

FACILITATION OF CONTROL IN HIGH AND LOW
DEBILITY GERIATRIC PATIENTS:
A FIELD EXPERIMENT IN A HOSPITAL ENVIRONMENT

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BY

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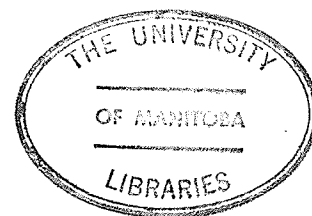
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Facilitation of Control in High and Low
Debility Geriatric Patients:
A Field Experiment in a Hospital Environment

Abstract

The efficacy of an intervention designed to facilitate feelings of control in high and low debilitated hospitalized geriatric patients was tested in a ten day field experiment. Forty geriatric patients (17 males, 23 females) were rated by two nurses as to degree of debilitation. A two-by-two design yielded four groups: high debility-treatment, high debility-comparison, low debility-treatment, low debility-comparison. Treatments consisted of three visits from an experimenter who emphasized patients' ability to maintain control while in the hospital. Comparison subjects were also visited but not given the control induction message. Dependent measures consisted of preliminary acceptance of responsibility for a plant, acceptance of an offer of a magazine cart, recall of experimenter on his second visit, final acceptance of responsibility for a plant, and number of suggestions made over the course of the study. Main effects were hypothesized for treatment and debility group membership. An interaction effect between treatment and debility status was also hypothesized. Additionally it was predicted that high debility patients would be perceived by nurses as evidencing greater emotional and behavioral deficits than low debility patients. Findings supported all predictions with the exception of main effects for debility group membership. Results led to the inference that control is important for both high and low debility geriatric patients. The greater responsiveness of high debility patients to study dependent measures regardless of treatment condition, however, showed them to be eager for any kind of activity. The significantly greater withdrawal reported in these patients appears due not to lack of interest but of opportunity.

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Recent studies suggest that some of the cognitive and behavioral deficits commonly experienced by the aged in institutional settings are often neither inevitable nor irreversible (Langer and Rodin, 1976). The diminished alertness, social withdrawal and general passivity observed in many of these individuals relative to their non-institutionalized peers has over the years stimulated much investigative interest. Some writers have stressed the pejorative effects of low-stimulus institutional environments on geriatric residents' behavior (e.g., Parent, 1978; Erber, 1979). Butler and Lewis (1977) reported that a number of general effects associated with sensory and perceptual restriction under controlled laboratory conditions have also been noted in institutionalized geriatric patients, e.g., decreases in quality of verbalization; difficulties in directed thinking and concentration; drifting of thought; disorientation in time; body delusions; restlessness; anxiety. Recently O'Neil and Calhoun (1975) associated a poverty of sensory stimuli with mental deficits in nursing home residents, finding combined visual, auditory and tactile sensory loss scores to be significantly negatively correlated with a mental status evaluation score.

Lack of stimulation may indeed contribute largely to the cognitive and behavioral deficits observed in many of the institutionalized aged. Institutionalization often

signals an abrupt change from normal daily activities and experiences to a condition of inactivity, social isolation, sedation, immobility, and sensory attenuation (Parent, 1978). In some instances the medical management of residents, although appropriate for their physical needs, may lead indirectly to a decrease in motor and cognitive skills. The end result of prolonged confinement within these highly structured, monotonous environments, may be an atrophy of skills through disuse. Evidence exists, however, which suggests that a dearth of opportunities for sensory stimulation can not in itself account fully for the deterioration noted in the institutionalized aged (e.g., Langer and Rodin, 1976).

A number of writers have focused on the importance of an individual's sense of control over his behaviors, body and options for personal well-being. According to Lefcourt (1973) control, generally defined as the ability to manipulate aspects of the environment, has a definite and positive role in sustaining life. Indeed, the experience of control has been seen to be extremely significant for all forms of life from rats and dogs to human beings (Maier and Seligman, 1976). Lack of control, in contrast, has been associated with motivational, cognitive and emotional deficits in man (Seligman, 1975).

The aged, as a group, have been cited as one population

particularly vulnerable to the pejorative effects of uncontrollability, for they tend to experience an ever-diminishing sphere of influence over both the external environment and their own bodies. Burnside (1973), in discussing some of the physical, psychological, social and economic implications of aging, cited loss of health, mental acuity, loved ones, home and mobility. Perhaps most debilitating are the role losses often associated with aging. As Goffman (1959) observed, people tend to identify with and in a sense become the roles they play. Particularly following retirement, traditional roles--worker, spouse, parent, home-owner--begin to break down. The loss of these roles, and the potential control they represent over oneself and others, can bear negative consequences for the aging individual.

The growing dependence experienced by the aged is almost invariably compounded with institutionalization. Hulicka (1972) noted that most institutional facilities for the aged afford little opportunity for privacy or self-government. Programs are generally rigidly directive, with schedules for rising, therapy, eating, bathing and retiring. Another common form of institutionalization experienced by the elderly is prolonged hospital confinement. Taylor (1979) has cited the hospital as a total institution, one which manages all aspects of patient life.

It is one of the few places where an individual forfeits control over virtually every task he or she customarily performs.

Activities are mobilized around patient care, but not necessarily around the patient as a person. The patient is the body upon which the ministrations and talents of the staff are exerted, but the patient is not expected to take on an active role in his or her own care. She or he is expected to be cooperative, pleasant and quiet. Indeed, as Goffman (1961) has suggested, things would be much easier for the staff overall if the patient were not a person but, rather, a noninteracting object. In an effort to approximate this unattainable state, medical staff subtly communicate to each new patient the critical components of the hospital patient role. (p. 158)

Staff attitudes, then, may contribute in large measure to patient dependent behavior. Kalson (1972) maintained that though disabilities may cause residents to rely on others to meet physical needs, staff often unintentionally encourage an even more serious form of dependency by doing for patients what they can do for themselves, a phenomenon Ransen (1978) termed "Overcare". The end result of staff indulgence, Schulz and Aderman (1973) noted, is helplessness, borne of residents' perceptions of demands for

passivity.

The state of helplessness has been described as encompassing motivational, cognitive and emotional deficits, and has been regarded by a large body of researchers and theorists as a learned disposition. Learned helplessness theory has been described as a three-step affair: information about a contingency results in a cognitive representation of the contingency--learning, expectation, belief--which leads to behavior grounded on perceptions. The expectation that an outcome is independent of responding both reduces the motivation to control the outcome and interferes with learning that responding controls the outcome (Maier and Seligman, 1976). Depending on the subjective significance of the outcome for the individual, learning that one does not have control may lead to depression (Seligman, 1975). Maier and Seligman (1976) emphasized that it is the perception, or belief in uncontrollability that is the key factor in helplessness theory. Hence the perception of helplessness, even if objectively erroneous, can bear real consequences for an individual. A belief in helplessness may soon take on the dimensions of self-fulfilling prophecy.

Learned helplessness theory can be used to at least partially explain many of the phenomena observed in the institutionalized aged. When independent action is subtly discouraged patients quickly learn that there is little

they can do to effectively manipulate their environment. Consequently patients decrease efforts to master or control, retreating gradually into a state of passivity and, in some cases, depression. As belief in one's power to influence the environment further diminishes, genuine opportunities for mastery are disbelieved or overlooked.

While traditional helplessness theory presupposes failure of initial attempts to control, Langer and Benevento (1978) have written that opportunity for any activity on the part of the institutionalized elderly is so limited that it may be unrealistic to think of their helplessness-like behavior as resulting from the experience of failure. They have contended that through a process of self-induced dependence individuals can come to erroneously infer personal incompetence and eventually be rendered helpless by any of a number of interpersonal situational factors, even in the absence of failure experiences. In a recent series of studies (Langer and Benevento, 1978) individuals were seen to become helpless merely by accepting a label that connoted inferiority relative to another. Langer and Benevento further maintained that the same end may result by engaging in demeaning tasks, no longer engaging in tasks now engaged in by another, or allowing someone else to do things for you that you are capable of doing yourself. If accurate, this formulation may be of

significance for the elderly, who as a group bear negative labels (e.g., Kogan, 1961), and of particular significance for the institutionalized elderly, who no longer engage in previously engaged in activities and typically have things done for them.

While much has been written affirming the importance for individuals of maintaining a sense of control while institutionalized, few empirical investigations have been undertaken to test theory. In a series of experiments by Pennebaker and his colleagues (Pennebaker, Burnam, Schaeffer & Harper, 1977) it was found that persons exposed to aversive stimulation over which they felt they had no control reported more physical symptoms than when they felt they had control. Perceptions of loss of control engendered by the hospital milieu, then, may be anticipated to increase the experience of aversive symptoms. Perceptions of control, in contrast, may decrease the experience of aversive symptoms. Langer, Janis and Wolfer (1975) induced the perception of control over stress in hospital presurgical patients by means of a communication emphasizing potential cognitive control over stress. These patients were subsequently seen by nurses as evidencing less anxiety than patients who were given information and reassured about the impending surgery, and patients given no treatment. Following surgery those patients in whom the perception of

control had been induced were found to request significantly fewer sedatives and pain relievers than the information/reassurance and the no treatment groups.

To date only two major studies have been undertaken that have explicitly tested the efficacy of control interventions on the lives of the institutionalized aged. Schulz (1976) assessed the effects of increased control and predictability upon the physical and psychological well-being of 40 retirement home residents. In order to give these individuals the opportunity to influence a positive event, a student visitor was made available to them for a two-month period. One group of residents was allowed to control the frequency and duration of visits they received. A second group was informed in advance as to the time and duration of visits but was not given control over these details. A third group was visited on a random schedule, with no control over the duration or frequency of visits. A fourth group was visited only to collect data. Fifteen dependent variables were analyzed so that the manipulation's effects on health, psychological status, and activity level could be assessed, both prior to and following the two months of visits. Schulz's prediction that control and predictability groups would display significantly greater positive effects on the physical and psychological status indicators than random visit or no treatment groups

was supported. For all dependent variables, the predict and control groups, taken together, were superior in psychological status when compared to the no treatment and random groups (e.g., on such variables as zest for life, residents' perceptions of their own happiness, and level of hope for the future). The predict and control groups, taken together, were rated as significantly healthier by the activities director at the home. Also, activity level indicators revealed significant differences when comparing predict and control against no treatment and random groups. A most important finding was an absence of significant differences between the predict and control groups. This suggests that the relatively positive outcome of these groups was attributable to predictability alone, the element of predictability being inherent in any control strategy.

In a follow-up study (Schulz and Hanusa, 1978), Schulz returned to the retirement home and reassessed residents at three different intervals. Health and psychological status data (e.g., ratings on health status and zest for life) was collected 24, 30, and 42 months after the study was terminated. No positive long-term effects were found which could be attributed to the interventions. In contrast, all groups generally exhibited declines over time, with a significant time of measurement effect for both health status and zest for life. The number of persons exhibiting

declines, however, and the magnitude of the declines were significantly greater for the predict and control-enhanced groups than for the no treatment and random groups. Hence the groups that gained the most as a result of the interventions declined most on completion of the study. Although the declines of the predict and control-enhanced groups were such that they were found consistently below the random and no treatment groups on both indicators, these differences were not statistically significant.

Langer and Rodin (1976) introduced and then assessed the effects of enhanced personal responsibility and choice in a group of nursing home residents, finding generalized benefits in such areas as physical and mental alertness, activity, and level of satisfaction for those subjects afforded increased control. Ninety-one ambulatory adults, aged 65 to 90, served as study subjects. The population was drawn from two floors of a nursing home, one floor's residency being placed in a responsibility-induced condition, the second in a comparison group.

The nursing home administrator called a meeting in the lounge of each floor. For the responsibility-induced group he gave a communication emphasizing residents' responsibility for themselves. For the comparison group, his communication stressed the staff's responsibility for residents. In addition, residents in the responsibility-induced group

were asked to give their opinion of the means by which complaints were handled rather than simply being told that complaints would be handled by staff. They were permitted to select a plant and take care of it themselves, as opposed to being given a plant to be taken care of for them. Also, they were given their choice of a movie night rather than being assigned a particular night. Three days after this communication the director visited all residents and reiterated part of the previous message.

Two questionnaires designed to assess the effects of induced responsibility were each administered one week prior to and three weeks following the communication. The first, a rating scale administered to residents, contained questions dealing with the degree of control the individual felt over general events in his life and how happy and active he felt. The second questionnaire was completed by nurses from two different shifts, and consisted of questions pertaining to perceived resident happiness, alertness, activity level, eating and sleeping habits.

Study findings indicated that responsibility-induced subjects reported significantly greater increases in happiness after the experimental treatment than did comparison subjects. In addition, on the second interview responsibility-induced subjects reported themselves as significantly more active than comparison subjects. Nurses perceived

93% of the experimental group, opposed to only 21% of the comparison group, as considerably improved, and the interviewer's ratings of alertness also showed significantly greater increases for the experimental group. Significantly higher movie attendance was found for the experimental group. Also, participation in a jelly-bean-guessing contest yielded significant differences for the two groups.

In a follow-up to their first study, Rodin and Langer (1977) reevaluated patients after 18 months, finding that the experimental treatment and/or processes which it set in motion had sustained beneficial effects. Rodin and Langer's analyses in their first study were based on 52 of the 91 subjects, all the people for whom two nurses' ratings were available. Twenty-six of the 52 were still in the nursing home after 18 months and were retested. In addition to obtaining new nurses' ratings for mood, awareness, sociability, and so forth, a doctor rated the overall health of the subjects six months prior to the first study and six months immediately preceding the follow-up. Also, Rodin gave a talk at the home on psychology and aging, and the number of persons who attended from each condition and the frequency and type of question asked were recorded. Finally, a frequency count was made of deaths occurring during the 18 month period.

Results indicated that after a year and a half nurses

still rated patients in the responsibility-induced group as significantly more interested in their environment, more sociable and self-initiating, and more vigorous than residents in the comparison group. The responsibility-induced group showed a mean time-1/time-2 increase in general health of .55 on a five point scale, which was reliably greater than means for the comparison group (-.29) and a no treatment group (-.33). Most striking were differences found between treatment groups in death rate. Over the 18 months 15% of the responsibility-induced group had died, as compared to 30% of the comparison group, a significant difference. Though there were no reliable differences among the groups in lecture attendance, differences did occur in the number and type of questions asked. Of 14 questions asked, 10 came from residents in the responsibility-induced condition. Four of the 10 had themes of autonomy and independence. No questions from the comparison or no treatment group dealt with these themes, but two of their four questions dealt with death. No one in the responsibility-induced group asked a death-relevant question.

The findings of their follow-up study seem to justify Langer and Rodin's (1976) conclusion that objective helplessness--both enhanced by the environment and by intrinsic changes that occur with increasing old age--may contribute

to psychological withdrawal, physical disease, and death. In contrast, objective control and feelings of mastery may well contribute to physical health and personal efficacy. That so weak a manipulation as theirs had any effect, they stated, suggests how important increased control is for the elderly, for whom decision-making is virtually nonexistent. Even more impressive is that the effects of their manipulations could be seen to endure a year and a half later. This carry-over effect stands in sharp contrast to the long-term intervention effects observed in Schulz's study.

Schulz and Hanusa (1978) have made a convincing attempt to reconcile these disparate long-term findings in light of the attributional analysis of learned helplessness recently proposed by Abramson, Seligman, and Teasdale (1978). According to this analysis the reasons persons generate for their ability to control outcomes can be classified along three dimensions. While internal causes originate from the individual, external causes originate from the environment. Stable factors are long-lived and recurrent, whereas unstable factors are short-lived and intermittent. Thirdly, global factors occur across situations, unlike specific factors which are unique to a particular context. According to Abramson et al. (1978) attributions to internal-external factors should affect self-esteem, attributions to stable-

unstable factors will influence the long-term consequences of a given experience, and attributions to global-specific factors are believed to influence the extent to which individuals will generalize an experience to other situations.

Applying this model, Schulz and Hanusa (1978) have reasoned that in Langer and Rodin's study the communication delivered to the experimental group emphasizing their responsibility for themselves and their outcomes likely encouraged subjects to make internal, stable, and global attributions (e.g., "I control important outcomes because I am responsible and competent, and this should not change while I am here"), and thus the gains evidenced by the experimental group continued over time. In contrast, the intervention by Schulz (1976) likely led subjects to make external, unstable, specific attributions (e.g., "I can control one outcome, but I can do this only because someone is allowing me to do it, and I can do it only for a specific period of time"). Hence feelings of control in Schulz's study could be seen as dependent upon an external agent and, as might be predicted, did not persist once that agent was removed. If Schulz and Hanusa's application of Abramson et al.'s attributional analysis is appropriate, researchers may do well to consider the implications of this analysis when developing future control strategies.

The study reported in this thesis was predicated on the

theory and research cited above. Only in the two studies discussed (Schulz, 1976; Langer and Rodin, 1976), and their follow-ups (Schulz and Hanusa, 1978; Rodin and Langer, 1977), has hard experimental data been collected on the consequences of increasing the amount of control available to the institutionalized elderly. As one of these (Schulz, 1976) showed no significant difference between the effects of control and predictability, the issue of the importance of control per se seemed very much open for further examination.

Until the present study no control research had as yet been undertaken with the elderly hospitalized patient. It seemed intuitively that since, as Taylor (1979) states, there are even more restrictions on freedoms in hospitals than in nursing homes, the former would likely provide an ideal testing ground for hypotheses on the importance of experiencing continued control in institutional settings.

Finally, as existing control studies had utilized only relatively healthy and mobile subjects, who could attend to their own immediate physical needs (e.g., Schulz studied the elderly in a private retirement home; Langer and Rodin restricted study participation to ambulatory nursing home residents), groups of differing capacity for self-management were investigated. As Erber (1979) recently noted, the effectiveness of any given type of therapy for patients at

various levels of physical and/or cognitive disability has only occasionally been specified. The question asked here was, "Does the extent of an individual's debilitation influence responsiveness to control interventions?"

Four hypotheses were tested:

The first hypothesis was that experimental subjects, encouraged to become more active and assertive, would display greater willingness to accept responsibility and assume control than comparison subjects, as reflected by responsiveness on five dependent measures.

The second hypothesis made was that if control is, as theorized, of real significance to patients, then highly debilitated patients, who have less opportunity for exercising control by virtue of their physical limitations, should be perceived by nursing staff as displaying more psychological as well as physical helplessness.

Thirdly, it was hypothesized that highly debilitated patients, who have comparatively fewer outlets for stimulation of any kind, would be more responsive to opportunities for stimulation generally than low debilitated patients.

Fourthly, an interaction was predicted between debility group membership and treatment group status, with highly debilitated experimental group patients showing themselves most receptive to the study interventions, and low debilitated comparison subjects least receptive.

Of the four questions asked in this thesis study, the only one dealt with previously, and that in relation to a different subject population, was the first, regarding the effects of experimental treatment. The last three hypotheses were based on logical extensions of previously reported findings.

Method

Subjects

Forty geriatric patients from four extended care units of Winnipeg's St. Boniface hospital participated in the 10-day study. At the study's commencement the length of patients' stay in the hospital had ranged from weeks to months. Subjects were selected from among those patients judged by head nurses to be mentally alert and verbally coherent. Seventeen male and 23 female patients took part, with a median age of approximately 75 years. Age median approximation was necessary as age data was not available for all subjects. Experimental results were based on the responses of 38 subjects, as two female patients (one low and one high debility) left the hospital prior to the end of the study.

Procedure

Prior to the introduction of experimental variables each patient was visited by a study assistant who introduced himself as a University of Manitoba researcher collecting data on patient attitudes toward hospital life. All patients proved cooperative when asked to answer a number of questions about their feelings toward different aspects of the hospital experience (see Appendix A; e.g., "Do you think it's a good thing or a bad thing for patients to have plants and flowers in their rooms when they're in the

hospital?"). As a result of these interviews one patient, deaf to the point that communication proved extremely difficult, was eliminated from the subject pool and replaced.

Following subject selection two nurses from each unit, blind to the experimental procedure, individually evaluated patients on level of independent functioning (see Appendix B). On the basis of the nurses' independence ratings patients were classified into two groups: those able to function moderately independently (that is, walk by themselves, toilet themselves, eat and dress without assistance) and those less able to perform these behaviors. Of the twenty patients judged least debilitated ten were randomly assigned to the treatment group and ten to the comparison group. Likewise, of the 20 patients judged most debilitated 10 were assigned to the treatment group and 10 to the comparison group. In those instances where subjects were room partners, they were assigned either to the treatment or comparison condition as a pair.

To obtain an indication of the psychological state of patients from different groups at the study's commencement nurses were also asked to complete a general patient evaluation form for subjects (see Appendix C; e.g., patients were rated on level of activity, dependency, alertness, and so forth). Also, head nurses rated patients on two four-point scales for mental and emotional functioning (see

Appendix D; e.g., patients were rated as having either no, minimal, moderate or significant mental impairment), to provide a rough check that there were no significant discrepancies between patient groups on these variables.

On the first day of the study subjects were visited by a labcoated experimenter who introduced the experimental procedure.

To "Experimental" subjects he stated:

Hello, I'm Mr. Vulcano. I've been visiting patients on this floor today and I thought I'd stop in to see you. (if asked where he was from he stated that he was from the University and working on a program at the hospital) How are you today? (waited for answer) I've come to talk with you about being in the hospital. It's not always easy being in the hospital, I know. But you know, you still have your life to lead. All the doctors and nurses are doing whatever they can for you but a lot is up to you, too. It really depends on you. If you ever want something or if there's anything we can get for you, or if you want to know about anything, it's up to you to tell us, okay? Because you patients are the real bosses here, we're here to serve you. Sometimes we forget that but you shouldn't let us. Do you understand what I'm saying here? (waited for answer; if the patient didn't seem to understand, the experimenter rephrased the message).

You know, it's important to look after yourself as much as you can while you're here, too. There may not seem like much you can do but whatever you can do for yourself, you should do. You'll feel a lot better for it. Every bit--no matter how small it seems--helps a lot. You're still a responsible person and you're responsible for yourself. For example, what kinds of things can you still do for yourself while you're here, do you think? (waited for answer; if none was forthcoming, the experimenter suggested possibilities, e.g., Well you're responsible for keeping neat and clean; you're responsible for how you behave towards others, your attitude; you're responsible for how you spend your time.)

You can be deciding how you want to spend your time. For example, you could tell your friends and family to visit you more. Here's your chance to visit with them, to read, or listen to the radio or watch television (in those instances where the patient had radio or television). There seem to be a lot of people around here who would like some company; maybe you could visit with them more often.

I've brought a couple of plants with me today, as you can see, and I'd be happy for you to take one, if you'd like, to look after for a while as a present from all of us at the hospital. Would you like one? (waited for answer) Which one would you like, it's your choice. (the patient chose) I like that one, too. It will be up to you to see that your plant gets enough water and light, okay? (waited for answer)

There's one more important thing I'd like to say before I have to leave: We're here for you. You're an important part of this hospital and we'd like your opinion about things. How's your room? Is your bed comfortable enough? How's the food? Is it okay? (waited for answer) Is there anything bothering you? (waited for answer) You know, a lot of people have said that we should have a suggestion box, so people can write in their suggestions and tell us how we can do a better job. What do you think about this? (waited for answer)

Well, we're going to start bringing around a suggestion box several times a week, then. You can put in your suggestions about what can be done to improve the hospital. If you have any ideas or complaints about anything, if there's anything you think should be changed here, you tell us about it. Because we're here to serve you; it's up to you to get more involved. Have you any now? (waited for answer)

I'd like to visit you again some time soon. Would that be okay? (waited for answer) I'll be back this way in a few days so we can talk, alright? Would you like me to bring you the hospital magazine cart so you can choose some magazines to read or look at? (waited for answer) Well, I hope you have a nice day.

"Comparison" subjects received a somewhat different message:

Hello, I'm Mr. Vulcano. I've been visiting patients on this floor today and I thought I'd stop in to see

you. (if asked where he was from he stated that he was from the University and working on a program at the hospital) How are you today? I've come to talk with you about being in the hospital. It's not always easy being in the hospital, I know. But all the doctors and nurses want very much for you to be as comfortable as possible while you're here with us, and we're going to keep trying to do the best job we can, everything that's possible, so that you will be. What we'd really like, though, more than your just being comfortable, is to see you get well enough so you won't have to stay here any longer. I'm sure it'd be much better for you, and you'd be much happier, to get back to your own life, right? (waited for answer)

Have you been in the hospital long now? (waited for answer) It must be tough on you being here but at least you know you're getting the best care possible and that's something to be glad about.

How are you spending your time here? Are you keeping busy? Do you have a family to come visit? (waited for answer) Are you reading, or watching television? television? For example, what have you been doing today, so far? (waited for answer) Do you know what you will do this afternoon? (waited for answer)

How are you finding the food here? I hope you like it. I know a lot of people say hospital food isn't so terrific but we really try to have good meals here, the best we can. Do you like your room? Is the bed comfortable enough? (waited for answer) And how's everybody treating you here? (waited for answer)

I've brought a couple of plants along with me today, as you can see, and I'd be happy to give you one to look after for a while as a present from all of us at the hospital. Here's a nice one for you. (gave the patient a plant unless he protested that he didn't want it) You don't have to bother with it at all, I'm sure the nurses will water it and take care of it for you.

You know, a lot of people have said that we should have a suggestion box, so people can write in their suggestions and tell us how we can do a better job. Well, we're going to start bringing around a suggestion box several times a week, for you to put your suggestions in about what can be done to improve the hospital. If you have any ideas or complaints about anything, if there's anything you think should be changed here, you can let us know about it that way. Have you any now? (waited for answer)

Well, I've really enjoyed our visit together today, I hope you have, too. I'll try to be back some time soon to visit with you again. When I come back, would you like me to bring you the hospital magazine cart so you can choose some magazines to read or look at? (waited for answer) Well, I hope you have a nice day.

About five days later the experimenter returned to revisit all patients. To "Experimental" subjects he stated:

Hi, I'm Mr. Vulcano, do you remember my coming to visit you last week? How are you feeling today? Do you remember what I brought you when I visited you? So how is the plant that you chose from me doing? Are you looking after it? (if they were not, the experimenter added that, "Well, it's your plant for now, to look after or not as you choose.")

To those "Experimental" subjects who had requested magazines he added:

Remember that I asked you if you wanted me to bring you a magazine to read next time I came? Here's some--you can pick one, if you'd like.

He then continued, for all "Experimental" subjects:

You know, I hope you've been thinking about what we talked about the other day. Even though you're in the hospital, you still have your life to lead. Do you remember what I said to you? (the patient was given the chance to reiterate the experimenter's message if he remembered it; if he didn't the experimenter took this opportunity to repeat it briefly) I hope you're keeping busy and making the most of your time here. What kinds of things have you been doing the past few days?

I hope you've been thinking too about looking after yourself as much as you can while you're here. There may not seem, sometimes, like there's much you

can do for yourself but whatever you can do, you should do. You'll feel a lot better for it. Every bit--no matter how small it seems--helps a lot. You're still a responsible person and you're responsible for yourself. What kinds of things can you do for yourself to take responsibility while you're here, do you think? (patients were encouraged and praised for their answers)

You can try to be a little more active, too. There are lots of good ways to spend your time here. You can visit with friends, and make friends with some of your neighbours here, watch television, read. Life is what you make it. It's up to you to get more involved, and you'll be happier if you do.

One way to get involved is that, if you ever want something or if there's anything we can get for you, if you want to know about anything, it's up to you to tell us, okay? I've got this suggestion box with me again today and if you'd like to tell us something, I'd be glad to write in a suggestion for you or you can write one in yourself. Do you have any suggestions about the food? The nursing staff? Or anything at all? If you think we're doing a good job, you can tell us; if you think we're not doing our best, we'd like to hear about that, too--maybe we can do better for you.

Well, I'll be back again on Friday to visit you, would that be alright? Have a good day.

"Comparison" subjects were given this message:

Hi, I'm Mr. Vulcano, do you remember my coming to visit you last week? How are you feeling today? Do you remember what I brought you when I visited you? So how's your plant doing?

To those "Comparison" subjects who had requested magazines he added:

Remember that I asked you if I could bring you a magazine to read next time I came? Here's some. You can have this one (experimenter handed the magazine to the patient, not allowing him a selection).

The experimenter then continued, for all "Comparison" subjects:

So what have you been doing since I last visited? (waited for answer) Have you had a lot of visitors? Who's been by to see you? (waited for answer)

What have you been doing today, so far? (waited for answer) Do you know what you'll be doing this afternoon? (waited for answer)

You know, I'm bringing around this suggestion box again today and if you'd like to tell us something, I'd be glad to write in a suggestion for you or you can write one in yourself. Do you have any suggestions about the food? The nursing staff? Or anything at all? If you think we're doing a good job, you can tell us; if you think we're not doing our best, we'd like to hear about that, too--maybe we can do better for you.

Well, I hope I'll be able to come back some time to see you again. Have a good day.

Finally, about four days later, the experimenter returned and visited all patients, stating, regardless of group:

Hi, how are you today? Do you remember me? I'm Mr. Vulcano and I thought I'd come by to visit with you since I was on this floor. How's your plant doing? You know, some people have said to me that their plant is too much for them to look after, to water and such, and have asked me to take it to the day room so the nurses can better look after it. How do you feel about this? Would you like to keep it and be responsible for it yourself or would you rather have the nurses look after it in the day room? (if the nurses, then the experimenter stated, "Well, you tell them that, then.")

Have you any suggestions for the floor suggestion box today? (waited for answer) I'll be spending most of my time at the University pretty soon, so I'm going to leave a suggestion box for you to put your suggestions into in the day room, starting this coming week, okay? I've really enjoyed our visits together, I hope you have, too.

Throughout his visits the experimenter made certain to be as friendly as possible, and to spend an equal amount of time with all patients, about five minutes per visit. While it proved impossible for the experimenter to adhere verbatim to the presentations stated above, as patients were eager to initiate their own conversations, he did not neglect to forcefully convey the relevant information.

Dependent Measures

Five dependent measures were used to assess the success of experimental manipulations. These were:

(1) patients' preliminary acceptance/rejection of responsibility for a plant (Day 1)

(2) patients' acceptance/rejection of experimenter's offer to bring around the hospital magazine cart (Day 1)

(3) patient recall of experimenter on his second visit (Day 2)

(4) patients' final acceptance/rejection of responsibility for a plant (Day 3)

(5) number of patient suggestions proffered (Days 1, 2 and 3).

Results

A multivariate analysis of the data largely supported experimental hypotheses. Hypothesis one, that treatment subjects would display greater willingness than comparison subjects to accept responsibility and assume control, as reflected by the five dependent measures, was supported ($p < .05$). Two significant univariate results were found for effects of experimental treatment: (1) "accepting offer of magazine cart" ($p < .043$) and (2) for "final acceptance of responsibility for a plant" ($p < .045$).

Hypothesis two, that high debility patients would be perceived by nurses as displaying significantly greater emotional deficits than low debility patients, was supported ($p < .015$). High debility patients were rated as being significantly less active ($p < .001$), more dependent ($p < .0001$), more complaining ($p < .05$), less sociable ($p < .01$), less happy ($p < .04$), and as making more requests ($p < .003$). In addition, head nurses rated high debility patients as significantly more depressed ($p < .02$). Approaching significance was nurses' ratings for "goodness of sleep" ($p < .06$), with high debility patients sleeping more poorly than low debility patients.

Hypothesis three, that high debility patients would be more responsive to opportunities for stimulation generally than low debility patients, was not supported ($p < .13$).

No significant results at conventional levels of significance were found in a univariate analysis of effects of high vs. low patient debility. Approaching significance were "desiring magazine cart" ($p < .09$), and "remembering experimenter" ($p < .10$).

Hypothesis four, that an interaction effect would be seen between degree of patient debility and treatment condition, was supported ($p < .05$). One significant univariate result was found in the interaction analysis, for "preliminary acceptance of plant" ($p < .042$).

Table 1 illustrates the patient group means for the study's dependent measures, while Table 2 provides an overview of results:

Table 1
Table 1

Group Means for the Five Dependent Measures

Group	Took Plant	Desired Magazine	Remembered Expt. Per	Kept Plant	Offered Suggestions
HE	.889	.667	.778	.889	1.111
HC	.500	.600	.700	.300	.500
LE	.556	.667	.667	.556	.333
LC	.800	.100	.300	.500	.300

Table 2

Multivariate Analysis of the Five Dependent Measures

Sources of Variance	df	F	p
Treatment group (G)	5,30	2.6593	.0419
Debility group (D)	5.30	1.8850	.1267
Interaction (GxD)	5,30	2.8609	.0315

On the finding of a significant interaction effect, an analysis was undertaken to determine the multivariate centroids for the four patient groups, to obtain an indication of the nature of the interaction. The multivariate centroid for the "high experimental" group was found to be $-.173$; for the "high comparison" group, $.538$; for the "low experimental" group $.476$ and for the "low comparison" group -1.430 . Therefore, as predicted, low debility comparison group subjects were seen to respond quite differently to experimental manipulations than those of the other three groups, a finding which will later be discussed in greater detail.

In other findings, the overall correlation of nurse ratings on patient psychological functioning was found to be $.400$. The correlation between nurses on the "abilities for self-management scale", developed for the study, was found to be $.378$.

Discussion

Three main areas for discussion present themselves: firstly, an explication of experimental hypotheses in light of the collected data; secondly, implications of the findings of the present and related studies for future research; thirdly, general suggestions and considerations for hospital personnel interested in pursuing a program of control. Before turning to experimental hypotheses a number of procedural matters bear mention. These will be discussed as they occurred chronologically in the course of the study.

Prior to the study's commencement an experimental assistant visited all patients in order to obtain pre-study measures of receptivity to intended manipulations. Patients generally seemed passive and pleasant. All but one individual answered affirmatively when asked whether the practice of having flowers and plants in the hospital should be encouraged or discouraged. The dissenting patient was excluded from participation in the study.

In the present study, as in Schulz's (1976), the ability to communicate verbally was a criterion for patient inclusion. Since experimenter-subject interactions were fundamental to the study, the ability to communicate at some minimal threshold level was deemed necessary for participation.

Each hospital room houses two patients. In those

instances where both room partners participated in the study, they were assigned as a pair to either the treatment or comparison condition, for should one have overheard the experimenter talking with his neighbour this might have confounded the effects of experimental treatment. Thus joint assignment was a precautionary measure.

Langer and Rodin (1976) had their experimenter meet with groups of patients but suggested that a more powerful treatment might be one that is individually administered and repeated on several occasions. This suggestion was adopted in the present study, with the experimenter visiting each patient three times. Also, as with Langer and Rodin, in the present study a number of dependent measures were gathered, with the hope of increasing accuracy through a heterogeneity of methodology.

A decision was made in analysing the data to include two ambivalent comparison subject responses made on the final day of the study to the question "Do you want to keep your plant?" as "No." Only an immediate acceptance of responsibility for the plant seemed indicative of a confidence in one's abilities. The hesitation displayed by the two subjects was interpreted as a reluctance to accept final responsibility. The first of the two claimed he "didn't care" if he kept the plant, and the second said he would think about it. No other patients were seen to

equivocate.

One additional procedural matter remains to be discussed. Whenever a control strategy is introduced, an element of general stimulation is also introduced, but the question is what effect does control have above and beyond simple stimulation. Had the experimenter visited comparison group patients only to collect data regarding dependent measures, it could be strongly argued that treatment group patients responded not to the message of control but to the additional attention paid them by the experimenter. By having the experimenter spend an equal amount of time and attention on all patients, this potentially serious methodological problem was avoided. As a consequence, however, the study did not compare differences between enhanced control and no treatment groups, but rather between enhanced control and general stimulation groups. In effect, an attempt was made to isolate as much as possible the effects of control over and above general stimulation which would accompany any experimenter-patient interaction. Although it might have been of interest to also include a no treatment group of patients, who would have been visited only to collect data, under the study circumstances this did not prove possible owing to the paucity of patients.

As three of the four experimental hypotheses were statistically supported, each will be reviewed in turn.

The hypothesis that subjects encouraged to assume control would prove more responsive than comparison subjects on the five dependent measures was supported. Several tactics were employed in the attempt to afford treatment subjects a feeling of enhanced responsibility and control. In the treatment message patients' opinions were more actively sought, patient involvement in hospital life was encouraged, emphasis was placed on patient awareness of his responsibility for himself and his actions. More choices were presented treatment group patients and possibilities were suggested for how time in the hospital might be spent. Finally, treatment subjects were given greater control over the experimental relationship itself, being asked by the experimenter for permission to visit again, rather than simply being informed that he would. In brief, an attempt was made to facilitate the individual's sense of control by as many means as circumstances permitted.

In a discussion of the effects of experimental treatment on patient behavior, certainly the nature of the dependent measures employed bears consideration. Two of the experimental dependent measures--patients' original acceptance of a plant, and patients' decision at the study's conclusion whether to retain the plant--were regarded as indicative of patients' willingness to accept responsibility. A third dependent measure, patient acceptance or

non-acceptance of the experimenter's offer to bring the magazine cart, was aimed at seeing if patients would heed the communication relayed and take more responsibility for leisure time. A fourth dependent measure, the number of suggestions made, was predicated on patients' decisions to take constructive action in an attempt to influence the hospital environment. A final dependent measure, patients' recall of the experimenter's first visit on his revisiting them, was regarded as an index of the meaningfulness to patients of the experimental message. If the communication proved meaningful to treatment subjects it was anticipated that the experimenter himself would therefore likely be more readily remembered on his second visit. Like the other dependent measures, this last was yet another index of how successful the experimenter was at communicating his message of control to treatment subjects.

It might be advanced that the greater responsiveness evidenced by treatment group subjects on dependent measures was due not to the experimental message of control but to an "enhanced" experimenter-subject interaction, relative to comparison subjects. That is, treatment group subjects, liking the experimenter more, may have had a greater desire to please than did comparison subjects. Hence, responsiveness on dependent measures may have been more a reflection of one group's greater liking of the experimenter than on

a genuinely enhanced sense of control facilitated by the experimental message. Although the above, as expressed, is a legitimate concern, it is suggested that it was the message communicated treatment subjects liked more, not the experimenter. The experimenter remained equally cordial to all patients, regardless of message. Further, notes taken by the experimenter on the first day of the study indicated that both treatment and comparison subjects responded to him about equally well.

A second experimental hypothesis, that high debility patients would be perceived by nurses as displaying significantly greater emotional and behavioral deficits than low debility patients, was also supported. As compared to low debility patients, high debility patients were seen as being significantly more withdrawn, unhappy, less active, and so forth. Thus high and low debility geriatric patients don't appear to form one homogenous patient population. Debility group membership seems to have real implications for patients on the emotional as well as the physical level. This finding lends additional credence to Langer and Benevento's (1978) conceptualization of "self-induced dependence", wherein it is suggested that the more one has physically done for him, the more signs of emotional helplessness, such as withdrawal and dependency, he may come to display.

The third experimental hypothesis, that with stimulation held constant between groups high debility patients would be more responsive than low debility patients on the five dependent measures, was not supported statistically. It is possible that failure to find significant differences between low and high debility groups on the experimental dependent measures was due in part to the lack of sensitivity of the Abilities For Self-Management Scale (see Appendix A). Inter-rater reliability for the scale was found to be .378. Nevertheless, the self-management scale seemed to be of value, for it differentiated well between high and low debility patients on the large assortment of psychological variables on which patients were rated by nurses.

The fourth hypothesis, that an interaction effect would be observed between degree of patient debility and treatment condition, was statistically supported. Inspection of the data indicates that high debility patients were particularly responsive to the experimental control strategy which low debility patients were considerably less responsive to opportunities for stimulation in the absence of control. Logically, high debility patients, who by virtue of their physical limitations are afforded fewer opportunities for control than low debility patients, would be more responsive to such opportunities when they arise. Similarly low debility patients, more mobile than their

high debility counterparts, would have more opportunities for stimulation generally and hence not be as responsive to opportunities for stimulation per se. Thus while opportunities for control seem important to both high and low debility patients, they appear more so to the former. And as the reported multivariate centroid analysis indicated, while opportunities for any kind of stimulation seems important to high debility patients, this appears less the case for low debility patients, who are relatively more able to attend to stimulation needs on their own.

Based on the findings of this study and its predecessors several recommendations can be made to anyone interested in pursuing hospital control research. For example, future studies could be geared toward specifying the nature of the care that might be given high debility patients to counteract their social withdrawal and greater overall passivity. In the present study nurses rated high debility patients as significantly more passive and withdrawn than their low debility counterparts, yet findings indicated that high debility patients were no less open to involvement, as reflected by responsiveness (i.e., the dependent measures) than low debility patients. In fact, inspection of the data shows that high debility patients were, overall, more eager to participate. This speaks to the need on the part of this patient subpopulation for options to become more involved.

Their withdrawal seems indicative not of lack of interest, as might be inferred from nurse ratings, but of opportunity.

Anyone considering hospital research with the elderly should be made aware that there are no "ideal" geriatric subjects. In addition to being physically ill, many patients suffer from some degree of mental impairment. In the present study patients were drawn from four different hospital wards in order to locate 40 suitable experimental subjects. As a result of such patient selection the study included the hospital geriatric "elite". Future manipulations might be geared toward a more general participation, but the very nature of control research, which presupposes an ability to distinguish between nuances of control and lack of control, may make this unfeasible.

Beyond the problem of selective representation, other concerns emerge when singling out only a few ward patients for special treatment. Nonparticipants or study participants who discover that other patients are receiving better outcomes may become resentful or envious or make negative self-attributions (Schulz and Hanusa, 1978). In the present study, several ward patients who were not selected as study subjects seemed unhappy that, unlike their neighbours, they were not given plants.

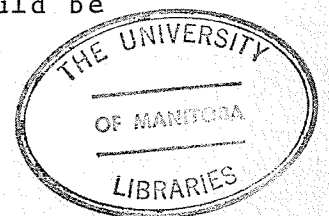
Generally in hospital research nurses and other staff are given only minimal information about the nature of

study manipulations, to avoid a potential source of contamination of results. Perhaps staff cooperation and benefits in the post-study nurse-patient relationship could be enhanced by increased staff involvement in the program itself. It is staff who must deal with patients on a daily basis. Their attitudes will have the most marked effect on how patients interpret their hospital experience. Patients, used to hospital routines, tend to be suspicious of people from outside. And, as Bandura (1977) observed, the impact of a manipulation may vary substantially depending on the perceived credibility, prestige, trustworthiness, and assuredness of those instituting it. The more believable the source of the information, the more likely is the information to be believed. Thus control interventions might best be made by those within the hospital infrastructure.

Finally, the research suggests that experimental manipulations should be evaluated as to their probable long as well as short term impact. Both Rodin and Langer (1977) and Schulz and Hanusa (1978) have stressed that interventions should be of a kind that need not be withdrawn on termination of the study, for the loss of control potential might lead to even greater patient debilitation than was first encountered. Treatments, to be effective in the long term, should be geared toward fostering generalized

feelings of control over ongoing daily events rather than over momentary, experimentally-created tasks. On the conclusion of the study reported herein, a suggestion box was left for continued patient use in the day room on each floor, and each study subject was informed of its placement there. All patients were allowed to retain their plants and a suggestion was strongly forwarded to head nurses that a magazine cart be made available to patients on a regular basis.

Whatever paths future hospital research with the aged may take, individuals undertaking studies should be made aware of the methodological limitations inherent in such investigations. Institutionalized geriatric patients have frequently been regarded as "deprived" and "helpless" by researchers and by those who deal with them in a service-oriented framework. The definition and measurement of these phenomena in animals and in college subjects placed in controlled laboratory environments are more precise than what will ever be feasible with institutionalized geriatrics. It is not possible to measure with any degree of accuracy levels of deprivation in the aged, or to isolate specific forms of deprivation of interest, e.g., social, sensory, perceptual (Erber, 1979). However, as qualified as the findings of real-world control research may of necessity be, failure to undertake such studies would be



to leave unexplored a broad and important spectrum of human experience. Field experiments should be undertaken with as many controls as are feasible given the unique circumstances surrounding each individual investigation.

A hospital staff contemplating a program of enhanced control for geriatric patients might choose to implement some of the following suggestions, any of which might lead an individual to perceive an increase in his sphere of influence. Less debilitated patients could be given some small responsibility, such as making their own beds, bringing around a magazine cart, reading to or simply visiting with bedridden patients. Taylor (1979) suggests that patients be given detailed information about the nature of their condition and care, so they may ask questions, develop realistic expectations and prepare themselves for new developments in their treatment. Staff could encourage patients to keep calendars, clocks, or bring a radio from home. Mirrors and combs could be kept close at hand for highly debilitated patients so that, to the extent that they are able, they could attend to their own appearance. Plants could be made available to those patients willing to assume responsibility for them. Use of a suggestion box could be encouraged. Finally, patients could be allowed more privacy than they are at present. In a recent study Mazeika (1978) found a significant correlation

between elderly nursing home residents' perception of privacy and life satisfaction, as determined by resident self-ratings, across three nursing homes. Staff could be encouraged to respect patient privacy by knocking on doors before entering.

No matter which of the above are selected as the basis for a program of control, one overriding principle should be observed. Bandura (1977) has stated that the more varied the circumstances in which mastery is available, the more likely effects will endure and authenticate feelings of personal efficacy. Verbal persuasion is widely used because of its ease and ready availability. Efficacy expectations induced by verbal persuasion alone, however, are likely to be weaker than those arising from one's own accomplishments. Whatever mastery expectations are induced by suggestion alone can be readily extinguished by disconfirming experiences. Yet individuals who are persuaded that they have within them the power to master difficult situations and are provided with aids for effective action are likely to mobilize greater effort than those who receive only performance aids. Thus verbal persuasion, including suggestion, exhortation, self-instruction and interpretive treatments, can most effectively be employed in conjunction with genuine opportunities for control.

Taylor (1979) has argued that an expanded patient role

based on informed participation would be cost-effective. While staff time would be required to inform patients about their treatment, time taken up by complaints and bids for attention would be reduced. While staff would be needed to teach patients various aspects of self management, once patients assumed those tasks, staff resources would be saved.

It might reasonably be argued that minor interventions as the ones suggested above could not genuinely make a difference in the lives of elderly patients. However, that the minimal interventions introduced by Langer and Rodin (1976) could set in motion a process resulting in benefits accruing to treatment subjects even a year and a half later speaks favorably for more widespread application of the principles of control. Staff should not be deceived by patients' passivity. Langer and Rodin (1976) noted that although significant differences in active involvement were found between treatment and no treatment groups, the overall level of participation in the activities comprising their study's behavioral measures was low. In the study reported in this paper patients generally seemed passive. Over three opportunities to do so, only 10 patients of 40 ever cared to enter suggestions in a suggestion box (see Appendix E). That so few patients entered suggestions--despite the fact that in a prestudy question-

naire nearly all expressed a belief that introduction of a patient suggestion box would be a positive addition--likely indicates these patients' reluctance to believe their efforts could lead to real changes in their circumstances. Patients need to be shown that this is not the case.

It is one thing, however, for a researcher to say "give the patient control", and another to implement that notion in a manner that maintains a high degree of care and allows the hospital bureaucracy to continue to function. Hospitals are generally understaffed and nurses, harried enough attending to patients' physical needs, are not expected and ill-prepared to meet the long-term geriatric patient's social and emotional needs as well. The reality is that hospitals are not geared toward the semi-permanent occupant. Also, for patients to become more vocal and demanding might be perceived by staff as a threat. Would floor nurses really be prepared to adopt an orientation toward patient care that might lead to a partial relinquishing of their perceived authority? In addition, it is more difficult to institute a program of control in hospital environments than in nursing homes, where residents can typically do more for themselves by virtue of their comparative physical health, e.g., go for walks and visit outside the institution. With hospital patients more time must be spent on a one-to-one basis and there is limited time for each

patient. In any event, though the hospital status quo may be grudgingly accepted for brief confinement, when the period of incapacitation extends to months some greater effort to attend to basic human emotional needs seems in order. Perhaps an individualized program geared toward the potentialities of each patient is called for. Doctors, nurses and social workers could meet to discuss and plan for the psychological as well as medical needs of long-term patients.

In sum, then, programs to enhance patients' perceptions of control can be approached from at least four different perspectives. Firstly, a program of staff education could be initiated--which might focus on the recent control literature--and hopefully sensitize staff to patients' needs in this regard. Secondly, staff in their interactions with patients could give greater attention to their suggestions and need for privacy, while encouraging them to be as self-sufficient as they are able. Thirdly, objective environmental modifications could be introduced, with the aim of providing patients with further means to increase their sphere of influence (e.g., suggestion boxes, magazine carts, clocks, radios, and so forth). Fourthly, individualized programs for long-term care patients could be instituted. And lastly, further research to test the long-term efficacy of such interventions could be

undertaken.

The study reported in this thesis was among the first to investigate the significance of continued control for hospitalized geriatric patients, and the first to explore the relationship between the facilitation of control and degree of patient debility. This study adds to the growing body of literature which suggests that some of the deficits encountered by the aged in institutional settings are at least in part attributable to loss of control. If patients are ever to be more than the passive recipients of services, they must be afforded options to become more involved in hospital life. It remains for concerned hospital personnel to initiate programs toward this end.

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APPENDIX "A"

PATIENT NAME _____

ROOM NO. _____

- 1.) How long have you been in the hospital? _____
- 2.) Do you think it's a good thing or a bad thing for patients to have plants and flowers in their rooms when they're in the hospital? _____ Would you want plants and flowers in your room, or not? _____
- 3.) How does the staff act towards you here? _____
- 4.) Do you think it's a good thing for patients to make suggestions and give their ideas to the doctors and nurses, so that they can do a better job? Or do you think patients should leave everything up to the doctors and nurses, because they know best? _____
- 5.) Are you looking forward to leaving the hospital? _____
- 6.) Would you say that your being in the hospital is a good thing for you, all things being considered? _____

7.) (S)he usually is

1	2	3	4	5	6	7	8	9	10
very									very
withdrawn									sociable

8.) (S)he usually is

1	2	3	4	5	6	7	8	9	10
very									very
happy									unhappy

9.) Approximately how much of the day (excluding meal time) does (s)he spend engaged in the following activities. (Please assign percentages to each category so that they add to 100%).

- Watching T.V. or listening to the radio _____%
- Visiting with people from outside the hospital _____%
- Visiting with other patients _____%
- Sitting alone doing nothing _____%
- Sitting alone reading or making a craft _____%
- Watching the staff _____%
- Talking to the staff _____%
- Other (please specify) _____%

10.) How often does (s)he make requests of you?

1	2	3	4	5	6	7	8	9	10
never									very often

How would you describe the kind of requests (s)he typically makes?

APPENDIX "D"

Please place the number (1, 2, 3 or 4) in the space provided which in your opinion best applies to this patient:

- 1.) No mental impairment (e.g., confusion, disorientation, reasoning difficulties, etc.)
- 2.) Minimal mental impairment
- 3.) A moderate mental impairment
- 4.) A significant mental impairment

Please place the number (1, 2, 3 or 4) in the space provided which in your opinion best applies to this patient:

- 1.) This patient displays no signs of depression
- 2.) This patient displays minimal signs of depression
- 3.) This patient displays moderate signs of depression
- 4.) This patient displays marked signs of depression

APPENDIX "E"

Patients' Suggestions, Comments and Complaints

1. doesn't like to be left waiting in a chair alone while getting ready for bed
2. a lot of food wasted; should be cut down
3. nurses have favorite patients
4. not enough freedom to do things on one's own
5. suggestion box can be carried too far
6. don't put gravy on everything
7. doctor to look at right shoulder
8. wants to go outside more often
9. not enough nurses available
10. staff shouldn't change bedspread twice a week; a waste
11. should have a sign for turning off lights; lights on all day and this is a waste of electricity
12. lots of unnecessary waste; why throw away clean diapers when making up the bed
13. not consulted when his room was changed; wants to be in a room with a better view
14. toast shouldn't be covered, it makes it steamy and rubbery
15. hates white hair, wants access to a hairdresser
16. wants to eat in room as opposed to hall; wants privacy
17. nurses doing what they can, but there's not enough of them
18. too much noise, six people yelling at once
19. wants to go home
20. wants to see woman next door go for walks more
21. wants to go outside for one-half hour on nice days
22. wants more than anything else to eat in own room