible in a situation where the absence of fear makes possible the fullness of perception, where beauty can be seen apart from utility, where possessiveness is made unnecessary by the reality of possession (Harris, 1973:152).

To dispel social depersonalization one must move toward intimacy with others that are also caught in the depersonalizing setting. Jaspers (1959:211) argues for people to join an elite group of entering into intimacy with others. The elite ". . . are the origin of the loftiest soaring movement which is as yet possible in the world. They alone constitute true human beings."

Having considered social depersonalization in terms of a "movement away from," we turn our attention to viewing the concept in terms of objectification (being treated as an object). In these terms, "A <u>thou</u> becomes an it" (Stein, 1960:744). There is loss of "person." "The antithesis of the personal is the objective . . ." (Manus, 1965:70).

A person who is objectified is simply reduced to a number. Students feel this way when they must respond by I.D. number only, and not by name. Men in an army induction line (or almost any large waiting line) feel reduced to something other than a person. Some feel they have just been forced, in some social depersonalizing settings, to become a grain of sand on the beach.

> In modern times men have been shuffled together like grains of sand. They are elements of an apparatus in which they occupy now one location, now another; not parts of a historical substance which they imbue with their self-hood . . .
>
> When the average functional capacity has become the standard of achievement, the individual is regarded with indifference. No one is indispensable. He is not himself, having no more genuine individuality than one pin in a row, a mere object of general utility . . .
>
> It is as if the man thus deracinated and reduced to the level of a thing, had lost the essence of humanity . . . Whether in enjoyment or discomfort, whether strenuous or fatigued, he is still nothing more than the function of his daily task (Jaspers, 1959:50-51).

One who is objectified simply becomes another number in a larger statistical statement. "A rough rule-of-thumb: the more statistical the mode of discourse, the less its personal relevance. Unique beings do not quantify . . ." (Roazk, 1972:3). Put another way, ". . . we have become what Eric Fromm calls marketing personalities; what David Riesman speaks of as an other-directed lonely crowd; what William Foote Whyte terms organization men" (Stein, 1960:744).

A person who is objectified is reduced to a machine. This appears to be a trend that is being produced by large bureaucratic systems (see Bookin, 1972:247).

> Ours is a time in which we have learned to make machines so much like man in their behavior that they seem almost human. They can calculate, respond, make decisions, run factories, pilot airplanes. Sunday cartoonists show them acting temperamentally, and the slick-fiction writers depict them as turning upon their inventors. The mechanical monster of many movies is symbol-play for the catharsis and release of deep prescient anxieties in our culture.
>
> Another more subtle and more insidious fact of our day is that in many respects <u>humans are beginning to act like machines</u>. We are in critical ways tending to let ourselves become depersonalized--machine-like in our attitudes and behavior. Setting aside the possibility of atomic annihilation, the very real and equally devastating spector of a

> spiritual leukemia is before us--an inner attirtion of man as a person (Stein, 1960:744).

Bach (1970:76) refers to this form of reduction to a machine as functional segmentalization. He says,

> People who are thinged can also be facilitators. In this case they are like machines, or extension of machines, that make things available to others. This is known as functional segmentalization; only that part of the thinged person that performs a desired function is recognized.

This concept of segmentalization is not foreign to the body of sociological literature. Ferdinand Tonnies identified it as Gesellschaft, a larger, impersonal, and segmentalized "society" as opposed to Gemeinschaft, a warm, personal "community." Emile Durkheim contrasted societies in terms of "mechanical solidarity" which was made up of social segments with those united by "organic solidarity" where people were together in social organs. Howard Becker differentiated the two types as "secular" and "sacred." Robert Redfield identified the concept of segmentalization in his "urban" society designations as opposed to its opposite "folk" society where relationships were personal, integrated and meaningful. Joseph Himes (1968:62-64) posits two types of societies. He identifies them as "associational" and "communal." Associational societies are characterized by their segmented, impersonal social relations which tend to be superficial, technical, and instrumental in character. Communal societies, on the other hand, are characterized by their integrated, inclusive social relations which tend to be intimate, informal, nontechnical and noninstrumental.

When we put social labels on people, we depersonalize them by objectifying them. We lose the person in the imagery of the label. Hence, some social settings are depersonalizing because the people in

the groups have been labeled by outsiders and thus stripped of their person-hood. An example drawn from the field of race relations would be appropriate to illustrate. If a person or a group is called "spic" or "nigger" or any other diminutive racial label, the persons or groups have been reduced from whole persons to stereotypical images.

One final statement in the conceptual development of social depersonalization: When persons are depersonalized, they are in a vulnerable position to be exploited or manipulated. Bach (1970:78) says, "Thinging is perhaps the most obvious syptom of exploitation." A most dramatic illustration of this point grows out of the Nazi Germany era: "Men were treated as things, as manipulatable guinea pigs for medical experiments or refuse fit only to be burned to serve the ends of the Master race" (Stein, 1960:745).

Manipulation or exploitation is bred in positions of absolute power settings. For those people who get into places of extremely large amounts of power, objectifying those under their control becomes all too easy.

> Depersonalization . . . arises from the fact that we live in a world of objects as well as people and from the consequent fact that as we learn to gain power over the world by manipulating objects, whether stone axes or uranium or rockets, it becomes all too easy for us to rationalize the manipulation of people for our private ends and to treat them as objects" (Stein, 1960:745).

Summary

In this chapter, social depersonalization has been defined as a particular feeling state, temporary in nature, that exists as a result of specific social conditions which produce in one a sense of being treated as an object or non-person.

Conceptually, social depersonalization was developed in several directions. Its basic nature is "situational" and temporary.

Social depersonalization is described as having a dual nature: subjective and objective. Subjectively, the person sees himself as an object. Objectively, others see him as an object. It is this objective sense that is the focus of this paper.

In its objective sense, social depersonalization has been described as a "movement away from" four elements: (1) community, (2) wholeness (whole person), (3) recognition (strokes), and (4) intimacy. It has further been described in terms of objectification (being treated as an object), and in terms of segmentalization.

A more complete exploration of the concept will be made in the following chapter.

CHAPTER II

THEORETICAL FRAMEWORK: A REVIEW OF THE LITERATURE

Introduction

In order to gain an understanding of the place of social depersonalization in the theoretical framework of current research, a review of related literature is presented. Though it is the purpose of this research project to develop and clarify a new concept, social depersonalization, it should be made clear that concepts very close to it pervade the literature.

Depersonalization has been alluded to in the psychological journals (Bird, 1957; Meyer, 1961), in the sociological journals (Hoult, 1958; Stanndard, 1973), in the popular journals (Percy, 1972; Tomlinson, 1972), in the scientific journals (Ackner, 1954), in the religious journals (Chartier, 1968; Boyle, 1972), and in a variety of books (Bach, 1970; Berne, 1961, Roszak, 1972; Tournier, 1957; etc.).

The first element of the review will focus on the concept of alienation since it is extremely important to this study to differentiate between this concept and the concept of social depersonalization. The following elements of the review will focus on the general concept of depersonalization, the psychological and medical uses of the term, possible causes alluded to in the literature, and depersonalization

scales.

Alienation and Social Depersonalization

There is, in sociological literature, a concept that is very closely related to social depersonalization. This writer refers to the much studied concept of alienation. At the outset it is important that the reader be aware that the writer is not attempting to identify social depersonalization as some form or variant of alienation. Quite the contrary! Social depersonalization is distinctly different from alienation. Alienation (Seeman, 1967; Middleton, 1963; Neal, 1963; Dean, 1960; Clark, 1959; and others) refers to a feeling state that is somewhat consistent with the individual over a period of time. It is almost a lifestyle or frame of reference. Social depersonalization, as this researcher perceives it, is a temporary state that the individual experiences as he moves in and out of certain social settings. When he is in a particular social setting, he feels depersonalized; when he is out of it, he no longer feels that way. An alienated person would feel alienated (from self, society, peer group, or norms of society) however often he might move in and out of undesirable social settings. In summary, alienation refers to a broad concept that is more a generalized estrangement, a lifestyle, an overall feeling that stays with the person (Hodges, 1971:322-333), while depersonalization is a temporary feeling state.

The concept of alienation is generally attributed to G. W. F. Hegel (Hammond, 1965:5). Many people, however, have contributed to the concept. Marx saw alienation as the overshadowing of the organism by the object outside itself. Put in a concise way, Marx perceived alienation

in terms of the estrangement of the producer from his product (Becker, 1964:124-125).

Gerson (1965:143) defines alienation as "an individual feeling or state of disassociation from self, from others, or from the world at large." When viewing its definition one cannot overlook the work of Melvin Seeman (1967:783-791) who in this writer's judgement probably has the most adequate definition of alienation. It is found in his classical article, "On the Meaning of Alienation." He defines alienation in terms of five variants: normlessness, powerlessness, meaninglessness, cultural estrangement, and self estrangement. All of these variants have one thing in common; they are all combinations of expectancies and rewards (Quiett, 1967:41).

The variants of alienation are separate and distinct so that it is possible that a person might be alienated on one variant and not on another (Middleton, 1963:973). However, Dean (1961:753) holds that alienation is a general syndrome. It is a sense of estrangement and it is prevalent in this society. Voluntary associations and playgroups have proliferated as an attempt to increase man's meaningful, primary relationship and compensate for alienation (Gerson, 1965:144-149).

There are other concepts that are often linked with alienation, but are in fact only alienating conditions. Anomie for both Durkheim and Merton can be identified as an important social condition for alienation (Gerson, 1965:144-145).

Social depersonalization and some aspects of alienation have some similarities. For example, many of the same kinds of feelings that are assumed that a socially depersonalized person would feel are the same kinds of feelings that are described in terms of the powerlessness

variant of alienation (Smith, 1968). Further, Champion (1967:77) defines depersonalization as ". . . a condition resulting from the removal of human control from the outcome of one's work procedure . . ." This is very close to work alienation and the powerlessness variant of alienation. It should be pointed out that the social depersonalization concept being developed in this research is not the same, but very similar to Champion's. Champion's depersonalization scale does appear to measure a person's attitude toward his perceived loss of control over his work procedure. In fact, his first item is directly from Leo Srole's early alienation scale (see Srole, 1956:709-716).

It seems appropriate here to argue a possible point of logic. It can be argued that large factories, assembly lines and other forms of mass work, such as packing plants and food processing plants, may produce depersonalization more than they do alienation. The assembly line person may feel a sense of non-worth, non-person, or self-estrangement on the job and not feel it in many other social situations in which he chooses to find himself. Consider also that the alienation scales are generally given once, not several times longitudinally. It is possible that what they measure is not always a permanent feeling. They may be getting socially depersonalized people scoring high on their scales.

In viewing the meaninglessness variant of alienation, Silberstein's typology of alienation as found in Blauner's book, Alienation and Freedom, describes alienation in terms of "non-relation" to life's goals. The alienated man in this sense is a "mere cog in the social machine" (Silberstein, 1967:26).

Alienation in the self-estrangement sense, emerges as a result of the disparity between the ideal self one would like to be and the actual self image one possesses. Seeman (1967:790) views Eric Fromm's concept of alienation to be this kind of estrangement from some ideal human condition.

Very closely related to social depersonalization, the alienation of an individual in the social estrangement sense is related to perception. It is the perception of the individual that causes the estrangement. It is ". . . the perception of losing effective contact with significant and supporting groups" (Dean, 1960:186). The alienated person expects to experience insincere relationships. A person highly alienated in the social estrangement sense would feel an absence of warm, friendly and personal relationships.

Social estrangement is the subjective state of expecting rejection. The person perceives himself as being rejected by society whether he is rejected socially or not. It is not difficult to see the very close parallel with social depersonalization.

In order to emphasize a point, one basic difference between alienation and social depersonalization is restated. Social depersonalization is temporary, dependent on the social setting, while alienation is non-temporary and independent of the social setting. Long range feeling states are linked to alienation in the literature. The scales that are used to measure alienation show face validity for testing alienation as a long range feeling state (Srole, 1956; Middleton, 1963; Nettler, 1957; Clark, 1959; Neil and Rettig, 1963; McClosky and Schaar, 1965).

Listed below are some typical examples of the long range feeling states from Dean's scale (1961:753-758):

Powerlessness:

"I worry about the future facing today's children."

"We are just so many cogs in the machinery of life."

"The future looks very dismal."

Normlessness:

"I often wonder what the meaning of life really is."

Social Isolation:

"I don't get invited out by friends as often as I'd really like."

"There are few dependable ties between people anymore."

It is acknowledged that this is a limited example and some bias was used to portray the items that had "non-temporary" implications. However, the point is a valid one. Alienation is less temporary in nature than social depersonalization.

Another area for comparison of the two variables is that of causation. There are some similarities between the two concepts at this level also.

The literature reveals a myriad of hypothesized causes of alienation. Some of those include lower social status (Dean, 1961; Meier and Bell, 1959), subordinate racial status (Middleton, 1963), age (Meier and Bell, 1959), personality states (McClosky and Shaar, 1965; Davids, 1955), industrialization (Blauner, 1964), and low educational achievement (Middleton, 1963). Somewhat closely related to an assumed causation of depersonalization, a few writers believe that mass society is a cause of alienation (Kornhauser, 1959; Scott, 1964). It should be remembered, however, at this point that it is this writer's view that though the causation may be similar, or even exactly the same, depersonalization is

a temporary feeling state (a situational trait) while alienation is viewed as more or less a permanent feeling state (personality trait).

There are several other possible causes of alienation that appear in various areas of the literature. They include a fundamental religious belief (Dean, 1961:757), religious preference (Meier and Bell, 1959:194-200), bureaucratization (Blauner, 1964:3, 10) and marital status (Meier and Bell, 1959:149).

This writer's view is that causation for social depersonalization is basically bound up in the particular social setting. Anything--and it may be just that--anything, may cause a socially depersonalizing situation. The only element required is to treat people as objects or to treat them in such a way that they perceive they are being treated as objects.

It has not been the purpose of this report to review all that has been written concerning alienation. The sheer volume of these writings far exceeds the scope of this research project. A broad general survey of the alienation literature has been done earlier (Quiett, 1972:17-124). However, it has been necessary to relate, in a limited way, the concept of alienation and social depersonalization since the two are tested later in the research.

Psychological and Medical Depersonalization

A concept of depersonalization very close to the concept proposed in this research is found in the field of psychiatry. One of the basic reasons that the term <u>"social" depersonalization</u> was chosen is that the medical world has been using the term "depersonalization" for over 50 years. One of the first men to write on depersonalization, Nunberg in

1922, defines depersonalization as the state in which the ego and external world appear different, changed and foreign to the patient (Nunberg, 1948).

Depersonalization is described in its medical sense in several ways. It is described as a syndrome (Roberts, 1960:478). It is described as an "ego-disorder" (Selinsky, 1956). It is described as one of the most important defense mechanisms (Schmideberg, 1957). It is described as a disorder of perceptual adjustment (Roberts, 1960:486). And, it is described as a "foreign feeling" (Salfield, 1958); a ". . . breakdown of ego reference" (Sherif and Cantrel, 1947:417).

The concept has been more formally defined by several writers. These definitions are exemplified by and similar to the following. "Depersonalization is a disturbance or even loss of the subjective experience of one's own existence, actions, and emotions" (Meyer, 1961: 357). Very close to this definition, but different in its focus on the environmental setting is the definition of "derealization." "Derealization is an alienation from the outer world, experienced as a feeling of unreality of the environment" (Meyer, 1961:357).

Depersonalization in the medical world has attracted a lot of attention. It is a subject of fascination for psychiatric researchers but as yet there is no common agreement as to the origin of the condition or its basic cause (Ackner, 1954:838).

It seems worthwhile at this point to describe some of the basic symptoms of medical depersonalization. Basically, for people who experience depersonalization, their sense of self is undermined (Kaplan, 1965). They seem to experience a loss of self-image (Roberts, 1960:488). "Things seem unreal to the patient, different from what he knows them to

be" (Salfield, 1958:472). They also experience terror, the absence of all emotions, and a feeling of lifelessness (Meyer, 1961:357).

Like social depersonalization, the medically depersonalized person does not experience other people as personalities, but as inanimate dolls (Sherif and Cantrel, 1947:417-418).

A young woman patient experiencing depersonalization is described by one writer. "She felt it as emptiness, strangeness, being lost, not being herself, not being anybody, and these feelings were accompanied by panicky fears of annihilation" (Peto, 1955:379).

Kaplan (1965:7) describes some of the symptoms when he says,

> Some disturbed people undergo a depersonalization process in which their sense of self is undermined. During treatment these people may make comments to the therapist such as 'I'm a fine example of nothingness,' 'I feel empty,' 'I just exist,' 'I feel like a blob of protoplasm,' and similar expressions of worthlessness which indicate that they feel hopelessly inadequate. They may neglect their personal appearance and present a picture of abject apathy and gross self-neglect.

One of the interesting things about this medical concept is that even though it is basically considered pathological in nature, it does at times come and go in normal people. These transient depersonalization experiences are discussed by Dixon (1965). It is emphasized that it may occur in "essentially normal people" by Bird (1957:256).

Roberts (1960:480-481) distinguished between normal depersonalization (i.e., symptoms of depersonalization appearing in normal people) and abnormal depersonalization (i.e., symptoms and a syndrome that is of a more permanent nature). Depersonalization develops in normal people after excessive activity or emotional engagement--not during the activity. Note: Our view of depersonalization as a social condition is that it exists only in the social setting and not after, though one might

still feel the pain of being "thinged."

These medical symptoms of depersonalization in "normal" persons are like our social depersonalization in some ways. The temporary nature of medical depersonalization in normal people is revealed by one person who experiences the symptom for short periods of time. "I find it difficult to recall the duration of the time; it may quite possibly have lasted ten minutes or for forty or so minutes, because time had no relevance at all" (Roberts, 1960:483). Though the symptoms of medical depersonalization come and go at random at anytime with any given person and the feeling of social depersonalization is fixed and dependent on a given social situation into which and out of which a person moves, they both are temporary and generally of short duration.

Another likeness between social depersonalization and medical depersonalization is based on the assumption that social depersonalization comes and goes. Before a normal person experiences social depersonalization he will be all right and after he experiences it he will be all right. It is just that time that he is in a specific depersonalizing social setting that he will feel like an object or a non-person. This is very much like the young woman in Roberts' study (1960:482) who points up this temporary feeling: "Feeling that surroundings are unreal and I am apart from them. They go flatter and fainter. Attacks don't last long and I feel perfectly all right before and after." (Underlining is this writer's.)

Still another likeness between medical and social depersonalization is the basic feeling of the person that he is an object or is being treated as an object. One of Roberts' very young, normally depersonalized subjects says, "I was aware of exactly what I must do in order to

appear normal but there was now a conscious effort and was more like maneuvering a puppet" (Roberts, 1960:482).

Even though a great deal has been written in the psychological journals and medical journals, the above portrayal of depersonalization in these two areas is very representative of the literature in general. It has been presented for two basic reasons: (1) it is closely related to the concept of social depersonalization posited in this dissertation and (2) though related, it is very important to distinguish the difference between the two.

Causes of Depersonalization

General

There are brief statements in several areas of the literature that allude either directly to social depersonalization, to the feeling state that is assumed in the concept, or to the social conditions that are assumed by this writer to cause social depersonalization.

To illustrate the extreme brevity of some of the statements in the literature it is noted that one writer says simply that mobility serves to depersonalize people (Stein, 1960:744). Another has said that it is simply the idea of an overlarge social organization: "Bigness dominates to such a degree that people lose faith in their own animal sociability" (Roszak, 1972:193). Another points to bureaucratic impersonality that produces instrumentalization or depersonalization (Silberstein, 1967:26). The over large metropolitan areas also have been cited as depersonalizers: ". . . even now in these megalopolitan empires, it is undeniable that the craving for community roots deep in us" (Roszak, 1972:194).

Champion (1967) found that high status (actual as well as perceived) produced low depersonalization (loss of control over the outcome of one's work) and that low status produced high depersonalization. Diamond (1972:212) blends the idea of depersonalization in status with that of function.

> Rationalized, mechanized, and secularized civilization tends to produce standard and modal rather than natural varieties of persons. The individual is always in danger of dissolving into the function or the status . . ."

Stigma

Stigma is cited as a possible socially depersonalizing element. Goffman's writing is probably the most important work in this area from a theoretical perspective. Goffman (1964:106) points out that there are three types of stigma. The first one is an abomination of the body, such as a limp or a missing arm; the second is a blemish of individual character, such as being labeled a homosexual, prostitute, etc.; and the third is a tribal stigma of race, national origin or religion (stigma transmitted through lineages). The depersonalized person would be one who has a stigma of "ego identity." Ego identity is ". . . first of all a subjective, reflexive matter that necessarily must be felt by the individual whose identity is at issue" (Goffman, 1964:106). A dent in one's ego identity comes through stigma and in Goffman's words is treated in ways that may be socially depersonalizing.

> By definition, of course, we believe the person with a stigma is not quite human. On this assumption we exercise varieties of discrimination, through which we effectively, if often unthinkingly, reduce his life chances" (Goffman, 1964:5).

Goffman (1964:131) carries the stigma idea from the objective depersonalization as described above to a subjective depersonalization

by describing what he calls a normal deviate. "A normal deviate is the average individual in a situation where he feels stigmatized."

Prisons

Prisons have the capacity to produce some form of social depersonalization. The famous prison simulation study of Zimbardo (1973) is a powerful demonstration of the effect that can be produced by a single social setting. This study comes closer to producing the basic feeling state of depersonalization than any other this writer has been able to find in the contemporary literature. He demonstrated that an individual's behavior can be principally controlled by the social situation rather than by personality traits or beliefs and values. Zimbardo pointed out that the elements of dominance and submission were principally a result of the role-playing of the student guards and the student prisoners and the prison setting. He also concluded that the process of "labeling" was powerful enough in the right setting to produce abnormal behavior.

It should be noted that Zimbardo did not attempt to identify or to measure social depersonalization even though it appears that he did produce it in ways similar to those of this author as described in the pilot studies presented in the next chapter.

Technology

The automation of contemporary technology is seen as depersonalizing. Hoos (1960b) defines automation as "a production process which uses electronic or other mechanical means to control the quality and quantity of a product." In one study it was found that automation

reduced the work load and made the actual work more simple. Greater simplicity in the tasks increased depersonalization. "Depersonalization is seen to increase with a decrease in perceived work load on the part of the bank employees, and an increase in work load perceptions generates decreased feelings of depersonalization" (Champion, 1967:81).

In another study, increased office automation in 20 businesses in the San Francisco area brought not only worker displacement, but also low employee morale (Hoos, 1960b).

Technology in general may have its depersonalizing effects. As society becomes more technogically oriented, its members become more prone to finding themselves in depersonalizing social situations. Nisbet points out (Merton and Nisbet, 1966:22-23) that several sociologists including Tonnies, Durkheim, and Simmel have seen the movement away from the personal nature of the social group toward a more impersonal, atomistic, mechanical relationship among people.

Though Nisbet (Merton and Nisbet, 1966:23) sees a movement in our society toward this depersonalizing climate he does hold that it is often exaggerated:

> It would be easy to exaggerate this process of individuation and depersonalization. There can be no such thing in either society or nature as a complete vacuum. The decline of the extended family, the corporate parish, the guild, traditional class, and the various other forms of traditional society has never been complete; new associations have arisen in many parts of society to replace them. The labor union, the school, the business enterprise all reflect modern forms of organization that can often be as rigorous in their influences as the older groups.

The computer in particular suggests the possibility of producing social situations that are depersonalizing. The computer has brought about dramatic changes in business and industrial organization. It has

also brought about employee resistance to change in the work setting (Hoos, 1960a). Champion (1967:71) points to the depersonalizing effects of the computer when he says,

> To employees formerly familiar with more personalized techniques for completing their jobs, the introduction of electronic data processing computer systems into their work environments would indeed be viewed as a traumatic experience for them.

The computer has two basic depersonalizing functions. First, it decreases the extent to which employees are brought into contact with one another on the job. Second, with the condensation of functions into electronic data systems, employees feel a loss of decision-making power (Champion, 1967:71). "One general concomitant condition of increased EDP (Electronic Data Processing) was an over-all rise in employee depersonalization" (Champion, 1967:80). Bearing in mind that though Champion's depersonalization concept is close to this writer's concept it is nonetheless different. Champion (1967:77) defines his concept of depersonalization as a condition which results from the removal of human control from the outcome of one's work process. However, his findings lend support to our contention that depersonalization can be induced by the social situation. He says, ". . . depersonalization increased for staff members as a whole" when EDP was introduced into their work environments (Champion, 1967:81).

Environment

Some behavioral scientists have been interested in the effects that physical environment has on behavior (Griffen et al., 1969). That the actual physical environment may be depersonalizing is alluded to by several writers. The major focus of the present study will be

principally on the social setting rather than the physical setting; however, the researcher will deal with the physical setting later in the review of the literature.

Psychologists have been experimenting with control of the environment in animal behavior. This has been done by overcrowding laboratory rates (Calhoon, 1962), isolating dogs (Meizaek, 1954), and isolating newborn primates (Harlow, 1958; Harlow et al., 1972). While this writer feels that the continuity and discontinuity with non-human animals are equally important, the animal researchers have made a contribution to understanding of behavior in general. This author must in the final analysis, however, agree with a humanistic researcher when he says, "People are neither machines, nor performing rats in a maze" (Maslow, 1966:102).

Other psychologists have studied the actual effect of the environment on human behavior. The effect of room size on human behavior (Black, 1950) and the effect of furniture design and arrangement on human behavior (Sommer, 1962a, 1962b) have also been studied. More important from this writer's point of view, is the study of the relationship between overcrowded housing areas and psychiatric problems (Grootenbaer, 1962). While physical setting may have some impact on social depersonalization, the major interest for the present research lies in the social setting.

Mass Media

This area of the literature review is of particular interest because of the nature of the social setting being researched in this dissertation. Since the effect of computer science being taught by

television, the major focus in this section will be on the effect of television and its ability to induce the feeling of social depersonalization.

Gerson (1965:149-150) expresses in a sense the widespread effect of the depersonalizing nature of mass media when he says, "Semi-alienation has become an established expectation in the mass society." Others have pointed to this intruding influence in the lives of people. According to Breed (1958:110-113), the media attempts to get adults to conform to the socio-cultural structure. Some have even gone to an effort to explore the reciprocal effect between the media and society. One study reversed the approach and sought to determine the effect society has on mass communication. The study reports that society gratifies its needs with mass media and mass communication (De Fleur, 1966:314-326). In effect these efforts seem to indicate that society gets what it wants and TV and other forms of mass media are what it wants.

In an earlier exploratory study by this writer, it was found in general that students preferred conventional classes over and above TV classes. One would expect to find this. However, an interesting insight from the study was that the students distinctly preferred mass classes (large classes with 200 students or more) that had a "live" teacher to TV classes with only 30 or 40 fellow students. They made this choice even when they had a "warm body" in the form of a fellow student serving as a proctor and handling record keeping details such as calling the class roll (Quiett, 1972:45-47).

It is this writer's contention that TV in the home, office or other places that people gather would not in and of itself produce social depersonalization. It seems that in one sense, the socially

depersonalizing situation must be in a framework where the individual has lost some of his personal autonomy. The individual must be in a social setting where he feels that he must absolutely be present (such as a job, a school classroom, or a branch of the military service). This researcher does not think that a person would necessarily feel the effects of a socially depersonalizing situation if he had the full awareness that he could leave this particular social setting any time at will. However, if he felt trapped or forced to remain, it would be very easy for him to become aware, either gradually or suddenly, that he was being treated as an object, a non-person, a thing.

Nursing Homes

The review of the literature takes a special twist at this point. The focus is on the aged in nursing homes. There are basically two reasons for doing this. One, there are indications in the literature that many nursing homes for the elderly are depersonalizing in nature; and two, an early pilot study for testing the social depersonalization scale for validity was done in two nursing home settings (one actual nursing home and one simulated nursing home). A description and the results of this pilot study are found in Chapter IV.

Although only five percent of all older people are in nursing homes and other institutions, while the other 95 percent are living in the community by themselves or with family or friends (Butler and Lewis, 1973:7-8), it is felt that nursing homes are social settings that merit attention for studying the concept of social depersonalization.

Several studies have shown that environmental and social-situational variables definitely affect the attitudes and behaviors of

the elderly (Wigdor et al., 1976:3). Some studies even show that depersonalization is highest in nursing homes compared to other institutional settings for healing. It has been suggested by one study (Civca, 1967) that longevity in the elderly is a matter of environmental and social conditions. Another study relates that life style and life outlook improved when they were moved to a prestigious high rise apartment building (Carp, 1967). Still another study advanced the hypothesis that arrangement of the social setting was directly related to positive self-regard (Swartz and Proppe, 1970). Finally, it has been shown that the social setting is extremely valuable therapeutically to patient recovery (McClannahan, 1973).

Boyle (1972:442) suggests that the elderly, who are accustomed to positions of responsibility, are ill prepared for being treated as non-persons whose skills and opinions are judged as worthless. When the elderly enter nursing homes and are suddenly faced with loss of respect as worthwhile human beings they feel less than valuable persons. ". . . dignity, pride, and autonomy are relinquished as older persons are transferred to cultures of dependency" (Euster, 1971:526).

The depersonalizing social conditions in nursing homes is lamented even in the popular journals (Tomlinson, 1972). In such articles, the elderly are often looked upon by employees not as persons with dignity and rights, but as objects to be handled in the easiest way possible.

Some staff members working closely with patients and residents find control of them to be their greatest problem and abusing the residents to be one way of handling it (Stannard, 1973:340).

The lack of respect toward those in nursing homes by the employees may become a self-fulfilling prophecy for many. They are not treated

as persons so they feel depersonalized.

> Possibly the most revealing sight you will encounter in your inspection trip is the look of indignation, terror, frustration, and helplessness in the eyes of old men and old women. Out of habitual disrespect and contempt, the nursing-home attendant or operator will forget himself and forget that you, the visitor, are perhaps aware. He will ignore the anguished cries of human beings who do not want to be 'inspected'--who do not want their little privacy invaded whenever the nursing home wishes to have someone in to look at them. But the patients have lost any claim to dignity, any right to be treated as something more than animals, in the minds of many operators (Burger and Garvin, 1968:21).

This constant objectification and thinging of those in nursing homes by the staff may be the function of self-fulfilling prophecy. They are not treated as persons. Their person-hood is taken away; so they begin to feel depersonalized.

The elderly often live in isolation in spite of being in a communal type setting simply because they often do not have enough energy to be outgoing or to make new friends. They often describe their roommates as "vegetables" with whom they cannot make contact. They find it difficult to maintain their own sense of reality, their own sanity, when they are housed with persons who are so out of contact with reality (Burnside, 1971:392).

Perhaps the best evidence of depersonalization of the elderly in nursing homes comes from personal comments of those older persons living in them. Percy (1972:133) reported that a well, mentally alert 72-year-old man told him, "I do not belong to life" because he endured a lonely existence in a barren nursing home. In another report (Time, 8/30/70:50) 74-year-old Mrs. Ruby Elliott refers to her year in a California nursing home with bitterness and fear: "It's pitiful, but people are just out for the money. That whole time I was among the living dead." In an

interview with the resident of a nursing home, Schultz (1973:50-51) found the following:

> When I asked her if she wanted to leave, Clara quickly answered yes: 'I would still like to do something worthwhile . . . to show people--and myself, too--that I'm still worth something.' At this point her eyes began to tear. She stopped to blow her nose before saying, 'There's one other thing I have learned in this home: and it's not pleasant. I've learned that here, people don't count.'

There is no more powerful way for a nursing home to depersonalize someone than to make him feel that he does not count as a person.

An excerpt from a report dealing with a group work situation in a rehabilitation hospital, similar to those situations in nursing homes, sums up the essence of the depersonalization of the elderly.

> 'You're not a name; you're a number,' Mr. C angrily exclaimed. 'When you come here you sign away all your rights to get care. And I need care.' These words expressed the sense of depersonalization and dependence these men experienced in this situation.
>
> Regimentation also contributed to the sense of depersonalization. 'You get a laxative whether you need it or not, just because they are passing them out to everybody. I'd like to be able to ask once.' Two of the men described the line-up for bathing wheelchair patients, with the lifting team operating like a 'Ford assembly plant' (Holtzen, 1973:165-166).

Jules Henry's contrast of three nursing homes, in his well known work, Culture Against Man, reinforces the foregoing literature in describing socially depersonalizing conditions. In the public supported Municipal Sanitarium the limited budget forces the "patients to suffer psychologically from the impersonality and vastness of the setting" (Henry, 1963:392). He further states that "once useful but now obsolete human beings are detached from their selves long before they are lowered into the grave" (1963:393).

> So they feel they are not human, and from this comes anguish that expresses itself in clinging. But silence is not

> the only form of dehumanizing communication to which these people are exposed. Empty walls, rows of beds close together, the dreariness of their fellow inmates, the bed pans, the odors, the routinization, all tell them they have become junk (Henry, 1963:405).

Henry (1963:406-441) describes even worse conditions of total depersonalization in the private Rosemont nursing home that he labels appropriately "Hell's Vestibule." There, people are treated worse than animals and in a form of human degradation that does not seem possible in the United States.

In conclusion of this section on causes, it is noted that there are probably many other social settings (such as hospitals, military institutions, mental insitutions, etc.) that produce social depersonalization. However, these have been presented in the review of the literature to illustrate the point that social depersonalization is a situational variable.

Depersonalization Scales

Having reviewed the literature related to the concept of social depersonalization and its accompanying social settings, the focus will now be on the literature that deals specifically with measuring social depersonalization.

A careful search of the literature shows that there are virtually no scales to measure the concept as it is presented here. Though it is called a scale to measure depersonalization, a careful perusal of Champion's Depersonalization Scale (1967:78) shows that it measures work dissatisfaction and a form of alientation. Champion's 10-item scale is presented here since it is the only scale that this writer has been able to find that has any similarity to his work.

1. Many times I feel that I have little influence over the things that happen to me.
2. On my job it is possible to make errors without too much disruption.
3. The way I do my job is important to my fellow workers.
4. Many times they think getting the job done is more important than the people on the job.
5. If I ever stay home from work, this department would be in a real bind.
6. A person who likes to do work which requires thinking would like performing my job.
7. Things are really regimented around here.
8. When I come to work each day, I look forward to a new and challenging experience.
9. Sometimes I wonder just how important I really am around here.
10. I think my job is too mechanical (Champion, 1967:78).

This scale had a six choice Likert-type range of from "strongly agree" to "strongly disagree." As the reader will note, this writer's scale (presented later in this paper) had a similar Likert-type scale response with only five possible responses. According to Champion (1967:78), "Scores on this scale presumably reflect one's degree of depersonalization and can range from 10 (low depersonalization) to 60 (extremely high depersonalization)."

Summary

The above studies represent the major empirical efforts which have been made to investigate the concept of depersonalization. There has been an effort here to define alienation and to differentiate it from the proposed concept of social depersonalization. A review of the basic meanings of the term "depersonalization" in the psychological and medical literature has been presented. Several causes alluded to in the literature such as prisons, stigma, technology, environment, mass media, and nursing homes were reviewed. And, finally, the only known scale for measuring depersonalization was cited.

CHAPTER III

CONCEPTUAL MODEL AND HYPOTHESES

Introduction

The rationale underlying this research study is an outgrowth in part of the personal experiences of this writer. The rationale will be presented in terms of a conceptual model. First, a description of the independent and dependent variables will be given. Second, a brief rationale for each of the major areas to be tested will be presented. This will be supported by information gained through a pilot study. Third, a discussion of possible "hidden" third variables will follow. And, finally, there will be a statement of the hypotheses in a formal manner.

The Conceptual Model

The independent variable in this study is the specific social condition (setting) and the dependent variable in the study is social depersonalization. In general the researcher is hypothesizing that social depersonalization is a function of specific social conditions.

The first two hypotheses will test social depersonalization as a function of two social conditions: (1) college courses taught by the conventional classroom technique, and (2) college courses taught by the closed circuit television technique. The third major hypothesis and its

four sub-hypotheses will test the difference between the concept of alienation as described in the current literature and the concept of social depersonalization. The fourth and fifth hypotheses will test the difference between social depersonalization and alienation over time; and the sixth and seventh hypotheses will test whether or not social depersonalization or alienation is a function of time. Hypotheses 8 through 14 will test the possible consequences of social depersonalization, while the remaining eight hypotheses will test sex, age, race, socio-economic status, year in school, religious preference, grade point average, and nationality as possible "hidden" third variables.

It is a conclusion of this writer that a difference in social conditions or social settings will make a difference in how socially depersonalized one feels. The logic for this conclusion comes from personal experiences of the writer who taught college introductory sociology courses by the closed circuit television method for over five years. Early in this paper research done by this writer was cited to show that students in the closed circuit television courses score just as well on tests and make the same kind of grades as those in conventional classes. However, when interviewed, they point out their strong dislike for this type of educational technique. Gathering of evidence over several years led this writer to believe that the social condition of the closed circuit television method was causing students to feel as though they were being treated like numbers or objects. They felt they were not being dealt with as persons; hence, they were depersonalized.

It was further concluded by this writer that the feelings of social depersonalization could be induced. To test this idea, tape recorded lectures were prepared and delivered to conventionally taught

introductory sociology courses. This will be described later in this chapter. Since the absence of a "warm body" (a "live" teacher) is characteristic of both the TV lecture method and the tape recorded lecture method, it was held that these two social conditions were more likely to produce feelings of social depersonalization. In both social settings the teacher is pre-empted by a machine; and in both courses the absence of a live teacher may be interpreted as a personal discount by the students. It is logical to conclude that they will feel as though they are treated as objects, non-persons, or things.

This author concludes that students will experience the conventional classroom social setting as less depersonalizing than any other method of instruction that uses primarily mechanized techniques to instruct students. Consequently, it is logical to adopt a general hypothetical framework that holds that the conventional method of classroom instruction is less socially depersonalizing than classes taught by mechanized methods of instruction such as pre-taped TV lectures.

Pilot Study

In order to gain information to explore this conceptual model, two pilot projects were carried out over a period of several months. The first one will be described here to lend support to the conceptual model. The second one will be cited in a later chapter in order to lend support to the validity of the scale which was developed to measure depersonalization.

The first pilot study involved the testing of four null hypotheses dealing with instructional techniques composed of East Central University (Ada, Oklahoma) students enrolled in a variety of courses and

a variety of teaching methods. In this study no attempt was made to check for intervening variables since it was principally a pilot study for testing the reliability and validity of the "Social Depersonalization Scale." The pilot study consisted of one conventional class, three closed circuit television classes and three sociology classes in which tape recorded lectures were used. The social depersonalization scale was administered in the eighth week of the semester.

The number of students enrolled in the three TV classes was a total of 70. The number of students enrolled in the conventional instructional class was 60. The total number of students enrolled in the three classes taught by the tape recorded lecture technique was 171. The total of the entire sample was 301. The TV classes were all part of one introductory level geography course. The conventional class was an upper level sociology course, The Family. The three classes taught by the tape recorded lecture technique were composed of two lower level introductory sociology courses and one upper level sociology course, The Family. A summary of the types and sample sizes is given in Table I.

The first null hypothesis was designed to test the effects of the three separate instructional settings on social depersonalization. The first null hypothesis tested: There is no statistical difference in means of student scores on the depersonalization variable between students instructed by the conventional techniques, those instructed by the use of the closed circuit television media, and those instructed by the use of tape recorded lectures.

This hypothesis was tested with an analysis of variance statistic and is presented in Table II.

TABLE I

PILOT STUDY CLASS TYPE AND SAMPLE SIZE

Type	Number in the Sample	
TV Geography Classes		
Room 204	24	
Room 235	24	
Room 228	22	
Total TV		70
Conventional Class		60
Tape Recorder Classes		
Introductory Sociology (spring)	54	
Introductory Sociology (summer)	52	
Family Sociology (summer)	65	
Total Tape Recorder Classes		171
Total of Entire Sample		301

When this F value is compared to a table of critical values of F (Wright, 1976:472) it is determined that the F value is significant at the .001 level of significance. Therefore, the null hypothesis is rejected and it is concluded that there is a difference in social depersonalization experienced by students in conventional, TV, and tape recorded learning situations.

It is apparent at this point that one cannot be sure where the variation is. It can be anywhere between the three or between any two of the three variables. Therefore, the second, third, and fourth null hypotheses of the pilot study were tested by the t test of difference in means between the three possible pairs.

TABLE II

ANALYSIS OF VARIANCE FOR TYPE OF INSTRUCTIONAL SETTING AT EAST CENTRAL UNIVERSITY

TV Instructional Setting		Conventional Instructional Setting		Tape Recorded Instructional Setting	
78	N = 70	82	N = 60	60	N = 171
76	$\bar{x}$ = 79.74	95	$\bar{x}$ = 76.6	70	$\bar{x}$ = 123.94
87		103		142	
ΣX = 5,582		ΣX = 4,596		ΣX = 21,195	

$\Sigma\Sigma X$ = 31,733
ΣN = 301

Source of Variation	df	SS	MS	F
Between	2	78,883.27	39,441.635	78.8735839
Within	298	149,018.298	500.0614027	
Total	N-1 = 300	SS_t = 227,901.568		

$p < .001$

The second null hypothesis was designed to test the difference between conventional and TV instructional methods on the social depersonalization variable. It is stated thusly: <u>There is no statistical difference in means of student scores on the depersonalization variable between students instructed by conventional techniques and those instructed by the use of closed circuit television media</u>.

This hypothesis was tested with a sample t test (Wright, 1976:347). The t test, with a df = 128 in this case, yielded a value of t = 1.0937. This was not significant at the .05 level and therefore the null hypothesis is sustained. With H_o sustained in this case it must be concluded that there was no statistical difference between students who take conventional instruction and those who take televised instruction on the social depersonalization variable.

This was not what had been predicted. It was hypothesized that the TV instructional setting would be more depersonalized than the conventional instruction method. Since it did not hold, and all logical implications predicted that it would hold, one is forced to turn to another variable for an explanation. It is possible that the students taking the TV instructional classes had adapted to the social situation and therefore, though possibly having felt depersonalized at one time, they no longer felt the depersonalizing effects of the TV method. This gave rise to a suspicion that social depersonalization might be a function of time. Hypotheses have been developed to test this notion and appear in the latter part of this chapter. The rationale for this will be dealt with more in detail in that part of the chapter.

The third null hypothesis was designed to test the differences between conventional and tape recorded instructional methods on the social depersonalization variable. It was stated thusly: <u>There is no statistical difference in means of student scores on the depersonalization variable between students instructed by conventional techniques and those instructed by the use of tape recorded lectures</u>.

This hypothesis was also tested with the t statistic. With df = 229, the t test yielded a value of t = 13.19681. This is significant

at the .001 level and in the direction predicted. Therefore, the null hypothesis was rejected and it was concluded that there was a difference in the level of social depersonalization experienced by persons taught by conventional instruction methods and persons taught by tape recorded methods. This supported the basic construct view that the social situation may be socially depersonalizing.

The fourth null hypothesis was designed to test the difference between the televised instructional methods and the tape recorded instructional methods on the social depersonalization variable. It was stated: There is no statistical difference in means of student scores on the depersonalization variable between students instructed by the use of the closed circuit television media and those instructed by use of tape recorded lectures.

This hypothesis was also tested using the t statistic. With df = 239, the t value obtained was t = -13.081257. This is significant at the .001 level of significance. The null hypothesis was, therefore, rejected and it was concluded that there was a difference between TV and tape recorded instructional techniques. The direction of the finding showed that persons in the tape recorded lecture setting experienced much greater social depersonalization than did those in the TV setting. This was not expected. However, it is in keeping with the findings in the second null hypothesis of the pilot study which showed that there was no signfiicant difference between conventional and TV instructional settings when tested on the social depersonalization variable. It was expected that TV instruction would be as depersonalizing as tape recorded instruction but it was not. As pointed

out earlier, the conclusion was drawn that this was due to an intervening time variable which, if proven to be so, would provide significant new insight into the variable.

It has been the purpose of this section of the chapter to show that there is a basic logic for the first five hypotheses presented in the last section of this chapter by citing the pilot study as evidence that more research is needed to clarify this intriguing concept.

Instructional Techniques

In order to further develop the model of the concept of social depersonalization, the instructional techniques to be used in the research will be viewed in a more individualistic manner. This discussion will serve to form the bases of the hypotheses. As the logic is built for each hypothesis, the hypothesis will be stated informally.

If it is true that social settings leave an individual in an uncomfortable position of believing that he is not taken into account as a person then one can use the logic that a mechanized technique of teaching is in some way going to communicate the basic feeling that one is not important enough to merit a "live person" for an instructor. It is logical, then, that it can be tested to determine whether there is greater social depersonalization among those who take the pre-taped closed circuit television instruction compared to those who take the conventional classroom instruction. Since the TV method uses a machine as the medium, one can conclude that persons taking a TV course will experience greater social depersonalization (at least initially) than those taking the conventional course. Consequently, the first general hypothesis to test this conclusion is derived. Informally stated it is:

Groups taught by the pre-taped closed circuit television instruction method will be more socially depersonalized than groups taught by the conventional classroom instruction method.

Relationship to Alienation

The focus now turns to the matter of the relationship between social depersonalization and alienation. The problem at this point is: It is not known but that some of the people who would score high on a social depersonalization scale might simply just be alienated. Hence, they might score high on a social depersonalization scale in a non-socially depersonalized setting simply because they were experiencing alienation which they carry from one social setting to another. To control for this, an alienation scale was given along with the social depersonalization scale.

As has been pointed out in the review of the literature section, it is believed that social depersonalization is far less permanent than alienation. If this be true, then a single testing of a group of people might not reveal the information sought. One might expect that students would score high on social depersonalization scales if they were alienated. However, if given the same two scales at a later time, one could expect the alienation scores to remain high for only the alienated while the depersonalization scores would change for those who are not alienated. One might use, to illustrate the point, a hypothetical couple, John and Mary. John is alienated; Mary is not. However, both John and Mary are in a socially depersonalized setting when they fill out the scales. Due to the very closely related nature of alienation and social depersonalization, John would probably score high on both

the alienation and the social depersonalization scales. However, one would expect Mary to score high only on the social depersonalization scale. On the other hand, in a non-socially depersonalized setting if both scales were given, one would expect only John to score high (possibly on both scales) while Mary would not.

It would be well to point out that this writer believes that alienation and social depersonalization are related variables even though it is believed that they are independent of each other. Alienation is viewed here as a personality trait while social depersonalization is viewed as a situational trait. It is possible for a person to be alienated and not socially depersonalized just as it is possible for a person to be socially depersonalized and not be alienated. Since both variables, in part, reflect a person's perception of society in general and social conditions in particular, it is expected that they may be related. However, it is expected that the variation in one will not be due in large part to the variation in the other.

In order to test this, the second general hypothesis is derived. It is stated informally as a null hypothesis thusly: <u>There is no correlation between social depersonalization and alienation</u>.

<u>The Element of Time</u>

This writer has come to believe that social depersonalization is a function of time. That is, the longer a person remains in a socially depersonalizing social situtation, the more likely he is to adapt to the situation and thus reduce the depersonalizing elements of the social setting. Evidence to support this view comes from the pilot research

cited earlier in this chapter. Until the pilot research was carried out, it was assumed that a socially depersonalized social setting would remain socially depersonalizing for those in it. However, when given the social depersonalization scale, students in a closed circuit televised geography class did not differ significantly from those in conventional classes. This was totally unexpected. Everything within the realm of logic suggested that the TV class students would be significantly more socially depersonalized than those of the conventional class. Then one fact emerged: this was past the middle of the semester--this introduced the element of time. After discussing their feelings with some of them, there seemed to emerge a general feeling that "it was worse at first than it is now." It was logical then to assume that at one time it was depersonalizing for them, but somehow now it was not.

Though this writer has been somewhat at a loss for why the phenomena of social depersonalization was absent in the middle of the semester, it is still believed that social depersonalization was present at the beginning of the semester.

There is the possibility that as students invest time and energy in a course in which they are uncomfortable for a long period of time (several weeks) they will seek to justify or rationalize the problem away. In social psychological terms, they will seek to reduce the "cognitive dissonance." They are required to be there, invest time and energy on the one hand, and are socially depersonalized and uncomfortable on the other; their only alternative: adapt themselves in such a way as to reduce the discomfort; that is, discount the social situation and reduce the feeling of social depersonalization.

If students are socially depersonalized at the beginning of the semester and not after the middle of the semester, then this can be tested. This gives rise to the third general hypothesis which informally stated is: Social depersonalization is a function of time; the longer one remains in a socially depersonalizing social setting, the less socially depersonalized he will become.

Based on the assumption that alienation is a personality trait, not a situational trait, it is assumed that, unlike social depersonalization, alienation is not a function of time. This gives rise to the fourth general hypothesis, a null hypothesis. Informally stated it is: There will be no significant difference in the alienation scores of students early in the semester and their alienation scores later in the semester.

Possible Consequences

Social depersonalization has been described earlier as an uncomfortable feeling. It has been clearly depicted as a negative concept. If indeed it is a negative variable, of what consequence is it? The answer suggests a wide range of possibilities. It is assumed that the feeling state of social depersonalization could produce an infinite number of negative results. However, due to the nature of this study, the focus will be on the possible consequences of social depersonalization in the school setting. Since it is assumed that mechanized instructional methods will produce greater social depersonalization in students than conventional methods, the concern will deal with the possible consequences of that mechanization.

The first consequence to be considered is the student's attitude with regard to completing the course he is enrolled in. Logically, it

could be assumed that if a student were perceiving himself as being treated as unimportant, as an object, or as a non-entity in a particular social setting, he might consider dropping out of the course. This assumption is the basis for the fifth hypothesis which is informally stated: The socially depersonalized person is less likely to feel that he will finish the course than is the non-socially depersonalized person.

Another possible consequence to consider is that of how well a student who feels socially depersonalized will like the class in which he is enrolled. Assuming the nature of social depersonalization it is logical to conclude that it will produce a dislike for the social setting--the class in this case. This conclusion gives rise to the sixth hypothesis which is informally stated: The socially depersonalized person is less likely to like the class than the non-socially depersonalized person.

Still another consequence of social depersonalization is the possible loss of effort expended on the class on the part of the student. It is a logical conclusion that the negative feelings of social depersonalization will lead to a loss of motivation, and hence, a loss in effort. Further, these feelings would probably cause a loss in inspiration to work diligently in class preparation and home studies. These conclusions call forth the seventh hypothesis which may be informally stated: The socially dpersonalized person is less likely to feel that he will put forth his best effort in the class work than the non-socially depersonalized person.

A fourth possible consequence to be considered is that of a negative attitude toward learning. It is logical to assume that the negative attitude produced by social depersonalization would not produce

a positive attitude toward learning in the particular social setting. Quite the contrary! The negative feelings of social depersonalization are likely to reproduce negative feelings toward the learning environment. This gives rise to the eighth hypothesis which is stated informally: The socially depersonalized person is less likely to feel a positive attitude toward learning than the non-socially depersonalized person.

A fifth possible consequence in the educational setting is that of a negative attitude toward knowledge. One can logically assume that the result of the negative nature of social depersonalization might well be a negative attitude about the knowledge being gained in the course. One might perceive that the mechanized instructional approach would make remembering the information more difficult. Such possible perceptions form the base of the ninth hypothesis. It may be stated informally as: The socially depersonalized person is less likely to feel that he is getting full knowledge from the course than the non-socially depersonalized person.

The sixth possible consequence of social depersonalization is decline in class attendance. Since it is assumed that social depersonalization is temporary, and since it is assumed that it is an uncomfortable, negative experience and since it is assumed that people prefer comfortable, positive experiences over uncomfortable negative ones, it follows that people will attend class less if they feel social depersonalization. Hence, informally stated, the tenth hypothesis is: The socially depersonalized person is less likely to attend class than the non-socially depersonalized person.

The final consequence of social depersonalization to be dealt with in this research project is that of expected course grade. The negative effect of social depersonalization, it is argued, will spill over into one's attitude about his potential grade earning ability in the particular social setting. This idea is in keeping with the idea that the person is not being dealt with as a person and, therefore, will have difficulty in responding to the mechanized learning situation in a grade earning capacity. This may give rise to the feeling that the mechanized instruction technique cannot take individual differences into account. Hence, the person may feel that he cannot respond in a grade earning capacity as well as his abilities might allow in a more personalizing situation. This logic forms the basis for the eleventh hypothesis which is informally stated here as: The socially depersonalized person is less likely to feel that he will earn a grade in keeping with his potential than is the non-socially depersonalized person.

Possible "Hidden" Third Variables

The balance of the hypotheses will be tested for the purpose of controlling for the following possible "hidden" third variables: sex, age, race, religious preference, number of years in school, socio-economic status, grade point average, and nationality.

It is the position of this writer that these variables will not affect the dependent variable of social depersonalization. However, they will be controlled for in order to insure as much as possible against contaminating effects.

It seems appropriate to point out that the informally stated hypotheses given in the rationale above are in the same spirit and

essence as the formal ones which will follow. It will become obvious to the reader that the wording is slightly different in the formal statements of the hypotheses. This is due to the nature of the precise wording necessary to accurately test the formal hypotheses by certain statistical procedures.

The Hypotheses

The rationale for the study having been completed, the researcher will now focus on the particular hypotheses that appear to be relevant in the understanding of the research variables. The phrasing of hypotheses to be tested represent the research objective of this present study. The following hypotheses will be empirically tested:

H_1: Groups taught by the pre-taped closed circuit television instruction method will be more socially depersonalized than groups taught by the conventional classroom instruction method.

H_{1A}: The group taught by the pre-taped closed circuit television instruction method will be more socially depersonalized early in the semester than the group taught by the conventional classroom instruction method at that same time.

H_{1B}: The group taught by the pre-taped closed circuit television instruction method will be more socially depersonalized late in the semester than the group taught by the conventional classroom instruction method at that same time.

H_2: There is no correlation between social depersonalization and alienation.

H_{2A}: There is no correlation between social depersonalization and alienation in the TV taught pretest group early in the semester.

H_{2B}: There is no correlation between social depersonalization and alienation in the conventionally taught pretest group early in the semester.

H_{2C}: There is no correlation between social depersonalization and alienation in the TV taught post test group late in the semester.

H_{2D}: There is no correlation between social depersonalization and alienation in the conventionally taught post test group late in the semester.

H_3: Social depersonalization is a function of time: the longer one remains in a socially depersonalizing social setting, the less socially depersonalized he will become.

H_{3A}: The TV taught pretest group will be more socially depersonalized than the TV taught post test group.

H_{3B}: There is no significant difference in means of student scores on the social depersonalization variable in the pretest group and the post test group instructed by conventional techniques.

H_4: There is no significant difference in the means of student scores on the alienation variable.

H_{4A}: There is no signfiicant difference in the means of student scores on the alienation variable in the pretest group and the post test group instructed by the closed circuit TV technique.

H_{4B}: There is no significant difference in the means of student scores on the alienation variable in the pretest group and the post test group instructed by conventional techniques.

H_5: The greater the degree of social depersonalization, the less the student is likely to feel that he will finish the course.

H_6: The greater the degree of social depersonalization, the less the student will like the class.

H_7: The greater the degree of social depersonalization, the less the student is likely to feel that he will put forth his best effort in the class work.

H_8: The greater the degree of social depersonalization, the less the student is likely to feel a positive attitude toward learning.

H_9: The greater the degree of social depersonalization, the less the student is likely to feel that he is getting full knowledge from the course.

H_{10}: The greater the degree of social depersonalization, the less the student is likely to attend class regularly.

H_{11}: The greater the degree of social depersonalization, the less the student is likely to feel that he will earn a good grade.

H_{12}: There is no statistical difference in means of student scores on the social depersonalization variable between students who are male and those who are female.

H_{13}: There is no statistical difference in means of student scores on the social depersonalization variable between students who are in different age levels.

H_{14}: There is no statistical difference in means of student scores on the social depersonalization variable between students who are members of different racial groups.

H_{15}: There is no statistical difference in means of student scores on the social depersonalization variable between students who have different religious preferences.

H_{16}: There is no statistical difference in means of student scores on the social depersonalization variable between students who have a different number of years of education.

H_{17}: There is no statistical difference in means of student scores on the social depersonalization variable between students who are of different socio-economic status levels.

H_{18}: There is no statistical difference in means of student scores on the social depersonalization variable between students who have different overall grade point averages.

H_{19}: There is no statistical difference in means of student scores on the social depersonalization variable between native students and international students.

Summary

The rationale for this research project has been presented in terms of a conceptual model supported by an initial exploratory study. The rationale for each of the hypotheses has been given. The first hypothesis and its two sub-hypotheses grew out of the type of instructional techniques being studied. The second hypothesis and its four sub-hypotheses grew out of the interest in the relationship between

social depersonalization and alienation. The third and fourth hypotheses and their sub-hypotheses dealt with social depersonalization and alienation as a function of time. The next seven hypotheses grew out of the interest in discovering the possible consequences of social depersonalization. The final eight hypotheses were designed to be used as tests of possible contamination effects from possible "hidden" third variables.

CHAPTER IV

RESEARCH DESIGN, MEASURING INSTRUMENTS, AND SAMPLE

Introduction

Having introduced the concept, shown its development, reviewed the literature and stated the hypotheses and their rationale, the focus of attention is now turned to the research design. After discussing the design, the focus will be on the measuring instruments and will deal with their reliability and validity. The focus will then shift to the sample which will be used to test the hypotheses.

Research Design

The independent and dependent variables will be described in terms of an "Analysis of Variance" design. The purpose of this design is not to commit the research to any particular statistical analysis but rather to illustrate the "logic" of the predictions. A table of basic design elements will be used in order to facilitate the explication of the major hypotheses in summary form.

Summary of Major Hypotheses

In terms of this analysis of variance design, a summary of two of the general major hypotheses can be made. These represent the thrust of this research project.

TABLE III

TABLE OF BASIC DESIGN ELEMENTS: SOCIAL DEPERSONALIZATION AS A FUNCTION OF CONVENTIONAL INSTRUCTION, TELEVISION INSTRUCTION, AND TIME*

Independent Variables		Dependent Variable Depersonalization	
Type of Instruction	Time	High	Low
Conventional Classroom Instruction	Early	A	B
	Late	C	D
Pre-taped Televised Classroom Instruction	Early	E	F
	Late	G	H

*Note: What varies in this table are the students' scores on the social depersonalization scale in the two different educational instructional settings and in two different times. The letters in this table are only labels for the cells.

1. The hypothesis, with regard to social depersonalization as a function of conventional classroom instruction and TV instruction:

   (1) Predict A to be less than B (A < B)

   (2) Predict A to be less than E (A < E)

   (3) Predict E to be greater than F (E > F)

   (4) Predict B to be less than F (B < F)

2. The hypothesis, with regard to social depersonalization as a function of time:

   (1) Predict no difference in A and C (A = C)

   (2) Predict no difference in B and D (B = D)

   (3) We expect no difference in C and D (C = D)

(4) We expect E to be greater than G (E > G)

(5) We expect F to be less than H (F < H)

(6) We expect no difference in G and H (G = H)

The above schema and summary statements are not intended to be comprehensive in nature but are meant to depict the major elements that are involved in the basic thrust of this research. The remaining elements will be dealt with in detail in Chapter V of this report.

Measuring Instruments

Social Depersonalization Scale

Having considered the research design, the focus will now turn to the instruments which will measure social depersonalization. The discussion will center first on the development of two scaling procedures and then on the ultimate choice; following that consideration will be given to the reliability and validity of the final instrument. Following this, the alienation scale choice will be discussed.

Scale Development. It was decided that there were at least two major possibilities for constructing a scale to measure social depersonalization. One scale might take the form of a Liker-type scale; the other could take the form of Osgood's Semantic Differential scale. These two scales are not only of different form but also of different theoretical background. The development of each will be described below.

The Likert-type scale (Selltiz, 1961:366-369) was designed using items that represented the concept of social depersonalization as it has been defined and described earlier. The concept was described to several colleagues of this writer. These included Dr. Ralph Fagin, of

Oral Roberts University, Mr. John Lamberton, of Tulsa Junior College, and Dr. Roy Maxwell of East Central University. The scale items were selected from several groups of items suggested by this writer and these colleagues. The final choice of items was determined by a discussion with these men concerning the face validity of each item. Those items that did not meet general group consensus for face validity were omitted. The final scale consisted of 36 items that are attitudinal statements to which the respondent responds by choosing one of five possible answers ranging from "strongly agree" to "strongly disagree." The total Likert-type scale had a high possible score of 180 and a low possible score of 36, or in other words a range of 145 points. This first Likert-type scale that was used in the pilot research projects is found in Appendix A of this thesis.

The second scale that was developed was a special form of Osgood's Semantic Differential instrument for measuring meaning (Osgood, 1957). The semantic differential test measures the meaning of concepts connotatively. Osgood calls this a measure of "semantic space." The space is measured by points on a continuum between adjective pairs which form a dichotomy (Kerlinger, 1965:564). There is a separate scale for each concept that is measured. This scale was developed at the same time as the Likert-type scale described above and with the same consensus-type inclusion by testing face validity of the concept and the relevance of the adjective pairs. The same set of 10 adjective pairs were used for setting the "semantic space" on each of the eight major concepts that embody the variable of social depersonalization. Each adjective pair has seven spaces and the spaces are valued at one point each so that a person could score as high as seven on each adjective

pair or as low as one on each adjective pair. Each of the eight concepts had a high possible score of 70 and a low possible score of seven. The total semantic differential scale had a high possible score of 560 and a low possible score of 56, or in other words a range of 504 points. A copy of the final semantic differential scale is found in Appendix B of this paper.

The two scales were used in the research to test the hypotheses of the two pilot projects. Only the Likert-type scale was used in the research to test the hypothesis of the second pilot project which dealt with nursing homes and is discussed later in this chapter in relationship to the validity of the social depersonalization scale. It was finally decided, by logic and by the results of the research that the Likert-type scale was superior to Osgood's Semantic Differential form. The Semantic Differential was labeled as "vague," "obscure" and "difficult to answer" by many of the people in the sample of the first pilot research project. In the sample of n = 301, students were asked to respond to which test they felt was easier to answer and which type test they preferred. They were asked to do this in class by show of hands after the research was done and the questionnaires were taken up. The overwhelming response was in favor of the Likert-type scale. The Likert-type scale was easier to score; but even more important than that, it measures a broader spectrum of the concept in the same time limit with its 36 items than the Semantic Differential scale does with its eight concepts and 10 adjective pairs. It was a logical conclusion that the best choice of scale types for this research was the Likert-type scale.

Having looked at the scale development and scoring techniques, the focus of attention is on its reliability and validity. The first

consideration is the problem of reliability.

Scale Reliability. In approaching the problem of reliability for a measuring instrument, it is pointed out that "the true reliability of an instrument can never be computed" (Helmstadter, 1970:283). However, experimental procedures are available for obtaining information about the extent to which a measure contains errors which differ from person to person and from time to time. One such procedure for establishing the reliability of a measuring device is the "split-half" technique. Split-half reliability is done by first administering the test, then dividing the items into two equivalent parts, with each part being scored separately. The two parts are then compared by using a correlation statistic between the two sets of scores. This index is often called a coefficient of equivalence, or split-half reliability (Helmstadter, 1970:285).

The split-half technique was applied to the Likert-type scale using a sample of 301 questionnaires. The method chosen for splitting the test in half is probably the most common according to Helmstadter (1970: 285). The method is simply to place all the even-numbered items in one half and all the odd-numbered items in the other half. This works especially well if the items on the test were randomly ordered. This was true in the development of the Likert-type scale used in the pilot projects. After all 36 items had been chosen, they were put in a hopper, thoroughly mixed up and then randomly drawn. The first item drawn was number one, the second number, two, and so forth until all 36 items had been put in order.

The results of this split-half reliability proved to be very satisfying in the pilot project. Split-half reliability for the n = 301

was r = .89083. Other pertinent information in this correlation is provided here:

$$\bar{x} = 51.1266$$

$$s = 16.1078$$

$$S_m = .92998 \text{ (Standard Error of the mean)}$$

$$r = .89083$$

> Once again by a logic identical with the procedure for test-retest reliability, it can be shown that the correlation between the scores obtained on the two parts of the test is in fact an estimate of the reliability of a test" (Helmstadter, 1970:285).

It is argued by some that test reliability is a function of the test length when length is determined by the number of items that go to make up a test. Helmstadter (1970:285) says, "As the length of a test increases so does its reliability." Since the split-half procedure is based on a correlation between scores on only half of the test, the Spearman-Brown prophecy formula is used to correct for length. This formula determines the reliability of the entire test. The formula is:

$$r_{xx} = \frac{2r'_{xx'}}{1 + r'_{xx'}}$$

where $r'_{xx'}$ = reliability obtained from the original calculation

$r'_{xx'}$ = reliability of the entire test.

When corrected for length using the Spearman-Brown prophecy formula it obtained an $r_{xx'} = .942237$ (compared to the r = .89083 of the half test).

Considering the possibility that there might be some error in the odd-even approach to the split-half technique, it was decided to try the split another way. In this case this writer took only one group of

tests, one of those of the tape recorded lecture instruction group (n = 64). This time instead of splitting the test on odd and even items, the test was divided into two equal parts: the first half of the test (18 items) and the last half of the test (18 items). The odd-even split is compared here with the first half vs. the last half split:

Odd-Even Split	First Half-Last Half Split
$\bar{x}$ = 63.9218	$\bar{x}$ = 62
S = 12.9262	S = 13.0067
r = .9185	r = .8705

The conclusion is simple. Either way they are split, they have very high reliability. When corrected for length using the Spearman-Brown prophecy formula the following results were received:

Odd-Even Split	First Half-Last Half Split
$r_{xx'}$ = .9575	$r_{xx'}$ = .93075

In order to add one further point to the search for reliability, one may use a standard error of measurement. It involves the idea of a "true score" set within a 95% confidence level. The formula for Standard Error of Measurement (S_e) is as follows:

$$S_e = S_x \sqrt{1 - r_{xx}}$$

Where: S_x is the standard deviation of the measurement

r_{xx} is the reliability of the measuring instrument.

In this case the standard error of measurement is given as 5.322158. Since the true mean score is equal to $\bar{x} \pm 1.96\ S_e$, then one can state the 95% confidence interval for this mean:

$$\bar{x} = 51.1266$$

$$S_e = 5.322158$$

95% C. I. = 45.8044 $\leftrightarrow$ 56.4487

"The question of what is a 'high' coefficient of reliability or how large r_{xx} must be for a test to be useful is difficult to answer in any general way" (Kolstoe, 1973:190). Standard Error of Measurement (S_e) is importance since it gives the possibility of confidence intervals at the 95% level. This is generally interpreted as the "true" score. This allows the interpreter to think in terms of a region of scores on a test as the best estimate of the individual's score. "S_e is the standard deviation of errors of measurement . . . It is used as an estimate of the variability to be expected on repeated measurements" (Kolstoe, 1973:190).

Still further evidence to support test reliability for the Likert-type social depersonalization scale are the results obtained by measuring the association of the Likert-type scale to the Osgood Semantic differential scale. When tested for correlation, the results yield a Pearson's r = .52005 for an n = 301. This is statistically significant at the .001 level. One conclusion that could be made is that the two scales really are measuring the same variable. One can see by looking at the two scales (see Appendix A and Appendix B) that they are distinctly different in form, but they both grow out of the same conceptual frame.

Another element in favor of the Likert-type social depersonalization scale might be referred to at this point. Using the sample (n = 839) that will be described in the last section of this chapter, a factor analysis was applied to the social depersonalization scale (36 items) combined with the alienation scale (6 items). Then the social depersonalization scale was factor analyzed independently. Combined

with the alienation scale, the 42 items of the data were collapsed to six factors. It is clear from the analysis that the social depersonalization scale items and the alienation scale items factored out separately. (See factor one and factor two of the "Factor Analysis of the Combined Social Depersonalization and Alienation Scales" in Appendix D.)

The factor analysis of the social depersonalization scale when treated alone, yields interesting information to support the internal consistency of the scale. The 36 items were collapsed to four factors. The reader is directed to Appendix D for a more extensive description of the results of the factor analysis.

In general it is safe to say, based on these findings, that there is substantial internal consistency on this social depersonalization scale. One can say with a good deal of confidence that there is reliability established for this scale.

The question of objectivity is, thus, also satisfied. Objectivity refers to the extent to which the measuring instrument is free from personal error, that is, the personal bias of the observer. The researcher can claim high objectivity for this scale based on Helmstadter's (1970: 280) statement: Any test which has an adequate reliability as indicated by the measures discussed below (reliability measures) may be assumed to possess sufficient objectivity for use."

Scale Validity. This part of the paper will deal with two kinds of validity: (1) face validity, and (2) construct validity. In viewing construct validity, one can support the claim for this type of validity for the social depersonalization scale with two types of construct validity: (1) group differences, and (2) changes in performance.

Face validity is a type of content validity. It is the most common variety of content validity. It does not so much refer to what an instrument actually measures but rather to what it appears to measure on the basis of a subjective evaluation. Even though some claim that it is the least justifiable of all concepts of validity, it does have its place.

> Even though face validity is never to be regarded as a substitute for more objective kinds of evidence, it does have a place in testing . . . in the original writing of items, face validity is about all there is to rely upon (Helmstadter, 1970:298).

As has been noted above, each of the 36 test items picked were picked on the basis of their perceived face validity. After the items had been put into test form, each was reviewed to see if in fact it still appeared, in the light of the other items, to measure what it purported to measure. The final conclusion was a consensus conclusion that the test was in fact measuring what it was designed to measure: social depersonalization.

Construct validity is probably the most recent addition to the idea of validifying a test. In recent years Cronbach and Meehl (1955) have clarified and to some extent dignified this approach to validity.

This section of the chapter will approach the matter of construct validity from two points: (1) group differences and (2) changes in performance. The examination of the evidence for validity based on group differences will be considered first.

> The first general type of evidence which might lend support to a claim of construct validity is <u>group differences</u>. Many traits are postulated in such a way that persons in different groups are conceived to possess different amounts of the characteristics involved" (Helmstadter, 1970:313).

The claim for this form of construct validity is supported on the basis of the evidence gained in testing the hypothesis of the second pilot study. In this study, an undergraduate student gathered data under the direction of this writer for partial credit in a sociology course. Twenty-one elderly (over 65) residents in two nursing homes in Ada, Oklahoma, and 21 elderly (over 65) residents living in their own homes were given the social depersonalization scale.

The 21 elderly people came from two separate nursing homes in Ada, Oklahoma: The Jan Francis Home and Ballard's Nursing Home. They were chosen on the basis of their ability to be able to function as a questionnaire taker; that is, they had to be well enough to be able to read the questionnaire and fill it out.

The control group was made up of 21 people scattered through the Ada community who were over the age of 65. Because of the time-cost factor it was not possible to get a random sample; so the convenience sample technique was used. The writer is well aware of the limitations of such a sample. However, valuable information about scale design can be gained by using a convenience sample in an early exploratory study.

The depersonalization scores were divided at the mean and those above the mean were considered depersonalized. The findings show that there is a significant difference in the two groups in the direction predicted and at the .001 level of significance. The hypothesis of the second pilot research project was designed to test the effect of living in nursing homes on producing social depersonalization for the elderly. The hypothesis was stated as follows: <u>The elderly person who lives in a nursing home is more likely to be socially depersonalized than is the elderly person who lives in his own house</u>.

This hypothesis was tested by using the Chi Square statistic (Kolstoe, 1969:210).

The Chi Square statistic yielded an $X^2 = 16.08$ with an $n = 42$ and $df = 1$. The hypothesis is supported at the .001 level in the direction predicted ($X^2 = 16.08$; $df = 1$; $p < .001$).

This finding is very much in keeping with what was predicted. It also lends support to the theoretical construct that some social settings are more socially depersonalizing than others. In this case, the elderly living in nursing homes are a great deal more depersonalized than are the ones living in their own house. Breaking depersonalization into a dichotomous variable at the mean for calculating Chi Square is also useful for calculating percentages. In this case roughly 81 percent (81%) were depersonalized while in nursing homes and only 20 percent (20%) experienced social depersonalization in their own homes.

The evidence of these two different groups having different levels of social depersonalization supports the claim to construct validity.

Further claim to construct validity is supported by evidence gathered in the area of changes in performance. In this type of construct validity ". . . rather than making comparisons among groups of different individuals, the same persons are studied upon two or more occasions" (Helmstadter, 1970:314).

The evidence to support the claim for this form of construct validity was gathered in a study of young adult college students in a simulated nursing home experiment done on the East Central University campus by a sociology professor and a psychology professor (Wigdor et al., 1976). They took several students and broke them into two

groups and had them to role play either staff members or patients in a simulated nursing home setting. This they did over the period of a long weekend. They were given the Thorndike Dimensions of Temperament Scale (Thorndike, 1966) and this writer's social depersonalization scale in a pre-test setting, prior to entering the nursing home environment. When the experiment was finished the same two tests were given again to see if any differences would occur. They were tested for differences with the students' t statistic.

The results again support the claim for construct validity. There were no statistical differences at the .05 level on any of the Dimensions of Temperament. However, there was a statistical difference in the means at the .05 level for the patients in the nursing home environment. There was no statistical difference in the means for the staff members in the nursing home environment. This supports this writer's claim that the social situation (nursing home) produces social depersonalization. Further, the social situation did not change the personality traits of the staff or of the patients, supporting the previously stated view that social depersonalization is a situational, not a personality variable. The staff did not experience greater social depersonalization probably because they were in control; if anything, they helped induce it. The patients on the other hand became much more depersonalized in the nursing home setting, after having been there for the weekend.

As Helmstadter (1970:310) states, "If the anticipated relationships are found, all is well. For the moment, the test is considered valid, and the hypothetical trait with its associated meanings is a useful construct." According to Cronbach and Meehl (1955) a test is never really validated; but rather a principle for making certain

inferences about persons who score a particular way is verified. Gaining construct validity is not only a "shot in the arm" for the scale, but also gives a boost to the theoretical concept of social depersonalization. "Every validation study becomes an evaluation not of the test alone but also of the theory and concept of the trait as well" (Helmstadter, 1970:310).

After the two exploratory studies, the social depersonalization scale was revised before being used in the final research project described in the "Research Design" section at the beginning of this chapter. Under the direction of Dr. Richard Dodder, some of the items in the scale were restructured in order to provide an equal number of positive statements and negative statements. After this was done, the 36 statements were again put into a hopper and randomly selected for the order they were to be placed in the scale that was to be included in the questionnaire. This final scale is found in Appendix C, Student Attitude Inventory, Part II, items 1 through 36.

There is one final piece of information regarding the scale. It is the use of the factor analysis technique of statistics to get a better understanding of the social depersonalization scale, especially as it related to the alienation scale mentioned below.

It seemed important to this writer that the difference between the two scales, if in fact there were a difference, needed to be established in as many ways as possible. One of the ways chosen was the use of the factor analysis statistic. The two scales were tested together in order to see what relationships existed between each item in the two scales and every other item in the two scales.

The factor analysis procedure analyzes the variance of each item. Each item has a variance which is a measure of how important the factor is. The total variance of a test is made up of two components--the common and the unique variance. Since common factors account for the intercorrelations between the variables (items), the factor analysis procedure allows one to distinguish those items with common properties. There remains a part of the total variance that results from the unique properties of an item and is not correlated with the other items. This is the unique variance.

The major aim of factor analysis is the discovery of the common factors. The process generally endeavors to take out as much common variance as is possible in the first factor. The second, and following factors, each attempt to account for the maximum amount of the remaining common variance until none is left. The SAS program (Statistical Analysis System) used in this research selects only for analysis those factors whose variance (eigenvalue) exceeds 1.0. Variance below this level is not seen as contributing very much at all to the common nature of the items. If the items correlate with each other, there is some basis for believing in the existence of a common relationship.

The purpose of using the factor analysis procedure in this study was to get information about how the scale items related to each other in the social depersonalization and the alienation scales. The items collapse into six factors. Each factor is a series of Pearson r's between the 42 items making up the social depersonalization and alienation scales. See Table XLI in Appendix D for a presentation of the six factors and their loadings.

This researcher consulted Dr. Don Holbert, Assistant Professor of Statistics at Oklahoma State University, for an interpretation of the factor analysis of the combination of these two scales. He made his interpretation of the data from the computer print-out sheets without having seen the items of the scales themselves. It was his conclusion that the depersonalization items "loaded" into Factor One and that the alienation items "loaded" into Factor Two. A perusal of these two factors shows high correlations for the depersonalization items and low correlations for the alienation items in Factor One. The correlations are reversed in Factor Two. It was the conclusion of Dr. Holbert that the items in the two scales were indeed independent of each other and did indeed measure two separate things.

Further information regarding the factor analysis of the two scales is described here. The total of the 42 items are collapsed into six factors. These six factors contain over half (55.7%) of the total value of the original 42 items. See Table XL of Appendix D for a presentation of the cummulative percentages of variances (eigenvalues) of the six factors.

Further examination of the six factors yields some interesting information (see Table XLI, Appendix D). As stated above, Factor One essentially factors out the depersonalization items. None of the alienation items has substantive significance in this factor (none exceeds $r = .26$).

Factor Two essentially factors out the alienation items. In this factor, none of the social depersonalization items has substantive significance (none exceeds $r = .25$).

Factor Three is a comparison of the means of certain components in the social depersonalization scale. It concerns three items in the scale (items 10, 23, and 31). All three items deal with the person's relationship to others. The three items are listed here for the reader's convenience:

10. Others are important to me in this circumstance.

23. I mean a great deal to others right now.

31. I am sensing a closeness to other people in this setting.

These three items seem to set themselves apart from the other items in the scale. They seem to indicate that "others" are highly significant to them even in socially depersonalized settings.

Factor Four concerns two items in the social depersonalization scale (the two with the highest Pearson r's) that deal with the concept of being an individual and being treated as one. The two items are:

15. I am receiving individual attention.

29. Right now I feel like an individual.

Factor Five focuses on four items of social depersonalization and one item of alienation. Items 31 and 36 of the social depersonalization scale and item 4 of the alienation scale are set against items 1 and 3 of the social depersonalization scale. This in essence sets distance and cultural estrangement against personal worth and importance. The items are listed as follows:

31. I am sensing a closeness to other people in this setting.

36. I feel distant from other people in here.

4. (alienation scale) I am not much interested in T.V. programs, movies, or magazines that most people seem to like.

VS.

1. I feel important in here.

3. I have a sense of worth in here.

This can be interpreted that a person who scores high on personal worth and importance will score low on distance and cultural estrangement and vice versa.

Factor Six isolates one item in the alienation scale. It is the item on cultural estrangement. This item is number 4 and is listed above. This factor yields very little information.

Alienation Scale. There is an abundance of scales that measure alienation. For the purposes of this research three possibilities were considered: (1) the scale designed by Dwight G. Dean (Dean, 1961), (2) the scale designed by Neal and Rettig (1963), and (3) the rather brief scale designed by Middleton (1963).

Dean's scale measures powerlessness, normlessness, and social isolation and consists of 24 items. The Neal and Rettig scales measure four variants: powerlessness, meainglessness, and social isolation and consists fo 36 items.

Since the major interest here is not in the area of alienation and the focus of our research is on social depersonalization rather than on alienation, a shorter, more general alienation scale, that of Russell Middleton was chosen. Part of the consideration here was the fear of possible test fatigue for the respondents closen in the sample. The social depersonalization scale consisted of 36 items. Add to this the demographic information and the items designed to measure the consequences of social depersonalization and the questionnaire becomes quite long. It seemed logical, therefore, to choose the more brief Middleton scale.

The scale devised by Russell Middleton (1963:973) is a brief scale consisting of only six items. Its brevity is defended on the basis that alienation may be tested as a general concept. Middleton, pointing out that there is a multiplicity of meanings attached to the concept of alienation, bases his study on a hypothesis that different types of alienation are correlated with each other. He further hypothesized that "each type of alienation is directly related to those disabling social conditions that limit or block the attainment of culturally valued objectives."

Middleton tested two of the most important disabling conditions in American society, low educational attainment and subordinate racial status. The study was done in 1962, in a central Florida city of 18,000 residents. All the residents above 20 years of age were enumerated and a random sample of 256 was drawn. An additional 50 Negroes were added to the sample so that the total sample included 207 whites and 99 Negroes.

The scale which was constructed included six items. Each item in the scale represented a particular area of alienation. Middleton formulated a single attitude statement for each of the variants of alienation, yet he concluded that single items were useful for his exploratory analysis. The interview schedule contained the six items dealing with alienation; however, they were interspersed with a large number of unrelated questions. Each respondent was asked to agree or to disagree with the statements; even when they did not fully agree or completely disagree with any of the statements, they were asked to tell whether they tended more to agree or tended more to disagree. Each agreement to a response was taken as an indication of alienation.

The statistical data were analyzed by using the Chi Square test of significance and Yule's coefficient of association. The scale to measure each area of alienation is listed below:

(1) Powerlessness. "There is not much that I can do about most of the important problems that we face today."

(2) Meaninglessness. "Things have become so complicated in the world today that I really don't understand just what is going on."

(3) Normlessness. "In order to get ahead in the world today, you are almost forced to do some things which are not right."

(4) Cultural estrangement. "I am not much interested in the TV programs, movies, or magazines that most people seem to like."

(5) Estrangement from work. "I don't really enjoy most of the work that I do, but I feel that I must do it in order to have other things that I need and want."

(6) Social estrangement. "I often feel lonely."

Middleton found that there are intercorrelations among the types of alienation. There was a moderately strong correlation between each type of alienation and each other type with the exception of cultural estrangement with the Q's ranging from .46 to .81. He found that the type of alienation most highly correlated with other types is estrangement from work with Q's ranging from .57 to .81. He found that cultural estrangement was not highly correlated with other types of alienation; the only statistically significant relation of this variant was with normlessness with a relatively low Q of .31. When cultural estrangement is excluded, the five remaining items constitute a Guttman scale with a coefficient of reproducibility of .90. Middleton draws the conclusion that there exists apparently, an underlying unity.

The alienation scale as it appears in the questionnaire was set up in a manner that it could be responded to in a range of five responses

from "Strongly Agree" to "Strongly Disagree." The scale is found in Appendix C, Student Attitude Inventory, Part II, items 37 through 42.

Having described the measuring instruments which will be used to measure social depersonalization and alienation, the focus of attention is now on the proposed sample of this research project.

Statistical Methods

In order to get the data gathered from the questionnaire into analyzable form, a special coding sheet was developed using a model patterned after such an instrument designed by Dr. Richard Dodder. A copy of this instrument appears in Appendix E. This instrument allows the raw scores from the questionnaire to be translated into a form that makes it easy for key punch operators to convert the data to a machine-readable form. The information provided by each respondent was encoded on standard punch cards which were used for computer processing of the data.

The primary programs used in data analysis were drawn from the Statistical Analysis System (SAS) designed and implemented by Anthony James Barr and James Howard Goodnight of the Department of Statistics, North Carolina State University, Raleigh, North Carolina. The programs were processed through the Oklahoma State University Computer Center.

Two major statistical processes were used to analyze the data: analysis of variance and Pearson's Product Moment. The analysis of variance technique is a statistical process which permits the assessing of significant differences between the means of two groups when comparing them on the same variable (Runyon and Haber, 1975:288). The Pearson r represents the extent to which the same individuals occupy the same

relative position on two separate variables (Runyon and Haber, 1975:128).

Analysis of variance was used in testing the first general hypothesis using experimental and control groups in both the pretest and post test setting. This statistic was also used to analyze the third and fourth general hypotheses to test the differences in means of the experimental pretest and post test groups as well as the control pretest and post test groups on both the social depersonalization and the alienation variables. This statistic was also applied in the testing of the appropriate test variables (hypotheses 12 through 19). All levels of significance are set at P = .05 with a one-tail test.

The Pearson's r statistic was used in testing the second general hypothesis measuring the correlation between social depersonalization and alienation on the total sample (n = 839) and then on each of the four sub-groups of the pretest and post test and experimental and control groups. This statistic was also used to measure the correlation between social depersonalization and its consequences (hypotheses 5 through 11). The Pearson r was applied to the original group (the pretest group) and then to the post test group for replication. This correlation statistic was also applied in the testing of the appropriate test variables (hypotheses 12 through 19). All levels of significance are set at P = .05.

Factor analysis was used to gain more insight into the function of the items in the social depersonalization scale. Two such factor analyses were done. The first was composed of the 36 items of the social depersonalization scale and the six items of the alienation scale. These collapsed into six factors. The second factor analysis was done on just the 36 items of the social depersonalization scale. These items

collapsed into four factors. Information regarding these results is found in Appendix D.

Sample

The design of this research calls for measuring students in higher education in two separate social settings. Each of these social settings and the proposed sample will be described.

Pre-Taped Televised Classroom Instruction Setting

For this research, the plan was to use six sections of Computer Science 2113, Basic Computer Programming, taught at Oklahoma State University. These sections meet the basic requirements of having the lecture material presented by a mechanized process: the TV. It may have one further social depersonalizing element in that it is a course about how to operate (program) machines; and the course is taught through the media of another machine. This course taught in this manner seems especially suited for testing the hypotheses.

The six sections of computer science began classes in the second week in September, 1976. They had been meeting for one and a half weeks when they had their first TV lecture, September 20, 1976. At that time Dr. James R. Van Doren, Associate Professor of Computing and Information Science and Director of the Basic Computer Programming Course, indicated that he could make no predictions about the attendance at those TV sessions. One TV lecture was given on Monday of each week, followed by two lab sessions later in the week at scattered times.

Each of the six lab sections was taught by a different lab instructor. The six lab instructors were graduate assistants. They met as a group each Monday afternoon prior to the TV lecture presentation. Students were assigned to specific time periods to view the pre-taped lecture series. The TV lecture presentations were made in the Math-Statistics Building in special TV auditorium classrooms at the following times:

1:30 p.m., two sections,

2:35 p.m., two sections,

3:40 p.m., two sections.

Each section was assigned one of the graduate assistants to be present at the tape presentation.

The TV taught computer science class had 593 officially enrolled in it as of the third week of school. The number of students receiving grades other than withdrawal totaled 447. These figures were formally stated in a letter to this writer (see Van Doren, 1977:1). According to these figures, 146 students dropped out of the course before its completion. This was a 24.6%, or roughly one fourth, dropout rate.

The sample for this group consisted of 491 who answered the questionnaire on the date of the first TV lecture. There were 23 unusable questionnaires; therefore, there were 468 respondents for the TV group in the pretest. The post test sample consisted of 236 students who answered the questionnaires on the date of the last TV lecture. There were seven unusable questionnaires; therefore, there were 229 respondents for the TV group in the post test. A summary statement is made in the following table for the convenience of the reader.

TABLE IV

SUMMARY OF TV LECTURE SAMPLE

Time	Number Answering Questionnaire	Unusable Questionnaires	Respondents Included in the Sample
Pretest	491	23	468
Post Test	236	7	229

For a more complete description of the TV lecture group sample see the Table of Sample Characteristics (Table VI) which follows later in this section.

Conventional Classroom Setting

For the research, a control group of students in conventional classroom settings was needed. This means that students were enrolled in regular lecture courses with instructors conducting classes in the traditional way. Conventional classroom settings in Computer Science 2113 taught at East Central University, Ada, Oklahoma were tested. These classes were chosen since they are the equivalent courses to the courses taught at Oklahoma State University by the pre-taped TV lecture method of instruction. The questionnaire was given to three sections at East Central University. All three sections were taught by conventional lecture method. This allowed an additional control: TV versus conventional in the same subject area.

The three conventional classes were taught by two instructors at

three different times of the day. One class was offered at 10:30 a.m. and one at 11:30 a.m. on Mondays, Wednesdays, and Fridays taught by the same teacher. The third class was offered at 7:00 p.m. on Monday and Wednesday nights. The two day classes had 31 and 36 members, respectively, and the night class had 21 members officially enrolled at the end of three weeks of school. This is a total of 88 students enrolled in the control group. By the end of the semester, 15 had dropped out of the combined classes, leaving 73 enrolled. This is a dropout rate of 17%.

The sample for this combined group consisted of 78 students who filled out the questionnaire at the first of the semester. There were no questionnaires that had been abused or not filled out; therefore, there were 78 respondents for the conventional lecture pretest. The post test sample consisted of 65 students who answered the questionnaire. There was only one unusable questionnaire; therefore, there were 64 respondents for the conventional lecture in the post test. A summary statement is made in Table V for the convenience of the reader.

TABLE V

SUMMARY OF LECTURE SAMPLE

Time	Number Answering Questionnaire	Unusable Questionnaires	Respondents Included in the Sample
Pretest	78	0	78
Post Test	65	1	64

For a more complete description of the conventional lecture group sample see the Table of Sample Characteristics (Table VI) which follows.

It seems appropriate to point to some differences in these two courses that are not related to instructional method. One major difference is that one-half of the students who take the computer course at Oklahoma State University are required by their various colleges to take it. At East Central University, it is not required by any departments except the Business Administration, Computer Science, and Accounting departments. Most of the students who take the course at East Central University choose it as an elective (sometimes Computer Science is choosen as a minor) while the majority at Oklahoma State University are required to take the course. This may be related to the degree to which social depersonalization increases in the TV-taught group. This will be explored more in the next chapter.

Another difference in the two courses offered at the two universities is that of access to the computer. Oklahoma State University students have access to the computer, but in ways that are more congested than those of East Central University students. East Central University students have access to the computer and the card punch machines and for the most part they are available both day and night. There is hardly any problem getting to the computer immediately and getting output immediately for East Central University students. Oklahoma State University students often must wait in long lines (especially at night) to get their cards read into the computer and then often must wait hours to get the printout sheets. This may be related to the degree to which social depersonalization increases in the TV-taught group.

TABLE VI

TABLE OF SAMPLE CHARACTERISTICS

Item	OSU TV Pretest	ECU Conventional Pretest	OSU TV Post Test	ECU Conventional Post Test
Sex				
Male	355 (75.855)	46 (58.974)	172 (75.109)	34 (53.125)
Female	113 (24.145)	32 (41.026)	57 (24.891)	30 (46.875)
Age				
16 to 20	300 (64.103)	37 (47.436)	134 (58.515)	30 (46.875)
21 to 25	139 (29.701)	23 (29.487)	77 (33.624)	21 (32.813)
26 to 35	26 (5.556)	15 (19.231)	15 (6.550)	12 (18.750)
36 to 45	2 (0.427)	2 (2.564)	3 (1.310)	1 (1.563)
46 or over	1 (0.214)	1 (1.282)	0	0
Race				
Black	14 (2.991)	1 (1.282)	2 (0.873)	2 (3.125)
Indian	8 (1.709)	2 (2.564)	2 (0.873)	3 (3.125)
Oriental	13 (2.778)	0	6 (2.620)	0
White	418 (89.316)	75 (96.154)	215 (93.886)	60 (93.750)
Other	15 (3.205)	0	4 (1.747)	0
Religious Preference				
Catholic	72 (15.385)	5 (6.410)	35 (15.284)	4 (6.250)
Jewish	4 (0.855)	0	0	0
Protestant	269 (57.479)	60 (76.923)	138 (60.262)	48 (75.000)
Other	86 (18.376)	10 (12.821)	33 (14.410)	8 (12.500)
None	37 (7.906)	3 (3.846)	23 (10.044)	4 (6.250)
Year in School				
Freshman	49 (10.470)*	5 (6.410)	21 (9.170)	2 (3.125)
Sophomore	190 (40.598)	24 (30.679)	97 (42.358)	22 (34.375)
Junior	140 (29.915)	34 (43.590)	59 (25.764)	24 (37.500)
Senior	58 (12.393)	13 (16.667)	33 (14.410)	14 (21.875)
Other	31 (6.624)	2 (2.564)	19 (8.297)	2 (3.125)

TABLE VI (Continued)

Item	OSU TV Pretest	ECU Conventional Pretest	OSU TV Post Test	ECU Conventional Post Test
Socio-Economic Status				
Lower	64 (13.675)	24 (30.769)	29 (12.664)	17 (26.563)
Middle	227 (48.504)	38 (48.718)	98 (42.795)	33 (51.563)
Upper	177 (37.821)	16 (20.513)	102 (44.541)	14 (21.875)
Grade Point Average				
0 to 1.9	17 (3.632)	3 (3.846)	2 (0.873)	0
2.0 to 2.9	199 (42.521)	26 (33.333)	72 (31.441)	31 (48.438)
3.0 to 3.5	143 (30.556)	38 (48.718)	85 (37.118)	25 (39.063)
3.6 to 4.0	109 (23.291)	11 (14.103)	70 (30.568)	8 (12.500)
Status in School				
International Student	**	**	15 (6.550)	0
Oklahoma Student	**	**	200 (87.336)	63 (98.438)
Out-of-State Student	**	**	14 (6.114)	1 (1.563)

*Percentages are in parentheses.

**Was not tested.

One other difference is that the East Central University students had access all semester to their computer, an IBM Model 1130. The Oklahoma State University students had their semester interrupted by the changeover from an IBM Model 360 computer to the IBM 370. This, too,

may have had an effect on the increase in social depersonalization. The focus now turns to the administration of the questionnaire.

Administration of Questionnaire

Since the administration of a questionnaire can yield some important information about the study, a special section in this chapter is devoted to the two occasions in which the questionnaires were administered both to the Oklahoma State University computer classes and to the East Central University computer classes. This can be important information even though it does not lend itself to statistical analysis since it is not quantitative data.

East Central University Classes

The questionnaires were given the first time to the three computer science classes at East Central University, September 22, 1976. This was the same week that the questionnaires were given the first time to the TV-taught computer science classes at Oklahoma State University. They were administered near the end of each of the three class sessions after the teacher had lectured. In order to keep intrusion into the research setting at a minimum and to insure uniform administration of the questionnaires at both institutions of higher learning, the Directions for Administering the Student Attitude Inventory was read by this researcher to the students in the class (see Appendix F).

The students appeared cooperative and worked silently until all the others had finished. In each case the instructor asked if they were all finished and then dismissed them. Two students in one class and three in another expressed a passing interest in what was being measured.

They did not seem to mind when they were told that that information would be available at a later time. It seemed important to this researcher to say as little as possible in light of the fact that a post test would be given to these same groups of students near the end of the semester.

The same questionnaires were given to these same three classes, December 8, 1976. This was the same week that the questionnaires were also given to the TV-taught classes at Oklahoma State University. This post test administration was essentially the same as the pretest one, basically uneventful. Only one questionnaire from this group was unusable. The front and back pages had been filled out but the entire center four pages were left blank. One could easily say that the administration of the questionnaire was almost ideal.

Oklahoma State University Classes

The administration of the questionnaires to the computer science classes using the TV instructional method was quite different from that of the three classes cited above. This was basically due to the different natures of the two classes. The TV-taught class was divided into six sections meeting at three different time periods under the direction of six graduate assistants. At each time period on Mondays when the TV lectures were given by TV, the students met in the two TV lecture rooms at each end of the Math-Science Building on the first floor. The rooms are arranged in tiers in a semicircle, amphitheater style. There are seven television receivers scattered about the room in strategic places. This writer moved about in the room and determined that any student

could view at least one, some places even three, of the receivers with ease. Three of the receivers are black and white while the remaining four portray programs in color.

A brief description of the taped programs produced for the classes would be in order. From this writer's point of view, they were excellent. They were produced in color and were well done. The film had sub-titles and the narration was clear and articulate. The first film was elementary, but not boring. It used cartoons, props, and overlays. In general it was entertaining. It was fast-moving and communicated specific points and ended with a clever summary. The first TV lecture was 22 minutes in length. For the details on the establishment of the course and the early development of the pre-taped lectures, the reader is directed to Dr. Eugene Bailey's doctoral dissertation (Bailey, 1971).

It seems important to make a point here. It appears to this writer that any depersonalizing effects that appeared in this sample would have to be due to the actual social situation and the media, not due to the program content or actual presentation of the lecture material since the pre-taped lecture was well done, clever, entertaining, clear and understandable.

The first TV presentation for the six sections of the computer science class was given September 20, 1976 in the three regular afternoon time slots. This writer sat through two of the presentations. Prior to the first presentation, this writer attended the lab instructor's meeting directed by Dr. Van Doren. After a briefing on ordinary course matters, they were told of their role in administering the questionnaires. Graduate assistant Mr. Linney Norris was made responsible for gathering the completed questionnaires from the other lab instructors to

be returned to this researcher.

The TV class started without any formal statement by the graduate assistant. The TV sets were already turned on and at the time for class to begin the program came on in full color and full volume. During the first five minutes of the film, there were some distractions with students wandering in and out of the room. This writer was aware that approximately 70 to 75% of the class watched the entire 22 minute program fairly intently. The remaining students were doing other things. One student went to sleep. Two students sitting in front of this writer noisily clipped their fingernails. Several read the school newspaper. Some talked rather loudly and could be heard at any point in the room. During the lecture eight students left the room at various times.

As soon as the program was over, the TV receivers were turned off automatically. The graduate assistant then went to the front, read the instructions for administering the questionnaire (Appendix F), and had some of the students help pass them out to the class. Several people left the room without answering even one item on the questionnaire. As students finished, most left the room. This writer made it a point to visit informally about the first TV lecture with some of the last ones to finish in each class. Some indicated they liked it, many indicated they did not like it and some simply seemed indifferent.

One startling fact become noticeable in these informal chats, the international students seemed inordinately favorable toward the TV lecture and the social setting. Since there was no way to control for this information in this early pretest, this writer feels valuable information was lost. As a result of this experience, an item to control for the cultural differences in international students was

included in the post test questionnaire (see item 8, Part I of Appendix C). The results from the data gathered on this item will be dealt with in a later chapter of this research report.

The administration of the questionnaire to the post test group was done December 6, 1976. This was the date scheduled for the final TV presentation to the six sections. This writer again met with Dr. Van Doren and his graduate assistants. At this meeting, just prior to the first class time, Dr. Van Doren reported that the last TV tape was unfinished due to technical difficulties. The graduate assistants were instructed to meet with their students, tell them of the unfinished tape, make some announcements regarding the final exam, and administer the post test questionnaires. At this graduate assistants' meeting it was learned that the attendance at the TV lectures had dropped to 50% or less as the semester drew to a close. One of the graduate assistants who directed one of the 3:40 p.m. sessions reported that he had from 35 to 40 students attending in the early part of the semester, but only six were attending regularly near the end of the semester. One graduate assistant's explanation for the low attendance was that the students could get their information other places than the TV class. Dr. Van Doren replied that much of their "outside" information was misinformation.

At the TV lecture meetings, the students were told that they were to report on how they felt about the use of TV in that course. Then they were read the same instructions (Appendix F) for responding to the questionnaire that had been used in the pretest. Almost all the students finished the questionnaires in less than 20 minutes and left. Again this writer talked to several of the students in the various

sections. The most dramatic impression was that at this later testing students seemed more hostile and aggressive. There were students who seemed indifferent to the TV instructional technique and some who reported they liked it. But the overriding impression was one of students who felt negative about it, uncomfortable in it, and aggressive toward it. This general impression of hostility was supported by some of the obscene and negative remarks made on the questionnaire. None of these types of extraneous remarks appeared on any of the questionnaires in the TV group pretest; however, they were quite conspicuous on the post test questionnaires (approximately 10%). Even though there were not a great number of remarks, they were severe, harsh, and written large and boldly on the papers. This is interesting information in light of the fact that no remarks were made on any of the pretest or post test questionnaires of the conventional instruction type classes at East Central University.

In general, it is this researcher's impression that the post test TV-taught group displayed behavior and made comments that appeared to embody the general ideas of social depersonalization more than they did at the pretest time. This seems especially significant since this writer predicted that this post test group would be less socially depersonalized than the pretest group. It is acknowledged that there is a strong possibility of subjective bias on the part of the researcher present. Nonetheless, it appears important to convey these impressions even in the light of their subjective nature.

Summary

The basic research design presented in this chapter identifies

social depersonalization as the dependent variable and the type of instructional setting and time as the independent variables. The scale to measure social depersonalization, developed by this writer, has been tested and supported by both face validity and construct validity. It has been tested and supported by reliability measures. The alienation scale used is the one developed by Middleton. The two sampling groups have been described. The East Central University computer classes, taught by traditional classroom techniques are contrasted with the Oklahoma State University computer classes, taught by the television instructional technique.

CHAPTER V

DESCRIPTION AND DISCUSSION OF THE FINDINGS

Introduction

The purpose of this chapter is to interpret the research findings in terms of the degree to which they support or refute the hypotheses and theories of this study. Each hypothesis or sub-hypothesis is stated, followed by a presentation in table form of the statistical analysis of the data. A discussion of each supported or rejected hypothesis will be made in terms of the rationale and model of this research.

Instructional Method and Social Depersonalization

The hypotheses analyzing the effect of instructional method on social depersonalization are as follows:

H_1: Groups taught by the pre-taped closed circuit television instruction method will be more socially depersonalized than groups taught by the conventional classroom instruction method.

H_{1A}: The group taught by the pre-taped closed circuit television instruction method will be more socially depersonalized early in the semester than the group taught by the conventional classroom instruction method at that same time.

TABLE VII

ANALYSIS OF VARIANCE FOR INSTRUCTIONAL METHOD AND SOCIAL DEPERSONALIZATION PRETEST

Source	df	M.S.	F	P
Group	1	54125.7192	136.3171	.0001
Residual	544	397.0575		

Group	N	Mean Social Depersonalization
TV-Taught	468	108.0042
Conventional-Taught	78	79.5512

The difference of means between the two groups is signfiicant at the .0001 level. The hypothesis for the pretest group is supported. This is in keeping with the theoretical model that social situations do produce social depersonalization. It is in the direction predicted; that is, the mechanized learning situation is more depersonalizing than the conventional learning situation. The difference in the two means is apparent in the above table. The mean for the TV-taught group at Oklahoma State University (108) is 29 points greater than the conventionally-taught group at East Central University (79.5) on the social depersonalization variable. The focus now turns to the post test group.

H_{1B}: The group taught by the pre-taped closed circuit television instruction method will be more socially depersonalized late in the semester than the group taught by the conventional classroom instruction method at the same time.

TABLE VIII

ANALYSIS OF VARIANCE FOR INSTRUCTIONAL METHOD AND SOCIAL DEPERSONALIZATION POST TEST

Source	df	M.S.	F	P
Group	1	51224.2458	74.5102	.0001
Residual	291	687.4798		

Mean	N	Mean Social Depersonalization
TV-Taught	229	114.4541
Conventional-Taught	64	82.4531

The difference of means between the two groups for the post test is significant at the .0001 level. The hypothesis for the post test is supported. It is in the direction predicted. The model suggested that at any given time, early or late in the semester, the mechanized learning situation would be more depersonalizing than the conventional learning situation. The data supports this and the first general hypothesis is confirmed by the original group (pretest) and the replication group (post test).

Social Depersonalization and Alienation

The null hypotheses analyzing the relationship between the scores on the social depersonalization variable and the scores on the alienation varaible are as follows:

H_2: There is no correlation between social depersonalization and alienation.

TABLE IX

MEANS AND STANDARD DEVIATION FOR ALIENATION AND SOCIAL DEPERSONALIZATION

Variable	N	Mean	S.D.
Depersonalization	839	105.1704	25.0005
Alienation	839	15.6126	4.1123

A significant correlation was found between these two variables ($r = .2758$) at the .01 level. The null hypothesis is rejected. The test result is interpreted that as one tends to score high on social depersonalization, he will tend to score high on alienation. It should be noted, however, that there is little or no substantive significance with an $r = .27$. Note, too, that the amount of explained variation is extremely low ($r^2 = .0760$). This means that only 7.6% of the variation in social depersonalization is due to the variation in alienation. This further means that there is 92.4% of the variation in social depersonalization that cannot be explained by the variation in alienation. A further explanation regarding the relationship of these two variables will follow the report on the four sub-hypotheses.

H_{2A}: There is no correlation between social depersonalization and alienation in the TV-taught pretest group early in the semester.

TABLE X

MEANS AND STANDARD DEVIATION FOR ALIENATION AND SOCIAL DEPERSONALIZATION IN THE TV-TAUGHT PRETEST GROUP

Variable	N	Mean	S.D.
Depersonalization	468	108.0042	20.2092
Alienation	468	15.6153	4.0739

A significant correlation was found between these two variables in this group ($r = .2389$) at the .01 level. The null hypothesis is rejected. The rather low Pearson's r indicates little or no substantive significance. The amount of explained variation ($r^2 = .0570$) is low with only 5.7% of the variation in social depersonalization being explained by the variation in alienation. Unexplained variation ($1 - r^2 = .943$) is high at 94.3%.

H_{2B}: There is no correlation between social depersonalization and alienation in the conventionally taught pretest group early in the semester.

TABLE XI

MEANS AND STANDARD DEVIATION FOR ALIENATION AND SOCIAL DEPERSONALIZATION IN THE CONVENTIONALLY-TAUGHT PRETEST GROUP

Variable	N	Mean	S.D.
Depersonalization	78	79.5512	18.1162
Alienation	78	14.5128	4.0986

A significant correlation was found between these two variables in this group ($r = .5983$) at the .01 level. The null hypothesis is rejected. There is moderate substantive significance. The amount of explained variation ($r^2 = .3579$) is greater than for any of the other three groups in the pretest-post test sub-division. For this group 35.79% of the variation in social depersonalization is due to the variation in alienation. The unexplained variation is 64.2%. One might point out that one of the reasons for this rather high Pearson's r is that the mean for alienation is almost identical in the TV-taught group ($\bar{x} = 15.6153$) and the conventionally-taught group ($\bar{x} = 14.5128$). However, the means on the social depersonalization variable is much lower for the conventionally-taught group (79.5512) than the TV-taught group (108.0042). This means that there is not as great a disparity between the social depersonalization mean and the alienation mean for the conventionally-taught group as the TV group.

H_{2C}: There is no correlation between social depersonalization and alienation in the TV-taught post test group late in the semester.

TABLE XII

MEANS AND STANDARD DEVIATION FOR ALIENATION AND SOCIAL DEPERSONALIZATION IN THE TV-TAUGHT POST TEST GROUP

Variable	N	Mean	S.D.
Depersonalization	229	114.4541	27.5379
Alienation	229	15.9607	4.2336

A significant correlation was found between the two variables for this group ($r = .2482$) at the .01 level. The null hypothesis is rejected. There is little or no substantive significance. Explained variation ($r^2 = .061$) is low with only 6.1% of the variation in social depersonalization being explained by the variation in alienation with the balance, 93.9%, being unexplained.

H_{2D}: There is no correlation between social depersonalization and alienation in the conventionally-taught post test group late in the semester.

TABLE XIII

MEANS AND STANDARD DEVIATION FOR ALIENATION AND SOCIAL DEPERSONALIZATION IN THE CONVENTIONALLY-TAUGHT POST TEST GROUP

Variable	N	Mean	S.D.
Depersonalization	64	82.4531	20.7616
Alienation	64	15.6875	3.8167

A significant correlation was found between the two variables for this group ($r - .3443$) at the .01 level. The null hypothesis is rejected. There is only a little substantive significance. Explained variation is low ($r^2 = .1185$) with only 11.85% of the variation in social depersonalization being explained by the variation in alienation. The unexplained variation is still large at 88.15%.

It will become clear to the reader that the second general null

hypothesis and the four null sub-hypotheses generated from it are dramatically rejected. These hypotheses have grown out of the basic theoretical model proposed in Chapter III. The findings are not as contrary to the model as one might conclude by simply seeing their rejection. It has been argued that social depersonalization is a separate variable from alienation. The two can be entirely separate and still be related. In fact, due to the similar nature of the two, one would expect that there would be some degree of association between the two. This data confirms that. However, it, in fact, fairly well supports the notion that the two are actually separate variables. A careful look at the substantive significance of each of the Pearson correlations will indicate that there is little or no significance in the combined group and three of the sub-groups. Only one group showed moderate substantive significance.

A careful perusal of the explained variation in each case reveals that as little as 5% and no more than 11% of the variation in one variable is due to the variation in the other. The one exception to this is the 35% explained variation in the pretest conventionally-taught group.

The information gathered here, coupled with the other data from the study, supports the claim that the social depersonalization variable is in fact separate from the alienation variable. Further evidence to support this may be found in the section just below which deals with these two variables in relationship to time.

Social Depersonalization and Alienation as Functions of Time

The hypotheses analyzing the variables of social depersonalization and alienation as functions of time are as follows:

H_3: Social depersonalization is a function of time: the longer one remains in a socially depersonalizing social setting, the less socially depersonalized he will become.

H_{3A}: The TV-taught pretest group will be more socially depersonalized than the TV-taught post test group.

TABLE XIV

ANALYSIS OF VARIANCE FOR SOCIAL DEPERSONALIZATION OF THE TV-TAUGHT PRETEST AND POST TEST GROUPS

Source	df	M.S.	F	P
Pretest-Post Test	1	6396.6288	12.2258	.0008
Residual	695	523.2069		

Group	N	Mean Social Depersonalization
TV Pretest	468	108.0042
TV Post Test	229	114.4515

The hypothesis is rejected. The difference of means between the two groups is significant at the .0008 level. However, it is in the opposite direction than it was predicted. As illustrated in Table XIV above, the TV-taught class had a lower mean ($\bar{x}$ = 108.0042) at the first

part of the semester than it did at the last part of the semester ($\bar{x}$ = 114.4515). The average student's score increased six and one-half points over the period of time. It was predicted that the average score would decrease. It was predicted that even though it would decrease for this group the mean for the TV group would still be higher than the mean for the conventionally-taught class. It was higher, but it had increased rather than decreased.

There is a basic problem at this point regarding a rational explanation for this happening. The reader will recall that this hypothesis grew out of the exploratory study with an East Central University TV-taught geography class. Contrary to the prediction in that pilot study, the TV-taught students were not significantly more socially depersonalized than the conventional class. The scale was given at near mid-semester. One conclusion that this writer could draw from that data was that the students in that TV class may have started out socially depersonalized and then adapted to the social setting, thereby reducing the depersonalizing effects. One conclusion now available is that the TV-taught geography class may never have been socially depersonalized. Students in that course did have an option to take the same geography class at another hour taught in the conventional manner.

Bailey's (1971) report of the student attitudes toward the early TV-taught computer science course at Oklahoma State University showed that students generally had favorable attitudes toward the TV situation (suggesting they were probably not feeling the pains of social depersonalization). The reader needs to be aware that in that study, the students volunteered to go into the TV-taught class. They had the

option to stay in the conventionally-taught class. The TV-taught class used in this pretest, post test study has no conventionally-taught counterpart. The students who want to take the computer science class 2113 must take it by the TV-taught method. It may be this lack of choice that caused the social depersonalization to increase by the end of the semester. This course is a prerequisite for all other computer science courses taught at Oklahoma State University. Some students can "test out" of the class if they have had computer science in high school or in some junior college; some others may choose to take the course by individual study through a programmed learning process. Approximately 35 took it by this method during the semester of this research project. If a student felt "trapped" in a required course that was necessary for pursuing his academic career, and if that course was also a mechanized learning situation, the student could conclude as the semester progressed that he "really didn't count."

Another explanation suggested by Dr. Van Doren, focuses on two elements: (1) the amount of material covered at the time of the pretest and (2) the increase in the level of frustration at the time of the post test.

At the time of the pretest, the TV-taught students had not had significant experience with designing, implementing and testing computer programs. They had not yet experienced the frustrations of "de-bugging" programs, waiting in line to use the key punch machines, waiting in line to use the card reading machine, and waiting long periods of time to get their programs printed out. As mentioned in Chapter IV, there was also a computer change in the middle of the semester which caused a disruption in the mode of operation of the students.

Since the course focuses on being a problem solving course and not on the rote memorizing of material, the more significant problem solving aspects are dealt with in the latter part of the course. It is possible that the increase in measured social depersonalization may be a manifestation of frustrations experienced by those students at the time of the post test since at the time of the pretest none of these elements had been experienced to any significant degree.

H_{3B}: There is no significant difference in the means of student scores on the social depersonalization variable in the pretest group and the post test group instructed by conventional techniques.

TABLE XV

ANALYSIS OF VARIANCE FOR SOCIAL DEPERSONALIZATION OF THE CONVENTIONALLY-TAUGHT PRETEST AND POST TEST GROUPS

Source	df	M.S.	F	P
Pretest-Post Test	1	296.0289	.7905	.6209
Residual	140	374.4797		

Group	Mean N	Social Depersonalization
Conventional Pretest	78	79.5513
Conventional Post Test	64	82.4531

The null hypothesis is supported. The difference of means for this group at the two separate times is not significant. They began the

semester with low depersonalization scores and ended it very close to the same way. Even though it is not significant, it is interesting to note a slight increase in means for the post test group ($\bar{x}$ = 82.4531) over the pretest group ($\bar{x}$ = 79.5513). Though not significant, it is in the same direction as the hypothesis tested above in Table XIV. Since this group is not identified as a socially depersonalizing setting, one could not predict the direction of any changes in social depersonalization were they to occur.

H_4: There is no significant difference in the means of student scores on the alienation variable.

H_{4A}: There is no significant difference in the means of student scores on the alienation variable in the pretest group and the post test group instructed by the closed circuit TV techniques.

TABLE XVI

ANALYSIS OF VARIANCE FOR ALIENATION OF THE TV-TAUGHT PRETEST AND POST TEST GROUPS

Source	df	M.S.	F	P
Pretest-Post Test	1	18.3348	1.0765	.3002
Residual	695	17.0323		

Group	Mean / N	Alienation
TV Pretest	468	15.6154
TV Post Test	229	15.9607

The null hypothesis is supported. The difference of means for this group at the two separate times is not significant. The group scored essentially the same on the alienation variable on the first day of the TV lecture as they did on the last day.

H_{4B}: There is no significant difference in the means of student scores on the alienation variable in the pretest group and the post test group instructed by conventional techniques.

TABLE XVII

ANALYSIS OF VARIANCE FOR ALIENATION OF THE CONVENTIONALLY-TAUGHT PRETEST AND POST TEST GROUPS

Source	df	M.S.	F	P
Pretest-Post Test	1	48.5093	3.0713	.0781
Residual	140	15.7946		

Group	Mean N	Alienation
Conventional Pretest	78	14.5128
Conventional Post Test	64	15.6875

The null hypothesis is supported. The difference of means for this group at the two separate times is not significant at the .05 level of significance. The fact that it has a probability of .07 is not adequate for rejecting the null hypothesis.

Some comments regarding the information gathered from hypotheses H_3 and H_4 are in order at this point. This information lends support to the argument posited in Chapter III that social depersonalization is temporary and based on the social setting while alienation is more permanent in nature and independent of social setting. It has been argued in the conceptual model that social depersonalization is a situational trait while alienation is a personality trait. Evidence from these two hypotheses and their sub-hypotheses support this contention.

The Consequences of Social Depersonalization

The hypotheses analyzing the consequences of social depersonalization in the educational setting are as follows:

H_5: The greater the degree of social depersonalization, the less the student is likely to feel that he will finish the course.

TABLE XVIII

MEANS AND STANDARD DEVIATION FOR SOCIAL DEPERSONALIZATION AND FINISHING THE COURSE (ORIGINAL GROUP)

Variable	N	Mean	S.D.
Depersonalization	546	103.9396	22.2630
Finish the Course	546	4.5495	0.6484

A significant correlation was found between social depersonalization and an intention to finish the course in the original pretest group ($r = -.1052$) at the .01 level of significance. The hypothesis is confirmed. It is in the direction predicted in the model (negative direction). This indicates that as the social depersonalization score goes up, the "intention to finish the course" score goes down. It is to be noted, however, that there is little or no substantive significance. There is very little explained variation ($r^2 = .011$) with only 1.1% of the variation in intention to finish the course being explained by the variation in social depersonalization. This leaves 99% of the variation unexplained. A replication of this data is given in the following table using the same group of people as the sample in the post test group.

TABLE XIX

MEANS AND STANDARD DEVIATION FOR SOCIAL DEPERSONALIZATION AND FINISHING THE COURSE (REPLICATION)

Variable	N	Mean	S.D.
Depersonalization	293	107.4642	29.3351
Finish the Course	293	4.4402	.6829

A significant correlation was found ($r = -.1248$) at the .03 level of significance. While not as high in significance as the original group, this correlation is in the direction predicted in the model. This replication confirms the hypothesis that the greater the degree of

social depersonalization the less likely the person will feel that he will finish the course.

As an additional element to support this hypothesis, the dropout rate between the two types of instructional methods is presented in the following table.

TABLE XX

STUDENTS WITHDRAWING FROM THE TWO TYPES OF COURSES

	TV-Taught	Conventional-Taught
Original Enrollment*	593 (100%)**	88 (100%)
Students Completing the Course	447 (75.4%)	73 (83%)
Dropouts	164 (24.6%)	15 (17%)

*This is the official enrollment as of the third week of classes at both OSU and ECU.

**Van Doren, 1977:1.

Due to legal restrictions, there is no way to determine for either group how many students dropped out of the course without officially withdrawing from it. Since these students usually receive a failing grade, the information is unavailable for this study. Note, however, from the information in the above table that a greater percentage from the TV-taught classes (24.6%) officially dropped out than the percentage from the conventionally-taught classes (17%). The drop out rate is high for the conventional as well as the TV-taught course. This may be due

in part to the fact that both courses are problem solving courses.

H_6: The greater the degree of social depersonalization, the less the student will like the class.

TABLE XXI

MEANS AND STANDARD DEVIATION FOR SOCIAL DEPERSONALIZATION AND LIKING THE CLASS (ORIGINAL GROUP)

Variable	df	Mean	S.D.
Depersonalization	546	103.9395	22.2630
Liking the Course	546	12.9616	3.8428

A significant correlation was found ($r = -.6002$) at the .0001 level of significance between social depersonalization and liking the class. The hypothesis is confirmed. It is in the direction predicted in the model (negative direction). This indicates that as a person's social depersonalization score goes up, his liking for the course goes down and vice versa. The substantive significance for this size sample is moderately high. The amount of explained variation ($r^2 = .3602$) is substantial with 36% of the variation in "liking the class" due to the variation in social depersonalization. This leaves 64% of the variation unexplained. This is one of the strongest levels of association among the consequence variables. The hypothesis is supported; the higher the social depersonalization, the less one likes the class. See the following table for the replication of this correlation.

TABLE XXII

MEANS AND STANDARD DEVIATION FOR SOCIAL DEPERSONALIZATION AND LIKING THE CLASS (REPLICATION)

Variable	df	Mean	S.D.
Depersonalization	293	107.4641	29.3351
Liking the Class	293	10.5938	5.0925

A significant correlation was found ($r = -.6968$) at the .0001 level of significance. It is in the same direction predicted in the model (negative direction). This replication confirms the hypothesis that the greater the social depersonalization, the less one will like the class. The amount of explained variation is greater in the replication ($r^2 = .4855$) than in the original group ($r^2 = .3602$). In this replication, almost half (48.55%) of the variation in "liking the class" is due to the variation in social depersonalization. This is important information for understanding the relationship between social depersonalization and attitude toward the social setting.

H_7: The greater the degree of social depersonalization, the less the student is likely to feel that he will put forth his best effort in the class work.

A significant correlation was found between social depersonalization and the attitude toward effort in the class in the original pretest group ($r = 0.4982$). The hypothesis is confirmed. This is significant at the .0001 level and is in the direction predicted in the model. This indicates as social depersonalization increases, putting forth effort on classwork will decrease. There is moderate substantive significance and

the amount of explained variation (r^2 = .2482) is roughly 25% leaving the amount of variation in "class effort" 75% unexplained by the variation in social depersonalization. There was a slight increase in the association of the two variables in the replication study shown in Table XXIV.

TABLE XXIII

MEANS AND STANDARD DEVIATION FOR SOCIAL DEPERSONALIZATION AND EFFORT IN CLASSWORK (ORIGINAL GROUP)

Variable	df	Mean	S.D.
Depersonalization	546	103.9396	22.2630
Effort in Classwork	546	6.1630	1.7932

TABLE XXIV

MEANS AND STANDARD DEVIATION FOR SOCIAL DEPERSONALIZATION AND EFFORT IN CLASSWORK (REPLICATION)

Variable	N	Mean	S.D.
Depersonalization	293	107.4641	29.3351
Effort in Classwork	293	5.5324	2.4571

A significant correlation was found (r = -.5363) at the .001 level of significance. It is a slightly higher correlation than the original and is in the direction predicted in the model. This replication confirms the hypothesis that the greater the degree of social depersonalization, the less effort students will likely feel that they will expend in behalf of the classwork. The amount of explained variation for this group (r^2 = .2876) is slightly higher than that of the original group (r^2 = .2482).

Again, the conceptual model is supported by the analysis of the data in this group at both pretest time and post test time. It appears that social depersonalization does, in fact, reduce the feeling of students toward expending effort in class. Again, the contention that social depersonalization produces negative effects is supported.

H_8: The greater the degree of social depersonalization, the less the student is likely to feel a positive attitude toward learning.

TABLE XXV

MEANS AND STANDARD DEVIATION FOR SOCIAL DEPERSONALIZATION AND ATTITUDE TOWARD LEARNING (ORIGINAL GROUP)

Variable	N	Mean	S.D.
Depersonalization	546	103.9395	22.2630
Attitude Toward Learning	546	13.6868	2.7719

A significant correlation was found between social depersonalization and attitude toward learning in the original pretest group ($r = -.6078$) at the .0001 level of significance. The hypothesis is confirmed. It is also in the direction predicted in the model. It has moderately high substantive significance for this sample size. The explained variation ($r^2 = .3694$) accounts for 37% of the variation in attitude toward learning being due to the variation in social depersonalization. Only 63% of the variation is unexplained in the two variables. The correlation increased slightly in the replication study presented in the table depicted below.

TABLE XXVI

MEANS AND STANDARD DEVIATION FOR SOCIAL DEPERSONALIZATION AND ATTITUDE TOWARD LEARNING (REPLICATION)

Variable	N	Mean	S.D.
Depersonalization	293	107.4641	29.3351
Attitude Toward Learning	293	12.0375	4.4401

A significant correlation was found ($r = -.6962$) at the .0001 level of signficance. This indicates that as social depersonalization increases, the positive attitude toward learning decreases. It has moderately high substantive significance. More than 48% of the variation in the attitude toward learning is due to the variation in social depersonalization ($r^2 = .4847$).

If social depersonalization produces negative feelings, one could argue that it would produce negative feelings toward learning in an educational setting. The analysis of the data certainly supports this in the original group and when the group was checked a second time late in the semester.

H_9: The greater the degree of social depersonalization, the less the student is likely to feel that he is getting full knowledge from the course.

TABLE XXVII

MEANS AND STANDARD DEVIATION FOR SOCIAL DEPERSONALIZATION AND ATTITUDE TOWARD KNOWLEDGE (ORIGINAL GROUP)

Variable	N	Mean	S.D.
Depersonalization	546	103.9395	22.2630
Attitude Toward Knowledge	546	9.4872	1.5267

A significant correlation was found between social depersonalization and attitude toward knowledge in the original pretest group ($r = -.2704$) at the .0001 level of significance. The hypothesis is confirmed. It is in the direction predicted in the model; as social depersonalization increases, the positive attitude toward knowledge decreases. There is little or no substantive significance. The amount of variation in "attitude toward knowledge" that is explained by the variation in social depersonalization is 7.3% ($r^2 = 0.731$). This leaves 92.7% of the

variation in the two variables unexplained. The amount of explained variation nearly triples in the replication study described below.

TABLE XXVIII

MEANS AND STANDARD DEVIATION FOR SOCIAL DEPERSONALIZATION AND ATTITUDE TOWARD KNOWLEDGE (REPLICATION)

Variable	N	Mean	S.D.
Depersonalization	293	107.4641	29.3351
Attitude Toward Knowledge	293	8.5222	2.4008

A significant correlation was found ($r = -.4381$) at the .0001 level of significance. It is in the same predicted direction as in the model and in the original (-.2704). It is of slightly moderate significance. The amount of explained variation ($r^2 = .1913$) is much greater, nearly triple, than the explained variation in the original test ($r^2 = .0731$).

The evidence from this analysis of data strongly supports the conceptual model and confirms the hypothesis that social depersonalization produces negative feelings toward getting full knowledge from the educational setting.

H_{10}: The greater the degree of social depersonalization, the less the student is likely to attend class regularly.

There is no significant correlation between social depersonalization and reported attendance in the original pretest group ($r = .0651$) at the .05 level. The hypothesis is rejected. The replication study

showed even a lesser degree of association between these two variables. Note the information in Table XXX.

TABLE XXIX

MEANS AND STANDARD DEVIATION FOR SOCIAL DEPERSONALIZATION AND CLASS ATTENDANCE (ORIGINAL GROUP)

Variable	N	Mean	S.D.
Depersonalization	546	103.9395	22.2630
Class Attendance	546	1.4560	0.6169

TABLE XXX

MEANS AND STANDARD DEVIATION FOR SOCIAL DEPERSONALIZATION AND CLASS ATTENDANCE (REPLICATION)

Variable	N	Mean	S.D.
Depersonalization	293	107.4641	29.3351
Class Attendance	293	1.7269	0.6879

Again, there is no significant correlation between the two variables ($r = .0321$) at the .05 level of significance. The hypothesis is again rejected.

This finding is unexpected in the light of the subjective observation of this researcher. Somewhat at a loss to explain this finding,

a comparison of the two means of the original and replication study on the variable of attendance might shed some light. The means for the original group ($\bar{x}$ = 1.45) is slightly less than for the replication group ($\bar{x}$ = 1.73). This item on the questionnaire has a four point response with 1 being "I never miss class" and 4 being "I seldom ever come to this class." The means for these two different test times both fall somewhere between "I never miss this class" and "I am seldom ever absent from this class." Based on the students' self reports, seldom anyone was ever absent. This is not in keeping with the reports of the instructors of the classes in both institutions of higher learning.

The East Central University class instructors indicated attendance to be fairly good with "light to moderate" absenteeism. Contrasted to this were statements from the director and graduate assistants who managed the TV-taught classes at Oklahoma State University. They reported 50% attendance or less at the TV lectures. One graduate assistant described that one of his TV lecture groups started with 35 or 40 students and had only six attending the TV lectures near the end of the semester.

Dr. Van Doren (1977:1) reported in a letter to this researcher the following:

> I should like to mention that in my opinion the attendance at TV lectures dropped off more than it should have. This may be due in part to the fact that we attempted, for pedagogical reasons, to review carefully in lab sessions many of the important topics covered via the TV lesson. I think some students quit going to TV lectures because of this. If I am correct the number of students responding to your questionnaire may have been substantially lower than the first questionnaire.

Dr. Van Doren's prediction that the number of students responding to the questionnaire might be substantially lower proved correct. In

the TV-taught pretest, 491 students answered the questionnaires. In the TV-taught post test group only 236 answered questionnaires. That is 255 fewer students in the second testing than in the first; this represents a 52% difference in attendance rates. Considering that only 146 students dropped the course, that still leaves a difference of 109 students absent that did not drop, roughly one-fourth absenteeism on the date of the second administering of the questionnaire.

This information poses a problem for the research. Since the reported absences do not correspond with the actual absences, one must conclude that the respondents were not truthful in reporting their absences. If one accepts this position, it leaves the rest of his questionnaire information open to questions regarding the accuracy of the students' reporting. Having taught in higher education for 14 years, this writer believes that of all the items on the questionnaire, the one on absenteeism would most likely be abused. Many times this writer has heard students remark with disbelief, "I wasn't absent that much" or "I didn't realize I missed that many times" when told of their excessive absence rate. This may be a reason for such self reporting on absences. Almost any other explanation eludes this writer.

H_{11}: The greater the degree of social depersonalization, the less the student is likely to feel that he will earn a good grade.

A significant correlation was found between social depersonalization and attitude toward a grade for the course in the original pretest group ($r = .1179$). It is significant at the .006 level and in the direction predicted in the model. This indicates that as social depersonalization increases so does the likelihood that a student will feel that he will make a lower grade than he usually makes (note: see

item #58 on the questionnaire in Appendix C for an understanding of direction). The hypothesis is supported. There is little or no substantive significance. Explained variation (r^2 = .0139) is only 1.3% between the two variables and unexplained variation is 98.7%.

The strength of the association between the two variables increases in the replication study and is shown in Table XXXII.

TABLE XXXI

MEANS AND STANDARD DEVIATION FOR SOCIAL DEPERSONALIZATION AND ATTITUDE TOWARD GRADE (ORIGINAL GROUP)

Variable	N	Mean	S.D.
Depersonalization	546	103.9395	22.2630
Attitude Toward Grade	546	2.1809	0.6341

TABLE XXXII

MEANS AND STANDARD DEVIATION FOR SOCIAL DEPERSONALIZATION AND ATTITUDE TOWARD GRADE (REPLICATION)

Variable	N	Mean	S.D.
Depersonalization	293	103.9395	22.2630
Attitude Toward Grade	293	2.1808	0.6341

A significant correlation was found (r = .4104) at the .0001 level of significance. It is in the same direction predicted in the model. It is a higher correlation than the original group. The amount of explained variation is greater (r^2 = .1684) than the original (r^2 = .0139). In this case approximately 17% of the variation in attitude toward earning a grade in the class is due to the variation in social depersonalization. Again, the hypothesis is supported by the replication study.

Once again, the conceptual model is supported. Social depersonalization does produce negative effects. In this case, as it increases, it tends to affect student attitudes negatively in such a way that they tend to feel that they will earn a lower grade than they usually earn.

The Demographic "Test" Variables

The test for possible "hidden" third variables will be done in terms of the social depersonalization variable over time. A review of the data analysis indicates that this is the area they intervene, explain or specify the conditions under which social depersonalization variable is operative.

H_{12}: There is no statistical difference in means of student scores on the social depersonalization variable between students who are male and those who are female.

A review of Table XXXIII indicates that there is a difference in means on the social depersonalization variable between male and female over time. On this basis the null hypothesis is rejected. The females, not the males, become more socially depersonalized over time. The level of significance is at the .0002 level for females and only .08 for males.

TABLE XXXIII

ANALYSIS OF VARIANCE OF SOCIAL DEPERSONALIZATION IN PRETEST, POST TEST, AND SEX

	N	Mean	F	P
Male				
Pretest	355	106.8309	2.9123	.0845
Post Test	172	110.3605		
Female				
Pretest	113	111.6903	16.19142	.0002
Post Test	57	126.8070		

H_{13}: There is no statistical difference in means of student scores on the social depersonalization variable between students who are in different age levels.

Table XXXIV indicates that there is a difference in means on the social depersonalization variable between age groups over time. On this basis the null hypothesis is rejected. This test specifies that it is the younger age groups (age 16 to 20 and age 21 to 25) that become more socially depersonalized over time. From this analysis, those over age 25 do not become more socially depersonalized as the semester progresses.

H_{14}: There is no statistical difference in means of student scores on the social depersonalization variable between students who are members of different racial groups.

Table XXXV indicates that there is a difference in means on the social depersonalization variable between racial groups over time. On this basis the null hypothesis is rejected. This analysis specifies

TABLE XXXIV

ANALYSIS OF VARIANCE OF SOCIAL DEPERSONALIZATION IN PRETEST, POST TEST, AND AGE

	N	Mean	F	P
Age 16 to 20				
Pretest	300	109.8966	7.91589	.0053
Post Test	134	116.1941		
Age 21 to 25				
Pretest	139	104.5899	6.078	.0138
Post Test	77	113.0129		
Age 26 to 35				
Pretest	26	105.1923	.06913	.7898
Post Test	15	107.6667		
Age 36 to 45				
Pretest	2	87.5000	1.53604	.3037
Post Test	3	107.6666		
Age 46 and Over				
Pretest	1	129.0000	*	*
Post Test	0			

*Number too small to test.

TABLE XXXV

ANALYSIS OF VARIANCE OF SOCIAL DEPERSONALIZATION IN PRETEST, POST TEST, AND RACE

	N	Mean	F	P
Black				
Pretest	14	102.5	.4546	.5173
Post Test	2	91.0		
Indian				
Pretest	8	107.8750	2.0053	.1927
Post Test	2	130.50		
Oriental				
Pretest	13	102.7692	.5875	.5407
Post Test	6	111.500		
White				
Pretest	418	108.4928	9.3324	.0027
Post Test	215	114.3720		
Other				
Pretest	15	104.1333	3.1253	.0919
Post Test	4	127.0000		

that under the condition of being white (P = .0027) social depersonalization becomes greater over time.

H_{15}: There is no statistical difference in means of student scores on the social depersonalization variable between students who have different religious preferences.

This analysis indicates that there is a difference in means on the social depersonalization variable between religious preferences over time (see Table XXXVI). On this basis the null hypothesis is rejected. This analysis appears to specify religious versus non-religious (other religious) as the condition under which social depersonalization increases over time. Catholic (P = .0039) and Protestant (P = .0047) differences are apparent; however, be aware that there was not a large enough sample to test Jewish preference.

H_{16}: There is no statistical difference in means of student scores on the social depersonalization variable between students who have a different number of years of education.

Again, this analysis of the data indicates that there is a difference in means on the social depersonalization variable between students who are in different years in school over time (see Table XXXVII). On this basis the null hypothesis is rejected. Sophomores become more socially depersonalized over time (P = .0004) while the members of the other classes do not. If one notes the means on the social depersonalization variable in Table XXXVII, he will note that all the other groups except the freshmen are in the same direction as the sophomores.

H_{17}: There is no statistical difference in means of student scores on the social depersonalization variable between students who are of different socio-economic status levels.

The analysis of the data in Table XXXVIII indicates that there is a difference in means on the social depersonalization variable between students who are in different socio-economic levels. On this basis the

TABLE XXXVI

ANALYSIS OF VARIANCE OF SOCIAL DEPERSONALIZATION IN PRETEST, POST TEST, AND REGLIGIOUS PREFERENCE

	N	Mean	F	P
Catholic				
Pretest	72	104.5138	8.8808	.0039
Post Test	35	118.1428		
Jewish				
Pretest	4	94.7500	*	*
Post Test	0			
Protestant				
Pretest	269	109.5576	8.1805	.0047
Post Test	138	116.5724		
Other				
Pretest	86	104.7558	.1022	.7485
Post Test	33	106.1212		
None				
Pretest	37	112.4864	.5258	.5219
Post Test	23	108.0869		

*Not able to test.

TABLE XXXVII

ANALYSIS OF VARIANCE OF SOCIAL DEPERSONALIZATION
IN PRETEST, POST TEST, AND YEAR IN SCHOOL

	N	Mean	F	P
Freshman				
Pretest	49	103.9597	.14125	.7096
Post Test	21	102.0952		
Sophomore				
Pretest	190	109.5421	14.14451	.0004
Post Test	97	119.9794		
Junior				
Pretest	140	109.7142	.48193	.5045
Post Test	59	112.0508		
Senior				
Pretest	58	106.9655	3.0456	.0806
Post Test	33	117.5454		
Other				
Pretest	31	99.1612	.20521	.6570
Post Test	19	102.0000		

null hypothesis is rejected. The table indicates that it is the lower socio-economic group that becomes more socially depersonalized over time (P = .0017). Both the middle and upper socio-economic groups are in the direction of increasing social depersonalization over time, but not at a significant level, when the means of the two groups are compared.

TABLE XXXVIII

ANALYSIS OF VARIANCE OF SOCIAL DEPERSONALIZATION IN PRETEST, POST TEST, AND SOCIO-ECONOMIC STATUS

	N	Mean	F	P
Lower				
Pretest	64	106.5000	11.0132	.0017
Post Test	29	121.8420		
Middle				
Pretest	227	107.0352	6.28913	.0122
Post Test	98	114.2245		
Upper				
Pretest	177	109.7909	.9868	.6779
Post Test	102	112.5686		

H_{18}: There is no statistical difference in means of student scores on the social depersonalization variable between students who have different overall grade point averages.

The analysis in Table XXXIX indicates that there is a difference in means of student scores on the social depersonalization variable between students who have different overall grade point averages over time. On this basis the null hypothesis is rejected. The table indicates that the group with the grade point average from 2.0 to 2.9 is the group that becomes more socially depersonalized over time (P = .0017). The reader will note that means on the social depersonalization variable increase over time for the other three groups even though not at significant levels.

H_{19}: There is no statistical difference in means of student scores on the social depersonalization variable between native students and international students.

This hypothesis was not tested over time since all of the international students were in the post test group of the TV-taught class. However, it was tested by the analysis of variance statistic by comparing the difference in means between international students, Oklahoma students, and out-of-state students. The 15 international students had a mean on the social depersonalization variable ($\bar{x}$ = 98.3333) that was lower than the Oklahoma students ($\bar{x}$ = 115.8800) and the out-of-state students ($\bar{x}$ = 109.6153). The statistic yielded an F value of 2.22943. This was at the .08 level of signficance. These means strongly indicate, by direction, that international students are not as socially depersonalized as natives. On this basis the null hypothesis is confirmed at the .05 level of significance.

Summary

This chapter has presented the analysis of the research data and an interpretation of it in terms of the research hypotheses and null

TABLE XXXIX

ANALYSIS OF VARIANCE OF SOCIAL DEPERSONALIZATION
IN PRETEST, POST TEST, AND
GRADE POINT AVERAGE

	N	Mean	F	P
Grade Point: 0 to 1.9				
Pretest	17	110.1764	.2457	.6313
Post Test	2	117.5000		
Grade Point: 2.0 to 2.9				
Pretest	199	107.7336	6.3805	.0117
Post Test	72	115.6111		
Grade Point: 3.0 to 3.5				
Pretest	143	110.0769	3.2147	.0706
Post Test	85	115.6823		
Grade Point: 3.6 to 4.0				
Pretest	109	105.4403	2.9814	.0821
Post Test	70	111.6857		

hypotheses. The first general hypothesis and its two sub-hypotheses tested instructional method and social depersonalization. The second general null hypothesis and its four null sub-hypotheses tested the relationship between social depersonalization and alienation. The third general hypothesis and its two sub-hypotheses tested social depersonalization as a function of time. The fourth general null hypothesis and its two null sub-hypotheses tested alienation as a function of time. The next seven hypotheses (H_5 through H_{11}) tested the consequences of social depersonalization. The final eight null hypotheses (H_{12} through H_{19}) tested the demographic variables for possible third "hidden" variables. A summary form of these findings is presented in the following chapter.

CHAPTER VI

SUMMARY AND CONCLUSIONS

Introduction

This study has posited the basic notion that certain social conditions produce discomforting, unpleasant, negative feelings which are temporary in nature and which generally disappear when the person moves out of the social setting. This has been labeled by this writer as social depersonalization. The approach has been to study six sections of a TV-taught introductory computer science class and compare their feelings on the social depersonalization variable with the feelings of students of three conventionally-taught introductory computer science classes. The assumption for the study was that mechanized forms of teaching in higher educational settings would be more socially depersonalizing than conventional forms of teaching.

A description of the development of the social depersonalization scale has been presented along with evidence for its validity and reliability established principally through exploratory pilot studies.

The rationale for the study has been supported by a conceptual model that focuses on personal experiences of this writer in teaching introductory sociology courses by TV for several years.

The sample was composed of an experimental group of Oklahoma State University students in a TV-taught computer class and a control group

of East Central University students in a conventionally-taught computer science class. Both groups were given questionnaires early in the semester and late in the semester.

Summary of the Findings

The presentation of the summary of the findings will be organized in terms of the hypotheses.

Instructional Method and Social Depersonalization

It was predicted that students taught by the TV instructional method would be more socially depersonalized than students taught by conventional classroom methods. This was tested by using the original groups as the test group early in the semester and by using them again as the test group in a replication of the study at the end of the semester. The findings were all in the direction predicted and were all significant at very high levels ($P = .0001$). The prediction is confirmed for the sample.

Social Depersonalization and Alienation

It was predicted that there would be no correlation between social depersonalization and alienation. It was predicted that though these two variables may be related, they are relatively independent. This was tested using Middleton's alienation scale and the social depersonalization scale developed by this writer. The two scales were tested on the entire sample in both the pretest and post test times.

When analyzed, the data proved that indeed the two variables were

related, but that very little variation in one was due to the variation in the other. This indicated that they were relatively independent of each other.

Social Depersonalization and Alienation as a Function of Time

It was predicted that social depersonalization was a function of time, but that alienation was not a function of time. This prediction was based on the assumption that social depersonalization is a situational trait while alienation is a personality trait. The prediction regarding social depersonalization was that it would decrease as persons adapted to their socially depersonalizing setting.

The data were tested using the pretest and post test scores of the two instructional groups. The prediction was confirmed that social depersonalization was a function of time, but not in the direction predicted. It was significant at a high level (.0008) in the opposite direction. The finding is that social depersonalization does increase, not decrease as predicted, with time in a socially depersonalizing setting.

The prediction regarding alienation proved true. It is not a function of time. The alienation variable did not change from early in the semester to late in the semester in any of the groups.

Consequences of Social Depersonalization

It was predicted that social depersonalization would produce a variety of negative attitudes and behaviors in the higher educational setting. For a high degree of social depersonalization, the predicted

consequences are as follows:

1. The student is less likely to feel he will finish the course.
2. The student will like the class less than other students.
3. The student is less likely to feel that he will put forth his best effort in the classwork.
4. The student is less likely to feel a positive attitude toward learning.
5. The student will less likely feel that he is getting full knowledge from the course.
6. The student will attend class less than other students.
7. The student is less likely to feel he will earn a good grade.

All of the findings except one were in the direction predicted and were verified at high levels of significance. The one exception was number six listed above, class attendance. It was not significant. The data for this was gathered from the students' self report on their attendance record for the class. It was found that the self reported attendance rate was not in keeping with the instructors' attendance reports. (They reported 50% absenteeism in the TV-taught lecture series near the end of the semester.)

Demographic "Test" Variables

It was predicted that certain demographic variables would have no effect on the social depersonalization variable. The possible "hidden" third variables are listed as follows:

1. Sex
2. Age
3. Race
4. Religious Preference

5. Year in School
6. Socio-economic Status
7. Grade Point Average
8. Nationality

The test variables were tested on the two groups at pretest time (early in the semester) and at post test time (late in the semester). The predictions did not hold. All of the test variables had some effect on the social depersonalization variable over time. (The one possible exception was nationality. Since there were only 15 international students who were all in the TV-taught post test group, this variable could not be tested over time.)

In the test variable of sex, it was being female that made a difference in social depersonalization over time. In age, it was the two younger groups that increased in social depersonalization over time. In race, it was being "white" that determined increasing social depersonalization over time. In religious preference, it was the preferences for Catholic and Protestant that made the difference. In "year of school" it was the sophomore year that made the difference. It was the "lower" socio-economic class in the socio-economic variable and the average "grade point average" (2.0 to 2.9) that made the difference in the social depersonalization variable over time.

Limitations and Recommendations

It was recognized at the outset of this study that it would be somewhat limited in its scope. The limitations of time, academic processes and the sheer nature of the material studied forced it to be somewhat narrow in scope.

One of the limitations of the study is that one of operating with a newly defined concept. Due to the lack of literature available that deals directly with the concept, new ideas had to be formed and articulated. The literature that was available dealt with the fringe areas of this study's proposed concept, not with its direct nature. Though the literature uses the term, "depersonalization," it uses it in ways other than this writer needed in order to communicate clearly the new concept. As a result, "social depersonalization" was the term chosen. This was done to differentiate it from the medical, psychiatric, and other uses of the term. The term social depersonalization is a long term, and it is recommended that somehow it be shortened or possibly be abbreviated ("S.D." or "SD" are two possibilities).

Another limitation was that of the sample. The TV-taught computer science class at Oklahoma State University served this study well. However, it is limited in that it is only one of the many kinds of mechanized learning situations. It is this writer's recommendation that future studies involve some of the individual learning machines, the programmed textbooks, and the Media Learning Centers (such as that one at Oral Roberts University, Tulsa, Oklahoma).

Still a further related limitation is that of studying mechanized learning situations. The one for this study proved highly successful. However, if social depersonalization does, in fact, exist, and this study certainly supports that, then it must exist in all areas of human movement. Since it has been shown by the exploratory studies, and by this study, to exist in the realm of higher education, it is recommended that it be studied in other areas of human life. Some of those possible areas might include organizations of the military (particularly boot

camp and induction centers), social security number identifications, being billed by banks, businesses and service organizations by computer cards. Another study might be the study of social depersonalization in people who make telephone calls only to be responded to by a recorder. Another area that needs to be researched is nursing homes and the elderly. The areas are infinite; they are bounded only by human imagination and experience.

Another limitation of this study focuses on the difference between the two universities used in the sample. East Central is a small university of just over 3,000 students while Oklahoma State University is six or seven times that size. There might be rural-urban differences that also need to be studied. It is recommended that future studies control for this; although, it is very likely that little or no differences actually exist between the two student bodies.

Another limitation of this study rests in the fact that it is a panel study of limited size. There were only two panels studied: pre-test, on the first day of TV lectures and post test, on the last day of TV lectures. It is recommended that the number of panels be increased to focus on the linear development of social depersonalization in depersonalizing settings.

Another limitation to be cited here is that of the instrument used to measure social depersonalization. The scale has gone through three development stages thus far, but it is not in its ultimate state at this point. It is recommended that further scale development be pursued in future research and that a variety of approaches to measure this new concept be explored. It is possible that some unobtrusive measuring devices could be developed along with some guidelines for getting at

more subjective information in field research.

A final limitation to be cited here is that of a failure to get enough background information on the students in the computer science classes. No attempt was made to find out the major, minor, or vocational plans of the student. It is recommended that future studies control for these elements by getting information regarding current occupational goals, departmental requirements for students enrolled in the course but not majoring or minoring in computer science, and whether the course is an elective or a requirement for the student.

Policy Implications

The results of this study do have possible implications in the field of higher education. The following statements are implications drawn from the study.

The first implication is related directly to the teaching of computer science by TV. It is suggested by this writer that for future classes taught at Oklahoma State University, or elsewhere for that matter, students be given an option to take the class either by the TV-taught instructional method or the conventional method. Some students do not mind and some even enjoy taking TV classes. Others, however, distinctly dislike the TV-taught courses; they should have an opportunity to choose other approaches. It is suggested that such an approach might very well reduce the amount of social depersonalization students experience.

Another implication of this study is that of weighing the costs and benefits of both TV-taught and conventionally taught courses. Those who are in charge of deciding whether TV-taught courses will be offered need

to consider whether the negative effects of such teaching techniques will outweigh the reduced instructional costs. It is conceivable that if several courses were taught by TV, and only by TV, in a university, there might be a reduction in enrollment. The implication of this is that TV-taught courses might in the long run cost more money than they save due to the loss of revenue from students and government agencies.

Another implication is that of the quality of education the student receives. If indeed the TV-instructional method has negative effects on learning, then some of the goals of higher education might be violated by its constant use of such techniques. Though one cannot say conclusively that social depersonalization does cause negative effects, the implications of such a causal relationship is suggested in the model described in Chapter III.

A final implication suggested here is that of the TV instructor's rights. If pre-taped TV lectures are used semester after semester without compensating the instructor, say through residuals, are the rights of that instructor being violated? Pre-taped lectures may free the instructor for other duties; however, if compensation in the form of release time, additional pay, or academic promotions are not made, then the instructor may become the victim of exploitation in a way that professors who do not produce pre-taped lectures are not.

Conclusion

Though this writer agrees that more research is needed, a great deal of information and understanding about human behavior has been derived from this research study. This has been a positive research experience. This researcher is gratified to have taken part in it under

the direction of capable and qualified scholars who have shared in directing this project.

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APPENDIXES

APPENDIX A

FIRST DEVELOPMENT OF THE LIKERT SCALE OF THE SOCIAL DEPERSONALIZATION

The symbols to the left of the statements represent the following:

SA = Strongly Agree

A = Agree

U = Undecided

D = Disagree

SD = Strongly Disagree

PERSONAL INVENTORY

SA A U D SD 1. I feel lost in the mass.

SA A U D SD 2. I believe that I'm just looked on as a "Pawn."

SA A U D SD 3. I am being treated as a number.

SA A U D SD 4. I feel unimportant.

SA A U D SD 5. I have a sense of worth.

SA A U D SD 6. I'm not being taken into account for who I am.

SA A U D SD 7. I feel like a "Human Being."

SA A U D SD 8. I'm being told, not asked.

SA A U D SD 9. Communication is absent.

SA A U D SD 10. I am like a grain of sand on a vast seashore.

SA A U D SD 11. I tend to underestimate myself.

SA A U D SD 12. I feel like I don't exist.

SA A U D SD 13. I feel worthless.

SA A U D SD 14. I'm a "nobody."

SA A U D SD 15. I sense a void.

SA A U D SD 16. I don't mean a great deal to others.

SA A U D SD 17. I am receiving no individual attention.

SA A U D SD 18. I feel distant from other people now.

SA A U D SD 19. Others don't seem important to me.

SA A U D SD 20. There is no give and take in this situation.

SA A U D SD 21. I'm not noticed.

SA A U D SD 22. I have a real awareness for life.

SA A U D SD 23. I feel wanted.

SA A U D SD 24. I sense a closeness to other people.

SA A U D SD 25. My being has no value.

SA A U D SD 26. I feel like an individual.

SA A U D SD 27. I sense fulfillment.

SA A U D SD 28. I am aware of being a unique person.

SA A U D SD 29. I feel ignored.

SA A U D SD 30. No one appreciates me.

SA A U D SD 31. I feel respect.

SA A U D SD 32. I feel I count as a person.

SA A U D SD 33. I feel the relationship here is personal.

SA A U D SD 34. I'm treated as one of the herd.

SA A U D SD 35. I sense that I'm treated as just an object.

SA A U D SD 36. I am treated as less than I am.

APPENDIX B

OSGOOD SEMANTIC DIFFERENTIAL OF THE SOCIAL DEPERSONALIZATION SCALE

INDIVIDUAL ATTENTION

Fair	_____|_____|_____|_____|_____|_____	Unfair
Valuable	_____|_____|_____|_____|_____|_____	Worthless
Unpleasant	_____|_____|_____|_____|_____|_____	Pleasant
Active	_____|_____|_____|_____|_____|_____	Passive
Meaningless	_____|_____|_____|_____|_____|_____	Meaningful
Fast	_____|_____|_____|_____|_____|_____	Slow
Tense	_____|_____|_____|_____|_____|_____	Relaxed
Weak	_____|_____|_____|_____|_____|_____	Strong
Vague	_____|_____|_____|_____|_____|_____	Precise
Deep	_____|_____|_____|_____|_____|_____	Shallow

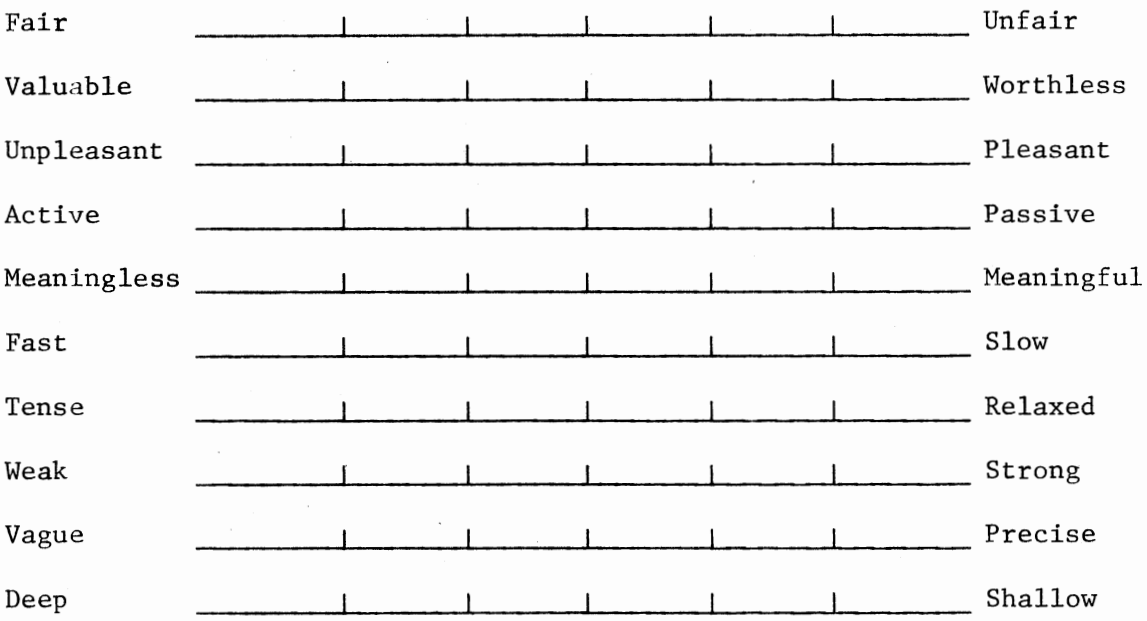
MASS SOCIETY

Fair	_____|_____|_____|_____|_____|_____	Unfair
Valuable	_____|_____|_____|_____|_____|_____	Worthless
Unpleasant	_____|_____|_____|_____|_____|_____	Pleasant
Active	_____|_____|_____|_____|_____|_____	Passive
Meaningless	_____|_____|_____|_____|_____|_____	Meaningful
Fast	_____|_____|_____|_____|_____|_____	Slow
Tense	_____|_____|_____|_____|_____|_____	Relaxed
Weak	_____|_____|_____|_____|_____|_____	Strong
Vague	_____|_____|_____|_____|_____|_____	Precise
Deep	_____|_____|_____|_____|_____|_____	Shallow

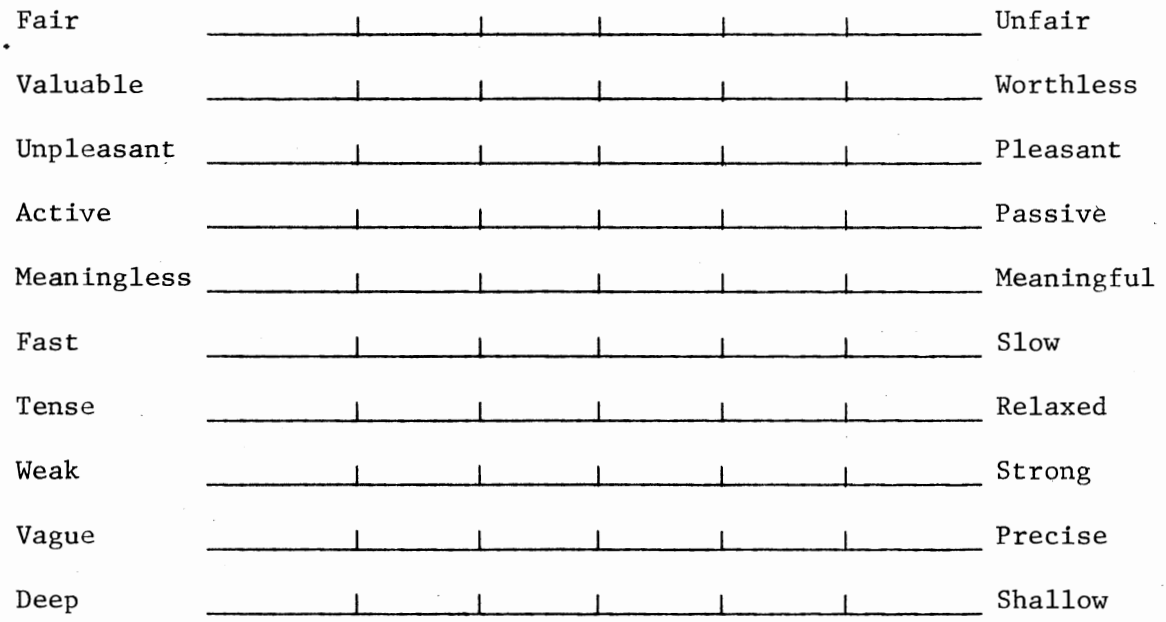
SELF-APPRECIATION

Fair	_____|_____|_____|_____|_____|_____	Unfair
Valuable	_____|_____|_____|_____|_____|_____	Worthless
Unpleasant	_____|_____|_____|_____|_____|_____	Pleasant
Active	_____|_____|_____|_____|_____|_____	Passive
Meaningless	_____|_____|_____|_____|_____|_____	Meaningful
Fast	_____|_____|_____|_____|_____|_____	Slow
Tense	_____|_____|_____|_____|_____|_____	Relaxed
Weak	_____|_____|_____|_____|_____|_____	Strong
Vague	_____|_____|_____|_____|_____|_____	Precise
Deep	_____|_____|_____|_____|_____|_____	Shallow

NON-BEING


Fair
Unfair
Valuable
Worthless
Unpleasant
Pleasant
Active
Passive
Meaningless
Meaningful
Fast
Slow
Tense
Relaxed
Weak
Strong
Vague
Precise
Deep
Shallow

PERSONAL RELATIONSHIP



COMMUNICATION

Fair	_____|_____|_____|_____|_____|_____	Unfair
Valuable	_____|_____|_____|_____|_____|_____	Worthless
Unpleasant	_____|_____|_____|_____|_____|_____	Pleasant
Active	_____|_____|_____|_____|_____|_____	Passive
Meaningless	_____|_____|_____|_____|_____|_____	Meaningful
Fast	_____|_____|_____|_____|_____|_____	Slow
Tense	_____|_____|_____|_____|_____|_____	Relaxed
Weak	_____|_____|_____|_____|_____|_____	Strong
Vague	_____|_____|_____|_____|_____|_____	Precise
Deep	_____|_____|_____|_____|_____|_____	Shallow

SELF-IMPORTANCE

Fair	_____|_____|_____|_____|_____|_____	Unfair
Valuable	_____|_____|_____|_____|_____|_____	Worthless
Unpleasant	_____|_____|_____|_____|_____|_____	Pleasant
Active	_____|_____|_____|_____|_____|_____	Passive
Meaningless	_____|_____|_____|_____|_____|_____	Meaningful
Fast	_____|_____|_____|_____|_____|_____	Slow
Tense	_____|_____|_____|_____|_____|_____	Relaxed
Weak	_____|_____|_____|_____|_____|_____	Strong
Vague	_____|_____|_____|_____|_____|_____	Precise
Deep	_____|_____|_____|_____|_____|_____	Shallow

APPENDIX C

QUESTIONNAIRE: STUDENT ATTITUDE INVENTORY

STUDENT ATTITUDE INVENTORY

Directions

1. Please do not write your name anywhere on the questionnaire.
2. Please circle the number of your response.
3. Please answer all items.

PART I

1. Sex

   1. male
   2. female

2. Age

   1. 16 to 20
   2. 21 to 25
   3. 26 to 35
   4. 36 to 45
   5. 46 or over

3. Race

   1. Black
   2. Indian
   3. Oriental
   4. White
   5. Other

4. Religious Preference

   1. Catholic
   2. Jewish
   3. Protestant
   4. Other
   5. None

5. Year in School

   1. Freshman
   2. Sophomore
   3. Junior
   4. Senior
   5. Other

6. Please mark the one following category which comes closest to your father's occupation. If your father is retired, deceased, or unemployed, indicate his former or customary occupation. (Mark only one.)

   1. Unskilled worker, laborer, farm worker
   2. Semiskilled worker (machine operator)
   3. Service Worker (policeman, fireman, barber, etc.)
   4. Skilled worker or craftsman (carpenter, electrician, plumber, etc.)
   5. Salesman, bookkeeper, secretary, office worker, etc.
   6. Owner, manager, partner of small business; lower level governmental official, military commissioned officer
   7. Professional requiring a bachelor's degree (engineer, elementary or secondary school teacher, etc.)
   8. Owner, high-level executive--large business or high-level governmental agency
   9. Professional requiring an advanced college degree (doctor, lawyer, college professor, etc.)

7. My overall grade point average is:

   1. 0 to 1.9
   2. 2.0 to 2.9
   3. 3.0 to 3.5
   4. 3.6 to 4.0

8. My status in school is:

   1. International student
   2. Oklahoma student
   3. Out-of-State student

PART II

Please answer the items in this section to the following code:

SA = Strongly Agree
A = Agree
U = Undecided
D = Disagree
SD = Strongly Disagree

SA A U D SD 1. I feel important in here.

SA A U D SD 2. In this group I am like a grain of sand on a vast seashore.

SA A U D SD 3. I have a sense of worth in here.

SA A U D SD 4. In this group I am treated as one of the herd.

SA A U D SD 5. In this place I'm just looked on as a "Pawn."

SA A U D SD 6. My being has value here.

SA A U D SD 7. This circumstance makes me feel like I don't exist.

SA A U D SD 8. I feel like a "Human Being" in this setting.

SA A U D SD 9. I feel worthless at the moment.

SA A U D SD 10. Others are important to me in this circumstance.

SA A U D SD 11. I am feeling wanted

SA A U D SD 12. I think communication is absent in this setting.

SA A U D SD 13. I am being taken into account for who I am.

SA A U D SD 14. I sense that I'm treated as just an object in here.

SA A U D SD 15. I am receiving individual attention.

SA A U D SD 16. I have a real awareness for life at the moment.

SA A U D SD 17. I feel lost in the mass in here.

SA A U D SD 18. This situation makes me feel that I am being treated as a number.

SA A U D SD 19. This situation makes me feel that no one appreciates me.

SA A U D SD 20. I am being noticed.

SA = Strongly Agree
A = Agree
U = Undecided
D = Disagree
SD = Strongly Disagree

SA A U D SD 21. In this setting I have respect.

SA A U D SD 22. I am feeling ignored.

SA A U D SD 23. I mean a great deal to others right now.

SA A U D SD 24. I sense fulfillment in this circumstance.

SA A U D SD 25. There is no give and take in this situation.

SA A U D SD 26. I feel the relationship here is personal.

SA A U D SD 27. I'm a "nobody" in this setting.

SA A U D SD 28. I sense a void in here.

SA A U D SD 29. Right now I feel like an individual.

SA A U D SD 30. In this place, I am treated as less than I am.

SA A U D SD 31. I am sensing a closeness to other people in this setting.

SA A U D SD 32. I am aware of being a unique person in this group.

SA A U D SD 33. I am being told, not asked.

SA A U D SD 34. I feel unimportant now.

SA A U D SD 35. Here I feel I count as a person.

SA A U D SD 36. I feel distant from other people in here.

SA A U D SD 37. There is not much I can do about most of the important problems that we face today.

SA A U D SD 38. Things have become so complicated in the world today that I really don't understand just what is going on.

SA A U D SD 39. In order to get ahead in the workd today, you are almost forced to do some things which are not right.

SA A U D SD 40. I am not much interested in T.V. programs, movies, or magazines that most people seem to like.

SA A U D SD 41. I often feel lonely.

SA A U D SD 42. I don't really enjoy most of the work that I do, but I feel that I must do it in order to have other things that I need and want.

PART III

Please answer the items in this section according to the following code:

SA = Strongly Agree
A = Agree
U = Undecided
D = Disagree
SD = Strongly Disagree

SA A U D SD 43. I intend to complete this course.

SA A U D SD 44. I am enjoying this method of teaching.

SA A U D SD 45. I would recommend this course to a close friend.

SA A U D SD 46. If I have the opportunity, I will take similar courses in the future that are taught this way.

SA A U D SD 47. I think more courses taught like this should be offered in the university.

SA A U D SD 48. I feel motivated to spend more time on work in this class than in my other classes.

SA A U D SD 49. I am learning a great deal from this course.

SA A U D SD 50. The method by which this class is taught does not inspire me to give it my best effort.

SA A U D SD 51. I feel I would learn more if this course were taught through some other medium.

SA A U D SD 52. I perceive this course as a good learning situation.

SA A U D SD 53. This class gives me the opprotunity to learn about my own ability.

SA A U D SD 54. I believe that the knowledge gained from this course will be of great use to me.

SA A U D SD 55. I am able to remember the material taught by conventional methods easier than when taught by media techniques.

SA A U D SD 56. I do not believe that the tests in here measure all that I am learning.

PART IV

57. With regard to attendance in this class:

    1. I never miss this class.
    2. I am seldom ever absent from this class.
    3. I am absent from this class frequently.
    4. I seldom ever come to this class.

58. I feel that the grade I will make in this class will probably be:

    1. Higher than I usually make.
    2. About the same as I usually make.
    3. Lower than I usually make.

59. Thomas Harris, in his famous best selling book, states that there are four basic life positions. They are listed below. Please circle the response that you feel best describes your view of yourself most of the time.

    1. I'm OK--You're OK
    2. I'm not OK--You're OK
    3. I'm OK--You're not OK
    4. I'm not OK--You're not OK

60. Most of the time my view of myself is:

    1. Very favorable
    2. Somewhat favorable
    3. Neither favorable or unfavorable
    4. Somewhat unfavorable
    5. Very unfavorable

61. Most of the time, I think others tend to view me as:

    1. Very favorable
    2. Somewhat favorable
    3. Neither favorable or unfavorable
    4. Somewhat unfavorable
    5. Very unfavorable

APPENDIX D

FACTOR ANALYSIS OF THE SOCIAL DEPERSONALIZATION AND ALIENATION SCALES

TABLE XL

CUMULATIVE PERCENTAGE OF EIGENVALUES FOR THE SOCIAL DEPERSONALIZATION AND ALIENATION ITEMS: SIX FACTORS

0.37143	0.42717	0.47044	0.50358	0.53193	0.55697

Note:

(1) The factor analysis procedure analyzes the variance of each item. Each item has a variance which is a measure of how important the factor is. The factor variances are the eigenvalues. The SAS program (Statistical Analysis System) only selects for analysis those factors whose variance (eigenvalue) exceeds 1.0.

(2) The percentage values in the figures in the above table represent the cumulative percentages for each of the six factors; i.e., factor one has 37% of the total value of all the items, factor two plus factor one has 42.7% of the total value on to factor six (plus the first fi e) which has 55.7% of the total value of the 40 items making up the social depersonalization scale (36 items) and the alienation scale (6 items).

(3) The interpretation of the material in this appendix (Appendix D) is in large part the work of Dr. Don Holbert, Associate Professor of Statistics, Oklahoma State University, Stillwater, Oklahoma.

TABLE XLI

FACTOR LOADING MATRIX FOR THE SOCIAL DEPERSONALIZATION AND ALIENATION ITEMS: SIX FACTORS

	F_1	F_2	F_3	F_4	F_5	F_6
D1	0.70883	-0.18241	-0.00795	-0.08692	0.32982	0.21888
D2	0.68217	-0.01981	0.24059	-0.10323	0.11706	0.04665
D3	0.70174	-0.17841	-0.00588	0.09583	0.32439	0.20212
D4	0.60677	-0.04010	0.23551	-0.29122	0.12149	0.09032
D5	0.69108	0.01731	0.29587	-0.06288	0.04060	0.10600
D6	0.66871	-0.14331	-0.03341	0.13926	0.29645	0.22020
D7	0.72793	-0.01687	0.17654	0.21848	-0.07591	0.03679
D8	0.70466	-0.12715	0.00348	0.29041	0.06391	0.07545
D9	0.53069	0.31758	0.06862	0.30106	0.05040	0.05434
D10	0.28446	-0.06176	-0.46452	-0.00197	-0.05958	0.15598
D11	0.58515	-0.10436	-0.29065	-0.05174	0.21035	0.20971
D12	0.68750	-0.10242	0.13832	-0.07908	-0.18611	-0.00448
D13	0.59876	-0.17127	-0.14171	-0.12503	0.15643	0.00897
D14	0.77208	-0.03686	0.23945	-0.00689	-0.02883	-0.02952
D15	0.61800	-0.15802	-0.03955	-0.37099	-0.04784	-0.15914
D16	0.41617	0.25775	-0.37121	0.30263	0.03316	0.06129
D17	0.73849	0.14114	0.21474	0.07017	-0.07106	-0.05267
D18	0.77208	0.00810	0.23543	-0.02327	-0.02327	-0.03145
D19	0.75178	0.07690	0.13772	0.09423	-0.14138	-0.05341
D20	0.66503	-0.14798	-0.18949	-0.11971	-0.03847	-0.09593
D21	0.69088	-0.11250	-0.14225	-0.00256	0.03034	-0.04539
D22	0.77404	0.04029	0.10540	0.04119	-0.14208	-0.08434
D23	0.41365	0.06179	-0.53979	0.01848	-0.02511	-0.07878
D24	0.66713	-0.09363	-0.22061	0.00347	0.01663	0.03833
D25	0.67988	-0.04706	0.12198	-0.13266	-0.06069	-0.12587
D26	0.60981	-0.19775	-0.14806	-0.26740	-0.08313	-0.15957

TABLE XLI (Continued)

	F_1	F_2	F_3	F_4	F_5	F_6
D27	0.78532	0.08618	0.16524	0.16391	-0.06756	-0.12628
D28	0.75932	0.00276	0.10180	0.05388	-0.14301	-0.02946
D29	0.55313	0.11355	-0.23132	0.42019	-0.09762	-0.13818
D30	0.71639	0.00235	0.12962	0.08133	-0.17090	0.03804
D31	0.46207	-0.08858	-0.46780	-0.25266	-0.32340	0.02022
D32	0.54307	0.02431	-0.28409	0.15769	-0.01344	-0.10911
D33	0.57990	-0.08692	0.11422	-0.17025	0.04174	-0.13965
D34	0.68341	0.21963	0.08818	0.23555	-0.13801	-0.06801
D35	0.73781	-0.11344	-0.09160	0.07447	0.10098	-0.05776
D36	0.60810	0.02828	-0.16454	-0.26832	-0.34846	-0.00914
AL1	0.20342	0.64660	-0.06603	-0.14394	0.24944	-0.05410
AL2	0.17876	0.67642	-0.04066	0.00560	0.11879	-0.14724
AL3	0.20492	0.57403	-0.04015	-0.16916	0.18170	-0.00449
AL4	0.05211	0.13518	0.06028	-0.01558	-0.41749	0.74829
AL5	0.17422	0.54286	-0.03281	-0.21494	-0.21469	0.02433
AL6	0.26606	0.50625	-0.04888	-0.29194	0.15720	0.21914

Note:

(1) These are the Perason r's between the six factors and the 42 items of alienation and social deperson-alization.

(2) These 42 items are collapsed into six factors.

(3) Factor 1 essentially factors out the depersonalization items (note that none of the alienation items exceed r = .26).

(4) Factor 2 essentially factors out the alienation items (note that some of the social depersonalization items exceed r = .25).

(5) Factor 3 is a comparison of the means of certain components of the social depersonalization scale.

(6) Factor 6 is a focus on the fourth item of the alienation scale.

(7) This is a non-rotated factor matrix.

TABLE XLII

COMMUNALITIES OF SOCIAL DEPERSONALIZATION AND ALIENATION

Item	Communalities
D1	0.70002
D2	0.55017
D3	0.67957
D4	0.53297
D5	0.58228
D6	0.62460
D7	0.61618
D8	0.60684
D9	0.48333
D10	0.32840
D11	0.52868
D12	0.54319
D13	0.44811
D14	0.65655
D15	0.57370
D16	0.47387
D17	0.62415
D18	0.66897
D19	0.62178
D20	0.52508
D21	0.51319
D22	0.64086
D23	0.47348
D24	0.50426
D25	0.51645
D26	0.53677
D27	0.69883
D28	0.61116
D29	0.57753
D30	0.56729
D31	0.60902
D32	0.41318
D33	0.40711
D34	0.60221
D35	0.58470
D36	0.59117
AL1	0.54970
AL2	0.52697
AL3	0.43477
AL4	0.75911

TABLE XLII (Continued)

Item	Communalities
AL5	0.41901
AL6	0.48743

Note: Each of the original variables (items) has a communality between 0.0 and 100%. The communality is the percentage of the variance of the particular variable which is explained by the factor scores. The communalities summarize the amount of information on each item captured by the factor scores.

TABLE XLIII

CUMULATIVE PERCENTAGE OF EIGENVALUES FOR THE SOCIAL DEPERSONALIZATION ITEMS: FOUR FACTORS

0.42804	0.47856	0.52003	0.55257

Note:

(1) See Note 2 of Table XL.

(2) The 36 items of the social depersonalization scale collapsed into four factors.

(3) The four factors made up of the social depersonalization scale contain 55.25% of the total value of the 36 items.

TABLE XLIV

FACTOR LOADING MATRIX FOR THE SOCIAL DEPERSONALIZATION: FOUR FACTORS

	F_1	F_2	F_3	F_4
D1	0.71219	0.03429	-0.22854	0.36927
D2	0.68239	-0.23686	-0.10437	0.02749
D3	0.70599	0.02676	-0.08097	0.44839
D4	0.60620	-0.22325	-0.27450	-0.01373
D5	0.69048	-0.29510	-0.05642	0.01270
D6	0.67201	0.04826	-0.01388	0.44362
D7	0.73040	-0.17905	0.17002	0.03442
D8	0.70995	0.00541	0.15132	0.23166
D9	0.52276	-0.11961	0.44718	0.02831
D10	0.28554	0.46736	0.03233	-0.07099
D11	0.58659	0.30212	-0.08788	0.21837
D12	0.69066	-0.12140	-0.10612	-0.13746
D13	0.60209	0.16523	-0.21973	0.12892
D14	0.77410	-0.02986	-0.02986	-0.04500
D15	0.62053	0.06556	-0.37510	-0.19703
D16	0.40925	0.32604	0.44723	0.04163
D17	0.73501	-0.23323	0.13777	-0.10500
D18	0.77137	-0.23413	-0.09309	-0.10600
D19	0.75060	-0.15158	0.14739	-0.14067
D20	0.66824	0.20912	-0.15834	-0.07124
D21	0.69352	0.15537	-0.07225	0.06268
D22	0.77335	-0.11364	0.08523	-0.14930
D23	0.41150	0.52458	0.12185	-0.09421
D24	0.66905	0.23099	-0.03157	0.08082
D25	0.68050	-0.11414	-0.13122	-0.10244
D26	0.61375	0.17237	-0.30785	-0.02574
D27	0.78414	-0.18349	0.19678	-0.96292
D28	0.75955	-0.10400	0.96854	-0.09296
D29	0.55213	0.20305	0.44511	-0.01578
D30	0.71696	-0.12722	0.07068	-0.06559
D31	0.46326	0.48222	-0.14351	-0.35807
D32	0.54240	0.27418	0.16287	0.00882
D33	0.58155	-0.10282	-0.18579	-0.07821
D34	0.67845	-0.12283	0.34918	-0.12546
D35	0.74076	0.10224	-0.01947	0.15113
D36	0.60560	0.16662	-0.11898	-0.39949

Note:

(1) These are the Pearson r's between the four factors and the 36 items of the social depersonalization scale.

(2) These 36 items are collapsed into four factors.

(3) Factor 1 is essentially the mean score on the social depersonalization scale.

(4) Factor 2 is essentially an average of D_{10}, D_{11}, D_{16}, D_{23}, and D_{31}.

(5) Factor 3 is essentially an average of D_9, D_{16}, D_{29}, and D_{36} versus D_{26}.

(6) Factor 4 is essentially an average of D_1, D_3, D_6 versus D_{31} and D_{36}.

(7) This is a non-rotated factor matrix.

TABLE XLV

COMMUNALITIES OF SOCIAL DEPERSONALIZATION

Item	Communalities
D1	0.69698
D2	0.53340
D3	0.70675
D4	0.49286
D5	0.56720
D6	0.65092
D7	0.59564
D8	0.58061
D9	0.48836
D10	0.30604
D11	0.49078
D12	0.52190
D13	0.45471
D14	0.65739
D15	0.56888
D16	0.47554
D17	0.62404
D18	0.66973
D19	0.62789
D20	0.52370
D21	0.51425
D22	0.64055
D23	0.46824
D24	0.50851
D25	0.50382
D26	0.50184
D27	0.69122
D28	0.60108
D29	0.54445
D30	0.53952
D31	0.59594
D32	0.39597
D33	0.38941
D34	0.61305
D35	0.58240
D36	0.56827

Note: Each of the original variables (items) has a communality between 0.0 and 100%. The communality is the percentage of the variance of the particular variable which is explained by the factor scores. The communalities summarize the amount of information captured by the factor scores.

APPENDIX E

CODING INSTRUCTIONS FOR QUIETT'S STUDENT ATTITUDE INVENTORY

The first task is to make sure all questions have been answered and that the answers are consistent with proper categories of response. If incomplete or inconsistent answers are found, check with the director.

Coding of questionnaires involves the assignment of numerical values to variables. In some cases this will simply require transferring the number, of the response to an item, from the questionnaire to the code sheet; in other cases it will first require adding or subtracting responses to items.

After the questionnaires are coded, the codes will be punched onto IBM cards for ease in compiling results. Thus, the instructions assign IBM column numbers to each variable, provide space for the code of each variable, and give instructions for determining the code of each variable.

IBM Column	Code	Variable
1	____	IDENTIFICATION
2	____	At the top of each questionnaire, a number has been assigned to identify each subject. Transfer this four digit number to the code space. (Note: The first number of this identification number designates pre- or post-test. Pretest = 1; Post-test = 2)
3	____	
4	____	
5	____#1	SEX Transfer the response to item #1 to the code space. Code 1 = male; code 2 = female.
6	____#2	AGE Transfer the response to item #2 to the code space. The largest number represents the oldest group.
7	____#3	RACE Transfer the response to item #3 to the code space. 1 = Black; 2 = Indian; 3 = Oriental; 4 = White; 5 = Other.
8	____#4	RELIGIOUS PREFERENCE Transfer the response to item #4 to the code space. 1 = Catholic; 2 = Jewish; 3 = Protestant; 4 = Other; 5 = None
9	____#5	YEAR IN SCHOOL Transfer the response to item #5 to the code space. The largest number represents the highest level in school.

IBM Column	Code	Variable
10	___#6	SOCIO-ECONOMIC STATUS

Transfer the response to item #6 to the code space. The largest number represents the highest socio-economic status.

11	___#7	GRADE POINT AVERAGE

Transfer the response to item #7 to the code space. The largest number represents the highest grade point average.

12	___#8	STATUS IN SCHOOL

Transfer the response to item #8 to the code space. 1 = International student; 2 = Oklahoma student; and 3 = out-of-state student.

NOTE: The pretest scales do not include this item; therefore, put a zero in the coding space for them on this number

13	___#1	SOCIAL DEPERSONALIZATION
14	___#2	
15	___#3	
16	___#4	
17	___#5	
18	___#6	
19	___#7	
20	___#8	
21	___#9	
22	___#10	
23	___#11	
24	___#12	
25	___#13	
26	___#14	
27	___#15	
28	___#16	
29	___#17	

Items 1-36 are measure of social depersonalization. Half of the items are phrased such that the strongest affirmative response is an indication of low social depersonalization. We have circled these items on this coding form.

NOTE: For these circled items use this scale:

1	2	3	4	5
SA	A	U	D	SD

All the other items (the ones not circled) are phrased such that the strongest affirmative response is an indication of high social depersonalization

NOTE: For these items use this scale:

5	4	3	2	1
SA	A	U	D	SD

IBM Column	Code	Variable
30	___#18	
31	___#19	
32	___(#20)	
33	___(#21)	
34	___#22	
35	___(#23)	
36	___(#24)	
37	___#25	
38	___(#26)	
39	___#27	
40	___(#28)	
41	___(#29)	
42	___#30	
43	___(#31)	
44	___(#32)	
45	___#33	
46	___#34	
47	___(#35)	Sum the column at the left and enter the sum in the code spaces for IBM columns 47,48. The highest number indicates the most social depersonalization.
48	___#36	
49,50	__,__	

IBM Column	Code	Variable
		ALIENATION
51	___#37	Powerlessness
52	___#38	Meaninglessness
53	___#39	Normlessness
54	___#40	Cultural Estrangement
55	___#41	Social Estrangement
56	___#42	Estrangement from work
57,58	__,__	

Items 37-42 are measures of alienation. All these items are phrased such that the most affirmative response is the most alienated.

NOTE: For all these items use this scale:

5	4	3	2	1
SA	A	U	D	SD

Sum the columns of six numbers at the left and put the sum in IBM columns 57,58. The highest number indicates the most alienation.

		CONSEQUENCES
59	___#43	(+)Dropping Out
60	___#44	(+)Like or Dislike of the class
61	___#45	(+)Like or Dislike of the class
62	___#46	(+)Like or Dislike of the class
63	___#47	(+)Like or Dislike of the class
64,65	__,__	Sum of Like or Dislike of the class. (Add the numbers in the code column for items 44, 45, 46, 47 and put the sum in IBM column 64,65).
66	___#48	(+)Effort in class
67	___#49	(+)Attitude toward learning
68	___(#50)	(-)Effort in class
69,70	__,__	Sum of "Effort in class". (Note: Add only items 48 and 50 and put that sum in IBM columns 69,70. Remember: do not add #49 to this sum, it will be added in the next set.)

Items number 50, 51, 55, and 56 are phrased in such a way that the most affirmative response is an indication of bad (negative) consequences (satisfaction).

NOTE: For these negative items (circled ones) use this scale:

1	2	3	4	5
SA	A	U	D	SD

These items deal with the consequences of social depersonalization. Items 43, 44, 45, 46, 47, 48, 49, 52, 53, 54 are phrased such that the most affirmative response is an indication of good (positive) consequences (satisfaction).

NOTE: For these positive items (uncircled ones) use this scale:

5	4	3	2	1
SA	A	U	D	SD

IBM Column	Code	Variable
71	___#51	(-)Attitude toward learning
72	___#52	(+)Attitude toward learning
73	___#53	(+)Attitude toward learning
74,75	__,__	Sum of "Attitude Toward Learning" (Note: Add items 49, 51, 52, 53 and put the sum in IBM columns 74,75. Remember: You are to pick up 49 and add it to 51, 52, 53).
76	___#54	(+)Knowledge
77	___#55	(-)Knowledge
78	___#56	(-)Knowledge
79,80	__,__	Sum of "Knowledge" (Note: Add items 54, 55, and 56 and put their sum in IBM columns 79,80.)

NOTE: For these negative items (circled ones) use this scale:

1	2	3	4	5
SA	A	U	D	SD

NOTE: For these positive items (uncircled ones) use this scale:

5	4	3	2	1
SA	A	U	D	SD

NEW CARD

1	____	IDENTIFICATION
2	____	Put the same number here as you did in Column 1, 2, 3, 4 earlier. It is found at the top of the front page of the questionnaire.
3	____	
4	____	
5	____	EXPERIMENTAL AND CONTROL GROUPS 1. OSU Computer Science Class (TV) 2. ECU Computer Science Class (Non-TV) (Put a #1 for all OSU papers and a #2 for all ECU papers in IBM column 5.)
6	___#57	ATTENDANCE Transfer the response number to IBM column 6.
7	___#58	GRADES Transfer the response number to IBM column 7.

NEW CARD

8	____#59	OKNESS

Transfer the response number to IBM column 8.

9	____#60	SELF IMAGE

Transfer the response number to IBM column 9.

10	____#61	SELF IMAGE

Transfer the response number to IBM column 10.

11,12	__,__	SUM OF SELF IMAGE

Add item number 60 and 61 and put the sum in IBM columns 11,12.

13,14,15	__,__,__	SUM OF SOCIAL DEPERSONALIZATION

Add items 1 through 36.

APPENDIX F

DIRECTIONS FOR ADMINISTERING THE STUDENT ATTITUDE INVENTORY

1. The questionnaire is to be administered immediately following the taped lecture presentation.

2. Please read the following statements to your students before passing out the questionnaire:

   (1) _____ is cooperating in a research project which is aimed at getting important information about student attitudes toward the medium and methods used in teaching this class.

   (2) We need your cooperation in getting this information.

   (3) In a moment, you will be given a questionnaire to be filled out.

   (4) Please do not put your name anywhere on the questionnaire.

   (5) Please circle the number of your response.

   (6) Please bear in mind the method, techniques, and medium used in teaching this class as you answer all questions.

   (7) There are three sheets of paper with printing on the front and back of each sheet. Please answer all the questions on all the pages.

3. Now, please pass the questionnaire to each student.

4. When all have finished, please gather them up and return them (along with any extras) to Mr. Quiett.

Thank you,

Ray Quiett

Ray Quiett
Sociology Department
East Central University

VITA

Kenneth Ray Quiett

Candidate for the Degree of

Doctor of Philosophy

Thesis: SOCIAL DEPERSONALIZATION AS A FUNCTION OF SOCIAL SETTING: A STUDY OF THE SOCIAL EFFECTS OF MECHANIZED APPROACHES IN HIGHER EDUCATION

Major Field: Sociology

Biographical:

Personal Data: Born in Levelland, Texas, November 8, 1934, the son of Norris and Veomia Quiett.

Education: Graduated from Levelland High School, Levelland, Texas, May, 1953; received the Bachelor of Arts degree with a major in History from Baylor University, Waco, Texas, in May, 1956; received the Bachelor of Divinity degree from Southwestern Baptist Theological Seminary, Fort Worth, Texas, in May, 1959; this degree was converted by the Seminary to a Master of Divinity degree in 1968; received the Master of Arts degree in Sociology from Oklahoma University, Norman, Oklahoma, in July, 1967; completed the requirements for the Doctor of Philosophy degree at Oklahoma State University in July, 1977.

Professional Experience: Part-time instructor of Sociology, East Central State College, Ada, Oklahoma, 1961-62 and 1963-64; Instructor of Sociology, East Central State College, Ada, Oklahoma, 1964-67; Assistant Professor of Sociology, East Central Oklahoma State University, Ada, Oklahoma, 1967 to present; promoted to Associate Chairman of the Department of Sociology, 1970; promoted to Chairman of the Department of Sociology, East Central Oklahoma State University, Ada, Oklahoma, 1972 to present.