

THE UNIVERSITY OF CALGARY
THE EFFECT OF MANAGERIAL STRATEGIES
ON STRESS
IN STAFF IN RESIDENTIAL REHABILITATIVE SETTINGS

by

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "The Effects of Managerial Strategies on Stress in Staff in Residential Rehabilitative Settings, submitted by Douglas Allan Swanson in partial fulfillment of the requirements for the degree of Master of Science in Rehabilitation.



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ABSTRACT

In recent years there has been a proliferation of literature addressing the issues of stress and burnout. This study examined the notion that managerial strategies promoted in the literature affect stress levels among personnel. The focus of this study was on the application of goal setting, feedback, and job enlargement/enrichment by managers working in rehabilitation residential settings.

The literature on stress and burnout as well as organizational intervention were reviewed. Studies attempting to reduce stress were examined closely. While the studies reviewed generally claimed that stress could be reduced, few studies attempted to determine the effect of managerial strategies on stress among personnel. The central issue examined in this study is the effect of managerial strategies on personnel perceived stress.

The study was designed to involve employees (rehabilitation personnel charged with the responsibility of development of young and elderly mentally handicapped adults) in four managerial activities: goal setting, client feedback regarding progress on developmental goals, managerial feedback regarding program objectives, and job enlargement/enrichment.

The rehabilitation personnel worked in four homes. All employees of the four homes were involved in the four managerial activities, albeit in a varying order in each home. Stress levels of the rehabilitation personnel in each home were assessed every four weeks prior to the application of any conditions, four weeks following the introduction of

each new condition, and in follow-up after the application of all four conditions.

The data was collected and collated and statistically analyzed. It was hypothesized that the effect of the four strategies would be 'visible' in the stress levels of the employees. One group (N=3) showed a reduction in stress levels when treatment effects were compared to baseline levels of stress. No significant differences were found in the same comparison among the other groups.

While the results do not strongly support the conclusion that the four strategies reduce stress, the results do indicate that the four strategies do not seriously increase stress. Therefore the appropriateness of the strategies used in this study may be better evaluated using a different variable as indicator of effect. Phenomenological and philosophical parameters are indicated as possible areas of analysis in future studies. There is some evidence suggesting that the context in which strategies are applied may contribute, as much as anything, to the perception of the strategy as a stressor.

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DEDICATION

To CASEY, N-MES, and LIZARD
for having the vision
to see the importance of this task
and the wisdom to know how to nurture it.

TABLE OF CONTENTS

	<u>Page</u>
List of Tables	x
List of Figures	xi
CHAPTER 1 INTRODUCTION AND REVIEW OF THE LITERATURE	
Introduction.....	1
Burnout.....	2
Stress and the Human Service Organization.....	6
Stress in a Variety of Working Environments...	9
Stressors.....	10
Precursors to Burnout.....	10
Behavioral Manifestations of Burnout.....	12
Solutions.....	13
Burnout Intervention.....	15
Stress Intervention and Habilitative Personnel	19
Managerial Feedback.....	23
Client Feedback.....	24
Job Enlargement/Job Enrichment.....	25
Goal Setting.....	26
Conclusion.....	29
CHAPTER 2 METHOD AND EXPERIMENTAL DESIGN	
Introduction.....	31
Employee Self-Reported Questionnaire.....	32

Administration 1 (Validity).....	33
Subjects and Settings.....	34
Design.....	36
Details of Manipulations.....	38
Procedures.....	50
Stress Evaluation Form.....	50
Data Collection.....	51
Baserates.....	51
Phases of the Study.....	51
Ethical Considerations.....	59
CHAPTER 3 RESULTS	
Introduction.....	63
Reliability of Questionnaire.....	64
Inter-rater Reliability of Raw Scores.....	65
Comparison of Baseline Performances.....	68
Comparison of Baseline and Treatment Conditions.....	68
Comparison of Baseline, Treatment and Follow-up Conditions.....	69
Comparison of Gain Scores.....	69
Analysis of Two Evaluation Conditions.....	78
Analysis of Feedback Conditions.....	78
Analysis of Follow-up Condition.....	78
Administration Questionnaire.....	79
Social Validity.....	79
Interviews.....	81
Employee Responses to the Interview Questionnaire.....	81

CHAPTER 4 DISCUSSION

Introduction.....	91
Pros and Cons of Contamination and History....	91
Discussion of the Statistical Analysis.....	93
Administration Questionnaire.....	99
Social Validity.....	100
Summary of Issues.....	101
Suggestions for Future Research.....	103
Specific Changes Suggested to the Study.....	104
Practical Recommendations from the Study.....	106
Subjects and Design.....	110
Recommendations for Revisions to the Study....	111
References.....	114
Appendix 1.....	131

LIST OF TABLES

Table I: Design of the Study.....	37
Table II: Managerial Feedback Form 1A.....	39
Table III: Managerial Feedback Form 1B.....	40
Table IV: Weekly Program.....	41
Table V: Program Quality Self Report.....	42
Table VI: Goal Setting.....	43
Table VII: Job Enrichment/Enlargement.....	47
Table VIII: Client Feedback.....	49
Table IX: Questionnaire Administration.....	52
Table X: Administrator's Questionnaire.....	53
Table XI: Phases of the Study.....	54
Table XII: Raw Scores (Self-perceived Stress) Per Subject Per Group Per Condition.....	66
Table XIII: Mean Scores Per Condition Per Subject Per Group.....	74
Table XIV: Gain Scores Per Condition Per Subject Per Group.....	76
Table XV: Mean Scores Per Question (Administrator's Questionnaire) on Pre and Post Evaluation.....	80
Table XVI: Mean Scores of Social Validity Questionnaire Conducted Post Study.....	82
Table XVII: Post Study Interview Questionnaire.....	83
Table XVIII: Post Study Interview Results.....	88

LIST OF FIGURES

Figure 1: Value Priority Scale (Marlett and Hughson).	45-46
Figure 2: Weekly Client Progress Review (Sample).....	55
Figure 3: Social Validity.....	58
Figure 4: Stress Levels of Subjects of Group A.....	70
Figure 5: Stress levels of Subjects of Group C.....	71
Figure 6: Stress Levels of Subjects of Group D.....	72
Figure 7: Mean Scores of Self-reprted Stress for Groups A, C, and D Across All Conditions (Baseline, Treatment, and Follow-up).....	73
Figure 8: Mean Scores of Subjects Per Condition.....	77

CHAPTER I

INTRODUCTION AND REVIEW OF THE LITERATURE

Stress is stated as one of the biggest problems in education today (Truch, 1980) and many personnel are seen as unmotivated, doing little more than they have to and feeling they are not paid to think (Munro, 1977). While there has been considerable effort extended by educators and practitioners to improve the life-style of students, especially handicapped persons, [Public Law 94-142 in the United States (Turnbull and Strickland, 1981) and similar curricular efforts in Alberta Education, (Robin Hood School, Sherwood Park, Alberta; Vocational Training for the Handicapped, Red Deer College, Alberta; Michener Centre, Red Deer, Alberta)] there has not been similar effort to improve the quality of life of teachers in the classroom (Matteson & Ivancevich, 1982), and practitioners in the field. While few programs exist to improve the quality of life of teachers in the classroom, Truch (1980), reports that 95% of teachers surveyed desire stress management courses.

Research on stress and burnout has been directed towards three areas: 1) what is stress and burnout, 2) what are the precursors/indicators of stress, and 3) what are the solutions to stress and burnout (both reactive and proactive). To this end authors, such as Maslach (1982), have concluded that burnout is best understood and modified in terms of social and situational sources of job related stress. Stress is a group problem that individuals and organizations cannot dismiss lightly (Matteson & Ivancevich, 1982). The problem is

intensified when education desperately needs all the creative energy and drive its people can muster (Mattaliano, 1982).

The scope of burnout is broad and complex. The understanding of stress and its solutions requires an awareness of the interacting variables that contribute to the presence of burnout - a contextual focus on merging issues - social forces, low pay and resources, attitudes and policies (Whitebrook, 1981). In the last few years a great deal of work has been conducted to delineate the context of burnout and stress - identification, causes and solutions.

The review of research in this thesis includes a summary of descriptions of studies in a variety of human service fields (early childhood, careworkers, teachers, counselors, front-line personnel in rehabilitation facilities and administrators) as they relate to stress. The review is followed by a summary of the causes or precursors to stress; the manifestations of stress in the employee; and the suggested/attempted solutions presented.

BURNOUT

Teacher burnout is an increasing problem (Kirk and Walter, 1981). Truch (1980) reports that 20% of teachers surveyed report teaching to be very or extremely stressful and that ratings were not dependent upon variables such as sex, qualifications, age, length of teacher service or position held in the school. In his summary, Truch (1980) views burnout as a pervasive problem. While the volume of literature addressing burnout in the helping professions, appears to support Truch's position, attempts to operationalize the phenomenon of burnout have not yielded the same agreement.

Kirk and Walter (1981) suggest that educational or teacher

burnout is some degree of physical, emotional or attitudinal exhaustion related to occupational stress. Additionally, it is postulated that the helping professions, in general, seem to be inordinately affected. Like Kirk and Walter, Cherniss (1980) refers to burnout as a process in which professionals' attitudes and behavior change in negative ways in a response to job strain. The degree of strain is believed to be largely influenced by the nature of the work setting. Cherniss (1980) suggests that the work setting is all too likely the source of burnout. Cherniss is supported by Kirk and Walter who recommend that the goal of the human service manager is to determine the occupational stressors and then alter them. Cherniss concluded that those who work in extremely demanding, frustrating and boring jobs tend to change more negatively than those whose jobs are interesting, supportive and stimulating.

Whitebrook (1981) postulates that burnout is a phenomenon whereby an energetic staff person loses interest in his/her work and becomes likely to quit. Niehouse (1981) like Whitebrook (1981) presumes that the burnout candidate starts with enthusiasm, timeless energy and in some cases high ideals. He suggests that there is a genuine desire to cure the ills within his/her influence.

Niehouse and Whitebrook are both suggesting that it is energetic staff members that are most likely affected by burnout. While energetic persons may be affected disproportionately, many other authors see the problem as being more of an environmental/milieu issue than an individual issue (Iwanicki and Schwab, 1982; Monat and Lazarus, Koff, et al., 1981; Cherniss, 1980; and Freudenberger, 1974).

Maslach and Jackson (cited in Iwanicki and Schwab, 1982)

suggest that burnout consists of three characteristics: visible aspects such as increased feelings of emotional exhaustion, negative cynical attitudes toward clients including dehumanization and depersonalization, and evaluations of oneself which are negative and lack a feeling of personal accomplishment. The characteristics of a burned out employee are in part due to the constant involvement with people who have problems (Maslach and Jackson, cited in Iwanicki and Schwab, 1982) with a concomitant loss of caring and commitment that once was characteristic of their original attitudes. Iwanicki and Schwab (1982) conclude that teachers who are unable to cope with the stressors of the job, the impact of the succession of problems, and the resultant effect of depleted resources to perform, are burned-out. Niehouse (1981) agrees with the position of Iwanicki and Schwab in suggesting that burnout is the total depletion of one's physical and mental resources caused by excessive striving to reach unrealistic, job related goals. Like Iwanicki and Schwab and Niehouse, Koff, et al. (1981) perceive stress to be generated most often from the accumulation of situations and responsibilities characterized by constant pressure and no let up in problems (unrelenting demands) coupled with insufficient time to carry out responsibilities, which leads to a lack of time to do the work well enough.

Authors of definitions of burnout have generated two positions regarding the nature of burnout: 1) individuals experiencing burnout are unable to master the qualitative and quantitative issues, and 2) environments which do little to assist the human service employee in his/her efforts, are predisposing individuals to burnout. Other related definitional components focus on the precursors and

consequences of burnout, while still others focus on the manifestations of burnout in the employee. Niehouse (1981) cautions researchers that burnout is easily confused with identifiable problems which lead to burnout, suggesting that burnout in some way is a more severe manifestation of earlier stressful reactions. Goens and Kuciejczyk (1981) propose that stress is any action or situation placing physical and psychological demands upon a person and can unbalance the person's equilibrium. Burnout, is then suggested as a severe reaction to stress when attempts to successfully deal with the presenting stressors are unsuccessful. Burnout is referred to as the total physical and emotional exhaustion often coupled with a change in attitude toward people at work, with a resultant effect upon motivation, attitudes and personal interaction (Goens and Kuciejczyk, 1981 and Maslach, 1982).

A less common position taken by some researchers who accept burnout as the loss of human performance is that of focussing on the environment as the target of analysis when considering the issue of burnout. Cherniss (1980) suggests that there is a need to adapt a social, ecological perspective and observe human behavior as a dynamic interaction between the individual and the social environment of which he/she is part. Therefore, the factors which contribute to burnout must be scrutinized. An obvious factor to be analyzed in human service systems is the managerial position (in particular, the process of managing personnel). Freudenberger (1974) states that the major cause of burnout is loss of charisma of the leader. Laten (1977), of the Berkley Planning Association noted, that leadership and supervision (of all the factors contributing to burnout) appeared to be most strongly associated with the problem (cited in Cherniss, 1980).

The position offered by Cherniss in effectively dealing with stress focuses on the impact of the environmental factors on the employee,

"... any attempt to identify professional burnout as the individual professional's problem and to deal with it accordingly will be misguided and ultimately ineffective.

Burnout ... is a reflection of institutional deficit and weakness." (p. 48)

Niehouse (1981) indirectly supports Cherniss' position when he states,

"As human resource managers you have a clear mandate to initiate a preventative burnout program". (p. 32)

This study is directed to evaluating the impact of managerial behavior (four tasks) on employee self-perceived stress. The four factors of importance are management feedback; client feedback; job enlargement/enrichment; and goal setting. The research related to the four factors will be discussed.

STRESS AND THE HUMAN SERVICE ORGANIZATION

Truch (1980) suggests that teachers rank third behind airline pilots and surgeons as the most stressed occupation. While stress seemingly affects all educators, of both sexes and all ages to some degree, Matteson and Ivancevich (1982) suggest that stress is heightened in the young worker, and the older employee who has plateaued career-wise. Weller (1982) concluded that the climate is dependent upon the quality of leadership exhibited. Mattaliano (1982)

described the difficult task of the manager in providing support to the employee as allowing creativity and the kind of supervision that respects creative teachers. He further suggests that both take courage as creative people tend to challenge the existing order. Mattaliano concluded (1982) that we can little afford to have leadership which drives these potentially powerful forces (creativity) into other channels. The development of an inner feeling of worthwhile achievement experienced by the individual should be coupled with recognition of that achievement by supervisors, peers and subordinates to decelerate stress and the effect of stressors (Mattaliano, 1982).

Cherniss (1980) states that work is the central life activity for most people. It is often more than 40 hours a week. Employers need to improve the quality of work life by minimizing stressors and maximizing the employees' ability to deal more effectively with the stress they will experience. (Matteson & Ivancevich, 1982). Weller (1982) suggests that educational practices need to be developed which strengthen identified weaknesses, and promote a positive attitude toward evaluation and inservice activities. It is emphasized that employers can play an important role in relieving stress on the job. Providing opportunities that foster professional development is a primary responsibility of the administration (Weller, 1982). Additionally, it is suggested that staff need to be afforded the opportunity to initiate positive changes in the work environment (Hollefreund, et al., 1981).

While efforts directed toward the prevention of new stressors (or the eradication of present environmental stressors) may be difficult to interpret in true measurable performances and identifiable

organizational gains, the benefits may nevertheless be there.

Matteson and Ivancevich (1982) offer questions which may intrigue the administrator, "Who can say what an organization might gain by a 3% increase in decision making effectiveness or 5% increase in creativity?" While measurable gains may be difficult to identify, Scully (1981) suggests that there are several reasons why strategies to improve the climate be devised:

"While maintenance of mental health is ultimately the individual's responsibility there are also compelling reasons to provide programs to support its staff . . . institution ultimately benefits, service (by staff) is of higher quality, staff members are more productive , and development may proceed from "survival" to "self-actualization."" (p. 48)

A motivating work environment is suggested to provide opportunities for personnel to express and satisfy their own motives in ways, which at the same time, contribute to achievement of the organizational goals (Gordon, 1982). Fostering an environment such as this requires administrators to be effective climate-makers and they need to don a dynamic-administrative posture endowed with vision to maintain a commitment to the novel and to be dedicated to synergistic involvement and planning methods (Weller, 1982). An environment of this nature, according to several behavioral scientists (fosters) the ability to work well with others (and) has significant positive effect on organizational and individual behaviors (Gmelch & Swent, 1981).

STRESS IN A VARIETY OF WORKING ENVIRONMENTS

Stress and burnout are not confined only to the teaching profession. Cherniss (1980), conducted a longitudinal study using multiple in-depth interviews across four domains: lawyers, teachers, community health nurses, and mental health professionals. He found surprising similarities between stressors in the working environments and the adaptive responses of the personnel studied. Other studies support similar findings. Burnout is reported in child care workers (Whitebrook, et al., 1981; Hyson, 1982); special educators (Weiskopf, 1980; Bensky, et al., 1980); regular educators (Schwab and Iwanicki, 1982; Weller, 1982); counselors (Truch, 1980; Warnath, 1977); nurses (Hollefreund, et al., 1981; Lavendero, 1981); managers (Nickhouse, 1981; Quick and Quick, 1979); and rehabilitation personnel (Munro, 1977; De Loach and Greer, 1979; Miller and Roberts, 1979, Feinberg and McFarlane, 1979; and Freudenberg, 1974).

While much of the literature is directed towards identification of stressors in working environments; the recent literature has come to focus on the remediation and prevention of burnout (Cherniss, 1980; Edelwich and Brodsky, 1980; Truch, 1980). Consequently, the literature supports a variety of interventions thought to be useful in dealing with burnout and its related effects upon staff. This section will summarize the current reported efforts in the areas of special education (which includes rehabilitation), regular education, nursing, and counseling. A concluding section will look at some general perspective areas, the role of the administrators, and the importance of careful, attentive supervision (Bensky, et al., 1980 and Maslach, 1978).

STRESSORS

Teacher burnout exists at all levels of education from pre-kindergarten to universities (Weiskopf, 1980) and, additionally, affects the specialized educators in segregated and integrated settings for handicapped people. Special educators work intensely with children who require constant care, support and supervision (Weiskopf, 1980). Coupled with this, the clients of the 1980's will be more severely disabled, less educated, less able to cope with the rising costs of inflation, and older (De Loach and Greer, 1979). This new client and economic conditions which may be very austere (De Loach and Greer, 1979) will in all likelihood further increase the stress and strain upon the educator. The environmental sources of stress reported by Weiskopf (1980) (work overload, lack of perceived success, increased and intensified contact, lack of administrative support, higher ratios, and increased responsibility to provide for the other person) coupled with increased feelings of incompetency in new teachers (Cherniss, 1980) in all likelihood will increase even further, and contribute to a fostering of burnout through repeated stress. As environmental demand increases and/or response capability of the client decreases, the likelihood that the individual practitioner will experience stress as a negative reaction becomes more probable (Bensky, et al., 1980).

PRECURSORS TO BURNOUT

Currently within special education settings, antecedents to stress are reported to include lack of direct, immediate feedback; excessive paperwork; role conflicts; and poorly defined objectives (Cherniss, 1980). Additionally, the lack of precise criteria to measure accomplishments contributes to stress (Edelwich and Brodsky,

1980). Bensky, et al., (1980) report clear role expectations to be negatively correlated with stress, while discrepancies in role expectations are positively correlated, suggesting that the greater the clarity of role and responsibility for the special educator, the less the stress. Dixon, et al., (1980) supports other authors and suggests that setting up clear goals and precise objectives for the teacher's role(s) should be the responsibility of administrators.

Munro (1977) describes a consultative approach useful in remediating "front-line collapse" (the institutionalization of staff) and identifies that the administrative target group is not the handicapped client, but the front-line staff. The front-line staff are characterized as an unmotivated work force who do little more than they have to and they feel they are not paid to think (Munro, 1977). The solution, described by Munro, to preventing front-line collapse should focus on collaboration with the concomitant provision and opportunity for staff to channel their power into constructive endeavors (Munro, 1977).

Bensky, et al., (1980) compared stressors among special educators, resource room teachers, and regular teachers. Special educators marked pupil load as the highest of five stressors, while regular teachers ranked pupil load as the lowest of the same five stressors. The implication suggested is that special educators perceive that the needs of the special-needs learner are excessive (at least more so than the needs of the regular learner as perceived by the educator.)

Additional precursors identified in the literature include feelings of inadequacy when performing assigned job tasks/activities,

self-doubt (Cherniss and Egnatios, 1980), multiple roles, and lack of sense of power over their own work situation (Meadows, 1981).

BEHAVIORAL MANIFESTATIONS OF BURNOUT

Fatigue, irritability, mild depression, boredom and feelings of overwork (Freudenberg, 1979) are offered as common signs of burnout. Cynicism and negativism may evolve (Maslach, 1976) and the educator may become less flexible, leading to a decrease in effectiveness of the teacher (Weiskopf, 1980). More serious but apparently common problems are alcohol and drug abuse, marital conflict, mental illness, depression and excessive smoking (Maslach, 1978). Additional behavioral signs of burnout are reported to be absenteeism (Truch, 1980; Matteson and Ivancevich, 1982; Morrocco and McFadden, 1981), feelings of inadequacy (Meadows, 1981; Weller, 1982; and Christensen, 1981), reduced creativity (Matteson & Ivancevich, 1982; Weller 1982; Lavandero, 1981), and reduced involvement with students (Goens & Kuciejczyk, 1981).

The role of the administrator in teacher stress has been given considerable attention as an indicator of teacher stress and the following indicators are presented as precursors to stress. It should be reiterated that the context of the environment (Whitebrook, 1981) and the interactive effect of the variables may in fact be the critical dimension of stress, not the variables in isolation. Truch (1980) suggests that rigid control over employees and punishment for controversiality are strong precursors to stress in employees. Other administrative performances which act as precursors to stress are the higher order needs of the teacher going unfulfilled (Sweeney, 1981); lack of stability in the work environment and lack of input into

changes (teacher input) (Matteson and Ivancevich, 1982); inadequate institutional support (Edelwich and Brodsky, 1980; Heudekopfer, 1982); failure by administration to support and encourage ideas and not feeling that one is appreciated by the supervisor (Edelwich and Brodsky, 1980; Anderson, 1981); mandated rather than negotiated policies (Weller, 1982), environments which are restrictive and unresponsive to employees, and setting goals at the top and then coercing people to follow and attain the goals (Olson & Matuskey, 1982); thwarting innovations (Hyson, 1982); and teachers being accountable to too many persons (Mercer, 1981).

SOLUTIONS

The solutions to burnout tend to fall into two categories proactive and reactive. Each of these two categories has two sub-groups from which solutions might be generated - organization or individual.

Proactive orientations focus on preventing or minimizing precursors to burnout, while reactive orientations attempt to reverse the effects of existing stressors in the environment. Proactive organizational strategies include the design and development of a support system for staff (Truch, 1980; Whitebrook, 1981; Iwanicki, 1982; Kirk and Walter, 1981; Weller, 1981; Gmelch and Swent, 1981; and Christenson, 1981); the development of good communication with clear

job descriptions and role responsibilities (Maslach and Pines, 1976; Whitebrook, 1981; Iwanicki, 1982; Weller, 1982; Gmelch and Swent, 1981); joint decision making and participative management (Truch, 1980; Whitebrook, 1981; Iwanicki, 1982; Weller, 1982; Goens and Kucieyczuk, 1981); developmental progress evaluations which strengthen teacher need areas (Weller, 1982; Scully, 1981); and variety in job and involvement in committees (Truch, 1980; Gmelch and Swent, 1981; Scully, 1981). Additional solutions at the organizational level include ensuring planned time out from the class for the teacher each day (Truch, 1980); increasing public awareness of the job to reflect the comprehensive nature of the skill, training and commitment of employees (Whitebrook, et al, 1981); training teachers and administrators in conflict resolution skills (Iwanicki & Schwab, 1982); provision of incentives/feedback to maximize teacher achievements (Truch, 1980; Freudenberger, 1974); mental health days (Truch, 1980; Whitebrook, 1981); and involvement of the teacher in the evaluation process (Iwanicki & Schwab, 1982; Weller, 1982).

Conceivably each of the proactive organizational solutions might be implemented in a reactive effort to alleviate stress within employees in existing environments. Matteson and Ivancevich (1981) conclude that solutions should be proactive, as preventive maintenance is always more cost effective than repairwork. Short-term workshops and long-term plans to foster maintenance of employees' health (Morracco and McFadden, 1982) are reasonable organizational tasks.

This is supported by Scully (1981) who writes that administrators should be:

"...finding ways to tap into whatever pools of potential energy are available, finding ways to stir up and excite the energy, and designing, organizing, and managing work environments so as to provide channels through which the energies of personnel can be directed toward accomplishing the goals of the organization." (p. 28)

At the preservice and inservice level, teachers and administrators (together) should have the opportunity to attend stress management seminars and workshops (Morracco and McFadden, 1981). In addition, the preservice system must ensure training which enables human-service-providers to understand the realities of the job, (Hollefreund, et al., 1981) and the opportunity to acquire time management strategies (Gmelch and Swent, 1981).

In summary, there are a number of precursors which are believed to contribute to stress and ultimately burnout. The precursors most often cited are: lack of training (how to do the job one was prepared for); inadequate preparation for the realities of the job; low pay and few benefits; negative public perceptions; lack of feedback; lack of planning; reactive (stop-gap) measures rather than a balance of reactive and proactive strategies; heavy workload; inappropriate teacher expectations; ambiguous role descriptions; poor time management; bureaucratic needs (i.e. paperwork) which prevent the

caregiver from interacting as intensely with the client as might be desirable; and regulations which foster dependence rather than autonomy of staff/personnel. While the factors have been presented separately, they are usually inter-dependent (Cherniss, 1980), and while the structure of the work setting will have an effect upon each individual teacher, variables such as individual expectations and personal life situations may also contribute to burnout (Cherniss, 1980).

The most often cited manifestations of burnout are: absenteeism; feelings of inadequacy and isolation; loneliness; low productivity and work performance; low motivation; withdrawal from students (clients); turnover, physical illness, and deterioration of employee/employer relationship.

In an effort to prevent or remediate burnout, the solutions promoted include: shared decision making; shared policy making; precise job descriptions; feedback; reinforcement; rewards and incentives; evaluation review procedures which are developmental in nature; development of a peer support system; work environments which foster creativity; realistic workloads; and training/educational opportunities (professional and personal). (Refer to Appendix 1 for cross-referencing of authors and the stressors, behavioral manifestations and solutions.)

BURNOUT INTERVENTION

While much of the literature addressing the issues of stress and burnout is anecdotal and speculative, there are studies in which the authors attempted to remediate stressors and burnout. Anecdotal reports consist of case histories of individuals who are currently experiencing or who have previously experienced what they term to be

burnout. Speculative literature typically delineates precursors to burnout through self-reported surveys and then presents recommended solutions.

Research on alleviating teacher burnout is limited. Most systematic research has focussed on the helping profession with only a small representation reflecting teachers (Schwab and Iwanicki, 1982). Even though the review failed to reveal a single paper addressing the manipulation of managerial behavior as the independent variable in a rehabilitative setting, it is necessary that related remedial efforts be discussed here.

Of 91 references reviewed, only one reference focussed on evaluating research efforts to counteract the effects of stressors on employees; (Hollefreund, 1981). Many of the references reported survey findings and proposed solutions to the findings. The balance of references reviewed were essentially anecdotal with some reporting personal views regarding burnout, and others reviewing the literature and proposing solutions. In addition, many authors (Kirk and Walter, 1981; Maslach, 1978; 1982 Maslach and Pines, 1976) suggest that a multiple and complex arrangement of precursors may in fact "cause" stress and burnout. However, feelings of isolation, loneliness and lack of support are listed as consistent factors (Kirk and Walter, 1981).

INTERVENTION

Hollefreund, et al., (1981) implemented a reality shock program to enable individuals (employees) to become bi-cultural, that is, to achieve competence in a new sub-culture (work) while retaining values from the old sub-culture (school). Through a series of five

one-and one-half hour seminars and one eight hour workshop, new graduates (nurses) were instructed in reality shock, testing, feedback, values, and conflict resolution. The results were impressive where baserate data reflected an attrition rate of 36% within the first year and post data of attrition rates on three years of implementation dropped to 13%, 22% and 4% . But, perhaps, the strongest data is reflected in the graduates' written comments where they stated that it was nice to know they were not the only individuals having problems. The reality shock program and the support group developed through the program provided individual nurses with an opportunity to interface their concerns and fears about the role of the nurse with the organizational expectations.

While Quick and Quick (1979) have formulated a conceptual model where 4 stress factors contribute ultimately to employee fight or flight behavior and eustress or distress, there is no evidence demonstrating the efficacy of the proposed two-level system for stress and burnout prevention. This is not to suggest that the proposed program is not valid. Role, job, physical and interpersonal factors are described as organizational stressors. When the organizational stressors (Level 1) are reduced and the employee is taught a variety of individual strategies (Level 2) to alleviate stress both the employee and the organization benefit. The proposed individual and organizational strategies appear to be well supported in the literature by various authors as proposed solutions. However, systematic implementation and evaluation is necessary to determine effectiveness of the multi-modal technique proposed over both the short and long term.

STRESS INTERVENTION AND HABILITATIVE PERSONNEL

It is necessary to review the research associated with staff burnout in rehabilitative agencies prior to the discussion about the study. The stressors upon employees, the behavioral manifestations of stress and proposed solutions to remediate or prevent stress and burnout have been discussed.

Alberta Education and manpower fund four rehabilitation practitioner programs in the Province of Alberta. As yearly certificate graduates approximate 100 (84 in 1981) and diploma graduates approximate 80 (63 in 1981), the effect of stress upon the practitioner is of importance to habilitative managers and pre-service program personnel. (Advanced Education and Manpower Survey, 1982).

As burnout resulting from situational stress is a wide spread occurrence (Maslach and Pines, 1976), the literature should provide recommendations regarding how to remediate and prevent burnout in rehabilitative settings. A review of the literature reveals several papers directed specifically to rehabilitation (De Loach and Greer, 1979; Miller and Roberts, 1979; Feinberg and McFarland, 1979; Meadow, 1981; Weiskopf, 1980; Bensky, et al., 1980; and Munro, 1977).

De Loach and Greer (1979) discuss the current difficulties experienced by the disabled and workers in current rehabilitative settings and service systems, while suggesting that the time test for rehabilitation personnel will come in the 1980's with fewer monies, less able clients, and greater legislated control. The potential stressors are amplified with Miller and Robert's (1979) description of current stressors; employees are locked into ambiguity tension and closure tension, where the practitioner is continually faced with

selecting the best alternative for the client from a vast array of possibilities (ambiguity) and an ever present array of half-finished tasks (lack of closure). Feinberg and McFarland (1979) discuss the variety of functions of practitioners in a variety of rehabilitative settings and how each setting contributes uniquely to role variability. The compromises (internal and external to the agency) that are necessary, contribute to the unique adaptations of the agency personnel (some adaptive, others maladaptive). Meadow (1981) surveyed professionals working with the deaf and identified that teachers of deaf children had a greater tendency to depersonalize their children than regular classroom teachers; classroom teachers displayed greater emotional exhaustion than dormitory parents; and the youngest professionals through over-involvement had the greatest stress.

Mendaglio (1982) discussed the consequences of burnout for the professional, institution and consumers. The professional may manifest stress in the work setting and non-work settings. In the work setting, the employee may withdraw from colleagues and avoid typical interactive occasions such as lunch and scheduled meals. Within the home, marital discord may increase. The institution may be seriously affected through increased absenteeism, staff turnover, reduction in productivity and low morale. Recipients of human service resources may become diagnostic labels and numbers rather than unique individuals. Mendaglio (1982) speaks of the dehumanization of the consumer as the irony of the burnout phenomenon -- the very institutions and helping professions which were designed to assist the consumers may contribute to the ineffectiveness of an employee experiencing burnout.

Weiskopf (1980) completed a literature review and identified

several sources of stress (work overload; lack of perceived success; hours of direct contact with students; high teacher-student ratio; unstructured programs; expectations to always provide nurturance without return; excessive paperwork; and lack of administrative support). The stressors produced a variety of behavioral manifestations: distancing; group control techniques rather than individualization; personal distress; fatigue; irritability; mild depression; boredom; resistance to change; less flexibility; cynicism; negativism; withdrawal from people and activities; and a general deceleration in effectiveness as teachers. Weiskopf (1980) concludes that there are several strategies for preventing burn-out:

- 1) ensure that "teachers" know in advance the type of emotional stress the particular job entails;
- 2) have teachers set realistic goals;
- 3) have teachers delegate non-teaching tasks;
- 4) develop teacher support groups;
- 5) break up the amount of direct continuous contact with students;
- 6) provide opportunities for teachers' personal /professional development;
- 7) support creativity and innovation; and
- 8) help each teacher develop a personal program to prevent stress/burn-out.

Bensky, et al. (1980) evaluated the effect of the implementation of Public Law 94-142 (USA) on teachers, with particular reference to stress. They surveyed 114 full-time professional educators. Special educators were found to be under less stress than

resource room and regular teachers as it was the resource and regular teachers upon which PL94-142 had the most profound effect on changes in the job. Additionally, Bensky, et al. (1980) suggested that clear and concise goals, that are congruent with the teachers' expectations, are important in reducing stress. Assessment and intensive diagnostic procedures were new responsibilities to regular teachers and, therefore, the regular teachers ranked them as most stressful, while the special educator (already extensively utilizing assessment and diagnosis) ranked assessment and diagnosis as the third most stressful item. Pupil load and the instructional demands of intensive intervention were viewed as more stressful by resource and special teachers than by regular teachers. The suggestions offered to prevent or reduce stress included skill development through inservice/preservice training; direct (competency) based training; role clarity; pupil load and preparation time decreased and increased respectively; and strong staff-development programs.

Munro (1977) presents a consultative strategy to prevent burn-out in front-line workers. The process suggested by Munro is similar to process consultation as delineated by Schein (1978) and parallels the reality shock program developed by Hollefreund, et al. (1981). The effort advocated by Munro is to foster a climate where staff are involved in delineating problems and preparing solutions to the current issues.

The information presented in the references reviewed consisted of anecdotal reports and survey information regarding 1) stressors, 2) behavioral manifestations of stress, and 3) possible/suggested solutions. There were no interventions which

related directly to rehabilitation settings, where the attempt was made to decrease stressors. The lack of research into the effectiveness of strategies to reduce stress in rehabilitation personnel prompted one question: "What are the effects of managerial behavior on stress in employees in rehabilitative settings?"

The question was generated from the preponderance of proposed solutions by the authors reviewed. In addition, a variety of solutions focussed directly on the manager/ supervisor/administrator (Truch, 1980; Whitebrook, et al., 1981; Iwanicki and Schwab, 1982; Kirk and Walter, 1981; Weller, 1982; Gmelch and Swent, 1981; and Christensen, 1981). Four frequently identified solutions are discussed. The four solutions, discussed further, comprise the four independent variables discussed in Chapter Two.

MANAGERIAL FEEDBACK

Feedback procedures are common variables in articles in journals such as the Journal of Applied Behavior Analysis and the Journal of Organizational Behavior Management. Norman Peterson (1983) suggests that regardless of what form the feedback takes, it is a stimulus and therefore could have some or all the possible behavioral effects of any stimulus. The feedback forms are numerous (Ford, 1980, cited in Peterson) and include individual versus group; private versus public; personal versus mechanical; and immediate versus delayed.

The authors of articles focussing on stress and burnout have emphasized feedback as an important variable in reducing stress. Weller (1982) states that administrators should provide ongoing evaluation of teacher performances with frequent written and verbal critiques (presumably this would incorporate a proactive developmental

stance in which teachers were provided with information to enhance their current repertoire of skills.) Cherniss (1980) similarly identifies that teachers have a strong need for reassurance, more structure and clear guidelines. Huidekoper (1982) less definitively states that more administrative support is required. It appears that individuals in human service systems do not receive enough feedback directed to their daily ongoing efforts. Maslach (1978) states teachers need to hear from their colleagues, students, parents and administrators, that someone knows and cares about the time, effort and creativity that goes into lesson planning, field experiences and projects. Sweeney (1981) makes the suggestion that schools are not meeting the higher level needs of its teachers, and suggests that if feedback is present, it is being directed to the least relevant tasks.

Relatedly, Truch (1980) finds little support given to teachers to ensure that their creative and innovative efforts stay in the classroom. Anderson (1981) states that job unhappiness is directly related to lack of appreciation. Goens and Kuciejczyk (1981) suggest that communication in a regarding and positive manner is the exception rather than the rule.

While the forms of feedback and interaction between administrators and employees are as varied as identified by Ford (1980) there is support given to the necessity for increasing and improving feedback.

CLIENT FEEDBACK

Client progress is often assumed to be a significant motivator for persons working in human service situations. Whitebrook, et al., (1981) found in his survey of teachers that they liked working

with clients when there was immediate feedback. This suggests, then, that a lack of feedback could in part contribute to stress. Cherniss and Egnatios (1980) state that a lack of direct and immediate feedback concerning results in many work activities does in fact increase the job stress. Though feedback about client progress appears to enhance one's perception of the job, what effect does feedback have when it delineates a lack of progress?

Weiskopf (1980) stated a lack of perceived success to be stressful, and Meadows (1981) in her study of educators of the deaf, suggests that despair stems from the low levels of achievement attained by students. Sweeney (1981) suggests that if a feeling of achievement is as powerful a satisfier as Herzberg and others posit, then those working with low ability students have less opportunity to receive positive feedback from students. Sarata (1977, cited in Cherniss, 1980) in a study of job satisfaction in the field of mental retardation found that a lack of client progress was a major source of dissatisfaction. Cherniss and Egnatios (1980) in a study of job satisfaction in community settings found similar results. Cherniss (1980) suggests that when the most often cited source of satisfaction is doing something that gives me a sense of accomplishment, there appears to be a need to devise methods to measure both teaching and progress in students.

JOB ENLARGEMENT/ENRICHMENT

Job enlargement/enrichment is often characterized by changing job responsibilities. An area of job enlargement which requires little change in job tasks is that of enhancing autonomy. Cherniss (1980) and Whitebrook (1981) suggest that a lack of autonomy and control over

one's work fosters stress. Lavandero (1981) states it is a lack of power which places additional stress on the employee. Whitebrook, et al. (1981) and Lavandero (1981) also suggest that a lack of opportunity to learn and grow on the job is a frequent stressor.

Maslach (1982) suggests that changes in job assignments will decelerate or alleviate stress in the work environment. She proposes that special projects, exchanges in personnel and temporary appointments as being reasonable solutions. Goens and Kuciejczyk (1981) state that administrators should help teachers establish clear and reasonable objectives for themselves and give them autonomy and support to meet the objectives.

GOAL SETTING

Teachers (Truch, 1980) have a sense of powerlessness. Maslach (1982) states that teachers perceive themselves as being incapable of influencing their own work situations. She also states that those who exert the most influence over their job have the least amount of emotional exhaustion, least tendency to depersonalize students and the greatest sense of personal accomplishment.

Mattingly (1977), Fruedenberger (1974), and Whitebrook, et al., (1981) suggest that human service providers must develop a realistic sense of ability to effect positive change. This involves greater input by employees into all levels of decision making. Whitebrook, et al., (1981) propose that there is a positive correlation between input and involvement and satisfaction.

Mattingly (1977) states:

"The data with the most immediate implications are those related to feelings of power to change or influence one's own job situation or setting... the encouragement of democratic organizational structures may be one way of alleviating stress and burnout among professionals." (p. 133)

Iwanicki and Schwab (1982) recommend that the teacher become involved in the development of a realistic, system wide set of organizational and individual goals and objectives.

Mattaliano (1982) states that serious difficulties arise when goal setting does not involve the employee:

"It is common to encounter employees who lack interest in organizational goals or are resistant and rebellious toward the organization they work for. This occurs when the organization is restricting or unresponsive to the individuals (employees) and when the goals are set at the top and then coercion is utilized to ensure people follow and maintain the goals." (p. 38)

Morrocco and McFadden (1981) emphasize that individuals experience the most stress when they feel they do not control their circumstances. They recommend that the organizational climate be measured before instituting a four-step program: priority of agency tasks, goal setting, time management and relaxation training.

Tenley (1981) supports Morrocco and McFadden in stating that stress control begins by exercising some control over the little things

in the environment that, left unattended, function as significant stressors.

The importance of goal setting and involvement by people at all levels of the organization is underlined by Cherniss (1980) who states that professionalism has become more problematic because decisions affecting one's work are often made by people and forces unknown to the employee.

The lack of research into strategies to reduce stress and burnout in rehabilitative personnel, the continued increase in the number of rehabilitation personnel in the field (see Appendix 4), the emphasis on the varied roles of "administration", and the lack of information (literature) addressing the questions of the four variables discussed, have collectively contributed to the investigation discussed in Chapter Two.

The four strategies discussed (managerial feedback, goal setting, client feedback and job enlargement, job enrichment) generated a variety of questions:

Managerial Feedback

What would be the effect on personnel stress if managerial feedback were reversed, that is, if personnel began to provide managers (administrators) with information (data) explaining the type and progress of interventions with their clients? What function does self-reporting serve? What is the impact of self-evaluation of program efforts on personnel stress?

Goal Setting

Goal setting as discussed in the literature review characteristically focuses on delineating targets and setting

objectives. There is a sense in the literature that clarity of purpose will and does reduce ambiguities, conflicts and tensions. What effect would a comparison of personal perceptions of rehabilitation philosophies and agency perceptions of rehabilitation philosophies have on staff stress? If "perceptions" are discrepant or dissimilar, is stress heightened? Is stress reduced when the comparison reflects similarity? What role does "awareness" play in staff perceived stress?

Job Enrichment/Job Enlargement

Job enrichment and job enlargement typically refers to expanding the job tasks (more responsibility) and/or expanding the autonomy with which one is charged to carry out his/her responsibilities. This "expansion" is not always perceived as viable in organizations. What effect would an analysis of current job tasks and the resulting delineation of weak and strong aspects of those tasks have on staff stress? How important is the process of "targeting" change to "need areas" among personnel in rehabilitative settings?

Client Feedback

Awareness of how a client is progressing in special settings appears crucial where the expected rate of progress is somewhat less than that expected of individuals in mainstreamed or regular institutions. What effect does frequent review of program data on each client have on personnel perceived stress?

Conclusion

The review of the literature and the resulting predominant themes of feedback, goal setting, and job enlargement/enrichment led to the design of the study discussed in Chapter Two. What would be the impact of personnel sharing intervention data regarding their clients

with the Executive Director, of frequent review of client progress, of goal setting, and of job enlargement/enrichment on personnel self-perceived stress was a question with no strong research based answers. Many authors speculated that because personnel 'complained' about the lack of the four procedures noted that the four procedures would reduce the stress experienced in the work setting. It was thought that a variety of feedback conditions, goal setting activities, and job enlargement/enrichment would serve to clarify role expectations and as well promote an informed 'climate' among personnel. It has been further postulated that the resulting climate would reduce uncertainties among personnel and this would contribute to a climate of less stress. The method discussed in Chapter Two was designed to investigate the impact of the four variables discussed in the conclusion of the literature review.

CHAPTER II

METHOD OF EXPERIMENTAL DESIGN

Introduction

This study was concerned with the effects of managerial strategies on stress in rehabilitation personnel working in four rehabilitation settings. The rehabilitation personnel were identified as a diverse group consisting of rehabilitation practitioners (certificate/diploma) from college programs or rehabilitation care workers (non-certified personnel) all of whom were working in four group homes in a residential service system within the City of Red Deer.

The group homes were selected because they were integrated into various zones of the community while sharing the same philosophy, goals, objectives, and administration. The use of the four homes provided an opportunity to evaluate the effects of managerial strategies across four different settings which shared the spirit of rehabilitation in the Red Deer community and within a continuum with one philosophy.

The research was designed to evaluate the effects of four managerial strategies on stress in personnel in four rehabilitation settings. The four strategies included managerial feedback, job enrichment/enlargement, client feedback, and goal setting. The effectiveness of the managerial strategies on reducing stress in rehabilitation personnel was measured in terms of change in stress as measured by the stress evaluation scale. The study was

concerned with determining whether the strategies increased or decreased stress. It seemed reasonable to suggest that a change in stress could be associated with the change in managerial/supervisory behavior.

The four strategies of managerial feedback, client feedback, goal setting, and job enlargement/enrichment were proposed by various authors to enhance the functioning of the organizations. How rehabilitation personnel in applied rehabilitation settings would respond to the four managerial strategies was not clearly delineated or discernible in the literature reviewed. Would the strategies reduce stress? Could the strategies increase stress? To what extent, if any, would stress levels be affected if the strategies were employed. These questions led to the development of the design of this study. Employee Self-reported Questionnaire: Stress Evaluation

A review of the literature was conducted to delineate the factors which were reported to foster stress in work environments. The list of factors (See Appendix 1) was then used to develop questionnaire items which would measure the impact of the factors on employees. The questionnaire was designed as a self-reported questionnaire in which employees stated self-perceived states of agreement or disagreement with each item. The response scale was designed to allow employees to rank their perceptions from strongly disagree (0) to strongly agree (6).

The factors were grouped into six categories and labelled A to F. The six categories were: general, initial enthusiasm, frustration, stagnation, apathy and solutions. The scheme was adopted from the model proposed by Edelwich and Brodsky (1980) where stress leading to

burnout was viewed as a developmental process. The process delineated by Edelwich and Brodsky involved a continuum beginning with idealism and moving through stagnation, frustration, apathy, and, finally, solutions.

Administration 1 (Validity)

The employee self-reported questionnaire was administered to 50 college instructors across seven departments within the Allied Health Division at Red Deer College to determine the reliability and validity of the instrument. Approval was obtained from the Chairperson of Allied Health and then questionnaires were mailed to the 50 instructors. A covering letter was sent which explained the purpose of the survey and stated a desired date of return. The respondents were solicited on a voluntary basis.

The administration of the questionnaire was conducted to address two questions: 1) would the questionnaire delineate differing profiles among the seven departments when the seven programs were guided by and shared the same divisional goals and philosophy and 2) were there questionnaire items which were difficult to answer? Respondents were made aware of the two objectives and were asked to complete the questionnaire and comment in writing on questions which presented difficulty.

The results suggest the questionnaire was indeed sensitive to the varying concerns of the seven departments and the shared concerns of all departments collectively. Additionally, the questionnaire was found to discriminate across ages, sex and educational experience.

Clearly, men and women differed, regardless of the department

in which they worked, in their perceptions. Men reported, generally, less stress than women. Individuals with the most experience reported to be more stressed than individuals with five or fewer years of experience. The older female worker appeared to be less stressed than the younger female worker.

The sensitivity of the questionnaire (identification of different concerns across different departments) was corroborated through discussion with the Chairman of Allied Health. She affirmed that the results, as reported, did not surprise her and basically confirmed "the way things were." Eight (8) of the items raised concerns for respondents because they: 1) lacked clarity, 2) were two-part questions, or 3) did not provide respondents with sufficient direction to assume a personal or professional stance. These items were reworked to ensure that the concerns were adequately alleviated. Items lacking clarity were reworded. Two-part questions were reduced to questions with one direction and items which did not give direction were reworked to provide a 'personal focus'.

Subjects/Settings

The subjects studied, worked in four residential settings referred to as A,B,C, and D. Situation A was a group home for six mentally handicapped young adults; aged, 15-21, (3 males and 3 females). There were five employees (manager, assistant manager, two permanent relief and one occasional relief). The manager had a Rehabilitation Services Diploma. The assistant manager had a Bachelor of Social Work degree and the relief staff had experience in the field coupled with inservice training. The function of the group home was to

provide a home environment in which to foster the acquisition of residential and related recreational, educational and vocational skills. The home provided a transition to settings B or C (depending upon the sex of the client) and focused on ensuring that the client is prepared to cope in the next least restrictive, residential setting.

Situation B was a group home for mentally handicapped adult females (6). There were four employees (manager, assistant manager and 2 relief staff). The manager had a Rehabilitation Services Diploma. The assistant manager had 10 years' experience and course work. One relief staff had 2 years of psychology and the other relief staff had 3 years' experience. The function of the home was to provide training which prepared the client for Independent Living (IL) or supervised living in an approved home (AH) and focused on integration into the community. Clients in the home may have come from Group Home A.

Situation C was a group home for mentally handicapped adult males (five beds, plus one relief bed). There were four staff (manager, assistant, and two relief staff). The manager had 6 years' experience. The assistant manager and relief staff had 2 years' experience respectively. The function of the home was to provide training which prepared the adult for Independent Living (IL) or supervised living such as supervised apartments and approved homes, focused on integration into the community. Clients in the home may have come from Group Home A.

Situation D was a group home for mentally handicapped senior citizens (six beds). There were six staff, (manager, assistant manager and four relief staff). The manager had 3 years work experience. The assistant manager and relief staff had 3 years or less work experience.

The function of the home was to provide the least restrictive environment possible for each individual. Rather than being an exit home in the continuum, the home was a permanent residence. Exit from this home would likely be to a nursing home where medical needs could be better met. While the goals and objectives of the 4 homes were different, the four homes operated under the Central Alberta Community Residence Society's umbrella philosophy to "actualize the principals (sic) of normalization by providing a continuum of Residential Services for the Developmentally handicapped in order to facilitate the continual growth of social competencies to assist each individual to reach his/her potential."

Design

This study queried whether there would be a concomitant increase or decrease in staff perceived stress under the four conditions reviewed in Chapter One: goal setting, managerial feedback, client feedback, and job enlargement/enrichment.

While the literature on burnout and stress reports that all four conditions would or should decelerate stress, there was little experimental evidence to support the positions offered. This study is an attempt to answer the question - will staff self-reported perception of stressors decrease or increase when the four managerial strategies are employed? If the self-reported perceptions indicated a reduction in stressors, it was inferred that stress has been lessened.

The study used a multiple baseline design across four (4) settings (Sidman, 1960) where the effect of managerial strategies was monitored in terms of "stress" on the job (see Table 1). A multiple baseline design across situations necessitated that there were varying

Table 1

Design of the Study

Agency A	baseline	mf1	mf2	jeje	gs	cf	Follow-up			
Agency B	baseline	baseline	cf	gs	jeje	mf1	mf2	Follow-up		
Agency C	baseline	baseline	baseline	jeje	mf1	mf2	gs	cf	Follow-up	
Agency D	baseline	baseline	baseline	baseline	gs	cf	mf1	mf2	jeje	Follow-up
	0	4	8	12	16	20	24	28	32	

36 week study: Four (4) weeks per manipulation.
 (Stress measures taken every four weeks)

Key

mf - managerial feedback (Two types)
 cf - client feedback
 gs - goal setting
 jeje - job enrichment/job enlargement

lengths of time devoted to baseline prior to the inception of the change procedures, and that the change procedures be implemented sequentially across the four situations. The four variables manipulated were: 1) managerial feedback, 2) job enlargement and job enrichment, 3) goal setting, and 4) direct client feedback. The four variables were manipulated across all four settings in a random order.

Details of Each Treatment

Managerial Feedback

Managerial feedback was directed towards 1) programs delivered by staff, 2) programs developed by staff, 3) quality of program development, 4) quality of program delivery (See Tables II and III for the process of introducing the forms). A weekly program review (see Tables IV and V) was submitted by the housemanager and reviewed weekly by the Executive Director.

Goal Setting

This manipulation was designed to allow employees to have an opportunity to have input into organizational goals (See Table VI for the process of introducing goal setting). Each agency (independently) was guided through the Marlett and Hughson Value Priority Scale (1978) (Figure 1). The value priority scale is a checklist of 20 items - 10 which reflect individual/client centred values and 10 which reflect facility oriented values. The respondents rank ordered the 20 items, first on a personal basis of preference and, second, as she/he views the priority value of each item to his/her agency. A comparison of rankings among all respondents and between personal and program profiles was then tabulated. The resulting data was used to discuss discrepancies between actual goals and personal goals as they related

Table II
Managerial Feedback Form: Process Introduction

1. Form 1A was presented to staff.
2. Role of Executive Director was discussed regarding form 1A.
3. Form 1A was discussed:

Form 1A was a weekly review of programs being conducted in the house and was a way to provide the executive director with information regarding current and newly developed programs.
4. A completed sample of form 1A was reviewed.
5. Staff were instructed to complete the form weekly and deliver to the Executive Director every Tuesday, or an agreed upon day.
-
6. Discussion time was allowed.
7. Session was 30 minutes (maximum).
-
8. Upon receipt of the form, the Director reviewed the form.

Table III

Managerial Feedback Form 1B: Process of Introduction

1. Form was presented to staff and staff role discussed.
2. Director's was role described.
3. Form 1B was described.

Form 1B was a weekly review which required the staff to describe the quality of verbal cues, task analyses, reinforcers, praise, and procedures. As well, the staff described the overall quality, satisfaction or dissatisfaction with progress, and whether consultation was required.

4. A completed sample was discussed.
5. A group consensus was used to complete the analysis.
6. Form 1B was delivered to the Director every Tuesday with Form 1A.
7. Discussion time allowed.
8. Total process limited to 30 minutes.

Table IV
Weekly Program Review

Date: _____

Employee or Department: _____

Program Description

Current Programs

Progress

1.

2.

3.

4.

5.

6.

7.

8.

Newly Developed Programs (Within Last Week)

Progress

1.

2.

3.

4.

5.

6.

7.

8.

*Note: The emphasis is given to the "quantity" of programs and instructional activities.

Table V
Program Quality Self-Report

Program Quality (Self-Report)

Programs*****

Descriptors:

Clear verbal cues

Clear task analysis

Reinforcement

Praise

Clear Procedures

Overall Quality

Satisfaction with progress

Need for consultation

KEY

At the end of the week complete this form for each educational plan. Enter the name of the educational plan at the top, and then using the key below evaluate the plan.

X... indicates dissatisfaction with the item

S... indicates satisfaction with the item

C... indicates need for consultation

Table VI

Goal Setting

1. Each staff member completed the Value Priority Scale on site.
2. Results were tallied and graphed.
3. Results were discussed.
4. Using the results, goals of the house were discussed with Executive Director and employees, with researcher present.
5. Session was three hours, maximum.

to rehabilitation in the setting. The analysis was directed toward delineation of personal and program priorities and conflicts of the same. The analysis was concluded with the co-operative formation of organizational goals by the subjects, Executive Director, and the researcher to:

- 1) enhance existing "shared" (personal and program) priorities;
- 2) foster collaboration on "conflicting" priorities and the delineation of "solutions"; and
- 3) foster a discussion of personal and program priorities as they related to normalization, least restrictive alternatives and social competence.

Determining the possibility for implementation of items identified in one (1) and two (2) concluded the analysis. The analysis was discussed with the Executive Director, researcher and employees.

Job Enlargement/Enrichment

Each agency, (group of employees) as per phases, was given the opportunity to evaluate their job responsibility (See Table VII for the process of job enrichment/enlargement). The delineation of tasks was facilitated through the staff completing the employee inventory (available from the author). Emphasis was placed on "providing" information about "jobs" to both employees and the Executive Director through a composite employee profile. The strengths and weaknesses of the "job" were delineated through a meeting with the Executive Director, employees and researcher. Strategies to alter the weaknesses were discussed and noted by the researcher, employees and Executive Director in the follow-up meeting.

Figure 1

Value Priority Scale

VALUE PRIORITY SCALE

Below are 20 values which are reflected in existing programs. Feel free to add others that you feel are important to your program. To each value statement assign a number from 1 to 20, from most important (#1) to least important (#20) from your personal perspective in the program - **Personal Priority**. Then, to each value statement assign a number from 1 to 20 as you see the values reflected in the program - **Program Priority**. Give each value statement its own number, i.e., do not give more than one value statement the same number.

PERSONAL PRIORITY NO.	PROGRAM PRIORITY NO.	VALUE STATEMENT
_____	_____	- Education of community
_____	_____	- Training through normal means*
_____	_____	- Safety and health
_____	_____	- Family atmosphere*
_____	_____	- Research
_____	_____	- Specialized and individual trianing*
_____	_____	- Efficiency
_____	_____	- Friendship within peer group*
_____	_____	- Clean, sanitary surroundings
_____	_____	- Normal rhythm of life*
_____	_____	- Instilling discipline

Figure 1 (Continued)

_____	_____	- Continuum of services
_____	_____	- Independence of client*
_____	_____	- "No nonsense" atmosphere
_____	_____	- Community Exposure*
_____	_____	- Staff development
_____	_____	- Mastery of skills*
_____	_____	- Protection of society
_____	_____	- Integration with non-handicapped*

Which value statements had the greatest consensus between your personal priorities and the program's priorities?

Which value statements had the greatest discrepancy?

How many of the value statements in the top 10 priorities were:

1. Facility-oriented values: Personal _____ Program _____
2. *Individual-oriented values: Personal _____ Program _____

Reprinted with Permission: Marlett, Nancy and Hughson, Anne E., Rehabilitation Programs Manual, VRRRI, Calgary, 1978, p.6.

Table VII

Job Enrichment / Job Enlargement

1. Employee inventory was administered.
2. Results were tallied and graphed.
3. Results were discussed.
4. The results were discussed with Executive Director & employees with researcher present. Investigation of areas of concern on the assessment was conducted and "proposed" solutions discussed.
5. A list of tasks was established which delineated solutions to concerns.
6. Session time: maximum of three (3) hours.

Client Feedback

Staff were taught how to complete a weekly program review reflecting "client change" on programs delivered by the staff. The weekly analysis was shared between employees of the group home (See Table VIII for the introduction of the client feedback process). Upon implementation of this task, employees were told that it was sanctioned by the Executive Director, but she would not require it to be "sent-in" to the central office. The form was for use in the home. Alterations to the form were made as necessary in each agency, without altering its purpose/function. The researcher followed up on the client feedback form one week and one month after implementation (Figure 2).

Each agency was manipulated through the four conditions. The conditions were presented to each home in a different order. Eventually, each agency had to contend with participation in the four managerial strategies.

A multiple baseline design was chosen to determine the Hawthorne effect (Connellan, 1978) of the presence of the researcher and his obvious intrusion on the environments. While it might have been most ethical to provide the same opportunity to the four situations at the same time, it appears justified that differing lengths of baseline and follow-up were conducted to validate the findings. Within the multiple baseline design, it was possible to monitor the effects of intrusion in one situation across the other three situations. This appeared especially important during baseline and follow-up where the occasion existed that some situations were being manipulated while others were not. The multiple baseline design facilitated the opportunity to monitor confounding variables (Martin

Table VIII

Client Feedback

1. Form (client progress review) was presented to staff.
2. Staff were instructed on how to use the form.
3. Model or sample of the form was discussed with the staff.
Revisions, if necessary, discussed.
4. Client progress review was completed weekly.
5. There was no role assigned to the Director regarding this form.
6. Session time: maximum 30 minutes.

and Pear, 1983).

A quasi experimental design measuring the effects of various managerial behaviors on staff self-reported stressors appeared to be warranted. Much of the literature in management has focussed on the strategies utilized in this study and the literature reports that managerial feedback increases staff performance on job related tasks (Huidekopfer, 1982); that job enlargement has positive effects (Lavendero, 1981); participation enhances collaboration (Goens and Kuciejczyk, 1981); and client reinforcement is valuable in maintaining staff behavior at least over the short term (Cherniss, 1980).

Procedures

The precursors to burnout (identified in the literature, see Appendix 1) were grouped into 5 categories: general, enthusiasm, stagnation, frustration, and apathy. The categories identified by Edelwich and Brodsky (1980) were utilized to provide a framework of evaluation. Precursors extracted from the current literature comprised the items of the questionnaire. Data collated from the questionnaires provided a profile of "stress" as self-reported by the employees of the homes. (see Table IX for administration of the stress evaluation form).

Stress Evaluation Form

The form assessed a wide variety of precursors. The precursors reflecting enthusiasm, stagnation, frustration, apathy, solutions, organizational variables, feedback, personal advancement, collaboration, training, rewards, direction, peers and colleagues, students (clients), and self were extracted to form profiles. The profiles of each agency were obtained prior to the inception of the

managerial strategies, four weeks after the variables were presented, and in follow-up after all four strategies were incorporated into the routine of the homes.

Data Collection

Prior to manipulation of the variables, baserate of "stress" of all personnel in the four (4) agencies was obtained using the stress evaluation form. The employees completed a self-reported questionnaire. Upon completion of the questionnaire home "A" was selected as the first home to be manipulated (see Table XI). There were 4 manipulations, across 4 agencies and each manipulation lasted four weeks. After each manipulation all 4 agencies were evaluated using the stress evaluation. There were 10 evaluations in all, covering baserates, manipulations, conclusion and follow-up.

Baserates

The stress levels of all employees of agencies A, B, C and D was measured on the Stress Evaluation to determine the baserate of stress. For each item, and each agency independently, the data was summed and divided by N to determine the mean self-reported stress score for each item.

A set of questions (see Table X) was presented to the Executive Director as well to obtain further evidence as to the "degree" of stress in the staff. The Executive Director completed the survey of her perceptions of staff - stress pre and post to the study.

Phases of the Study

Table XI itemizes the phases of the study as they relate to each home and the manipulations. A brief description of each phase of the study is given below. A detailed description of the manipulations

Table IX

Questionnaire Administration

One envelope containing four (4) questionnaires and four (4) envelopes was delivered every fourth Tuesday to the four homes. All forms were the same.

Staff were asked to complete the questionnaire independently and place the completed questionnaire in one of the envelopes. The envelope was to then be sealed and returned to larger envelope. A date and time was established for the researcher to return and pick up the completed forms.

Each manager was informed that the researcher was conducting research in rehabilitative settings as a Masters Degree requirement. They were informed that the data collected for the duration of the study would be confidential. The managers were also informed that upon completion of the study the data would be made available as reported in the thesis.

If the manager asked what the study was about the researcher explained that the researcher wanted to examine the effects of rehabilitation settings on staff. It was explained that the questionnaire was a way to measure the effect of the environment on staff.

Managers were also informed that the researcher was working with Janet (Executive Director). All managers stated that Janet had spoken to them. The researcher stated that the project would run 8 or 9 months involving a variety of tasks.

Table X

Administrator's Questionnaire

Questions:	0 never occurs	1 seldom occurs	2 some of the time	3 most of the time	4 all of the time
1. At meetings staff complain about their clients.					
2. Staff complain about "too much work" and "too little time".					
3. Staff identify clients progress and improvements during meetings.					
4. Improvements are usually discussed more often than failures.					
5. Staff speak of client as a family member.					
6. Staff focus attention to negative behavior rather than positive.					
7. Staff show initiative.					
8. Staff blame "others" (government, etc.) for their short earnings.					
9. Staff are inactive.					
10. Staff like their jobs.					
11. Staff are sure of what they are to do - rarely confused.					
12. Staff ask for training opportunities.					
13. Staff (state) believe they have a lot to learn and accept that as part of the job..					
14. Staff see little chance of rehabilitation ever working the way it should.					
15. Staff work here because of the "work", not the money.					
16. Staff seldom quit working here in the first year.					

Table XI
Phases of the Study

Week	Agency A	Agency B	Agency C	Agency D	
	A	A	A	A	
1	mf1	-	-	-	
2	mf1	-	-	-	
3	mf1	-	-	-	
4	mf1/A	A	A	A	
5	mf2	cf	-	-	
6	mf2	cf	-	-	
7	mf2	cf	-	-	
8	mf2/A	cf/A	A	A	
9	jeje	gs	jeje	-	<u>Key</u>
10	jeje	gs	jeje	-	A-assessment
11	jeje	gs	jeje	-	gs-goal
12	jeje/A	gs/A	jeje/A	A	setting
13	gs	jeje	mf1	gs	cf-client
14	gs	jeje	mf1	gs	feedback
15	gs	jeje	mf1	gs	mf1-management
16	gs/A	jeje/A	mf1/A	gs/A	feedback 1
17	cf	mf1	mf2	cf	mf2-management
18	cf	mf1	mf2	cf	feedback 2
19	cf	mf1	mf2	cf	jeje-job enrich-
20	cf/A	mf1/A	mf2/A	cf/A	ment and
21	-	mf2	cf	mf1	job en-
22	-	mf2	cf	mf1	largement
23	-	mf2	cf	mf1	
24	A	mf2/A	cf/A	mf1/A	
25	-	-	gs	mf2	
26	-	-	gs	mf2	
27	-	-	gs	mf2	
28	A	A	gs/A	mf2/A	
29	-	-	-	jeje	
30	-	-	-	jeje	
31	-	-	-	jeje	
32	A	A	A	jeje/A	
33	-	-	-	-	
34	-	-	-	-	
35	-	-	-	-	
36	A	A	A	A	

Figure 2
Weekly Client Progress Review
(Sample)

WEEKLY CLIENT PROGRESS REVIEW				
Client's Name	Program	Descriptors	Comments/ Program Change	Initial
Bob Laskin	Eating	Increase/ ascending	Good Progress - no changes	RB
Francis Yallox	Tantrums	Increase/ ascending	dropped tokens and now pay tokens with candy	DS
Tom Ball	Color Discrim- ination	Increase/ ascending	new phase - now teach green, yellow and red!!	PFL

Descriptors:	<u>ASCENDING:</u>	data over last 5 days shows ascending trend
	<u>DESCENDING:</u>	data over last 5 days shows descending trend
	<u>ERRATIC:</u>	no discernible trend and data is very inconsistent.
	<u>STABLE:</u>	data very similar, showing no trend

Descriptors:	<u>INCREASE:</u>	today's data above yesterday's
	<u>DECREASE:</u>	today's data below yesterday's
	<u>NO-CHANGE:</u>	today's data unchanged from yesterday's
	<u>INCOMPLETE:</u>	today's data not collected (why)

Every five days the educational plans (programs) are evaluated using the descriptors at the bottom of the form. The descriptors were utilized to identify day-to-day change as well as trends of change over a five day period.

follows the description of the phases.

Phase 1

Phase 1 of the study consisted of collecting baseline data of all homes using the stress evaluation. One week following, managerial feedback was manipulated in agency A for 4 weeks.

Phase 2

At the conclusion of Phase I in Agency A (4 weeks), an assessment of the intervention was conducted. Baseline data was collected again across agencies B, C, and D. Agency A was then manipulated through job enrichment/job enlargement. Agency B was also manipulated through client feedback. Agency C and D at this point were not manipulated.

Phase 3

At the conclusion of the Phase 2 (4 weeks) agencies A and B were assessed. Baseline data was once again collected on agencies C and D. Agency A was then manipulated through goal setting. Agency B was manipulated through goal setting. Agency C was manipulated through job enrichment/enlargement. Agency D at this point was not manipulated.

Phase 4

At the conclusion of Phase 3 (4 weeks) agencies A, B and C were assessed. A final baseline of agency D was conducted. Each Agency (A, B, C, and D) was then manipulated. Agency A was manipulated through client feedback; agency B through job enrichment/job enlargement; agency C through managerial feedback and agency D through goal setting. This was the final manipulation of Agency A, third for Agency B, Second for Agency C, and first for Agency D.

Phase 5

At the conclusion of the phase 5 (4 weeks) all agencies were assessed.

No further manipulations were conducted of Agency A. Agency B was manipulated through job managerial feedback; Agency C through client feedback and Agency D through client feedback.

Phase 6

At the conclusion of phase 6 (4 weeks) Agency A was assessed in follow-up, while the other three agencies were assessed after manipulation. This was the final manipulation for Agency B. Agency C was manipulated through good setting and Agency D was manipulated through managerial feedback.

Phase 7

At the conclusion of phase 6 (4 weeks) agencies C and D were assessed. A second follow up assessment of Agency A and the initial follow-up of Agency B were conducted. This was the final manipulation of Agency C. Agency D was manipulated through job enrichment/job enlargement.

Phase 8

At the conclusion of phase 7 (4 weeks) Agency D was assessed. A third follow up of Agency A was completed with the second of Agency B, and the first of Agency C. No further manipulations were conducted of any agency.

Phase 9

After 4 weeks a final follow up of all agencies was conducted.

Inter-rater Reliability (IRR)

For twenty percent of the stress assessments, the mean scores for each item were calculated by two independent recorders to ensure objective and reliable recording of reported data. Each recorder did not have access to the other recorder's data and made all calculations independently. A third recorder determined the percentage of agreement

Figure 3

Social Validity

Questionnaire

Please answer the questions as accurately as possible. Your comments would be most appreciated.

	extremely satisfied	somewhat satisfied	satisfied	neutral	dissatisfied	somewhat dissatisfied	extremely dissatisfied	
	7	6	5	4	3	2	1	COMMENTS:
1. I was _____ with the opportunity to select new responsibilities.								
2. I was _____ with the opportunity to participate in selection/decision of organizational goals.								
3. I was _____ with the client progress reviews.								
4. I was _____ with supervisor/manager feedback regarding the number and quality of programs.								
1. I was _____ with the supervisor's support.								
2. I was _____ with the relationship among staff.								
3. I was _____ with the opportunity to participate in the project.								
4. Something good will come of this project.								
5. This is useful to management.								

Additional Comments:

between raters by dividing the lowest mean score per item of one rater by the highest mean score of the matched item of the second rater and multiplying by 100.

Social Validity

It is essential that consumers respond to procedures and tasks used in any intervention (Baer, Wolf and Risley, 1968). The employees and Executive Director were surveyed to determine their reactions and impressions, regarding the procedures utilized.

Interview

A follow-up interview was conducted with the personnel in the study to obtain their perceptions of the four instruments used in the study.

Ethical Considerations

The Multiple Baseline Design

The designs useful to this study were the Reversal - Replication (ABAB) Design and the Multiple Baseline Design. The reversal design was unacceptable because the return-to-baseline manipulation was perceived to generate unknown and possibly deleterious effects on both the employees and clients. Additionally with four manipulations being applied to four settings the ABAB design would have required an extensive number of return-to-baseline conditions (four in all).

The multiple baseline design minimized both disadvantages of the ABAB design as there was no return-to-baseline condition. The multiple baseline design allowed the experimenter to systematically introduce manipulations across settings while maintaining varying lengths of baselines and follow-up across the subjects of the four

settings. The varying lengths of baselines allowed the experimenter to measure the effects of manipulations in one setting while monitoring the other settings which either were not manipulated, or were being manipulated simultaneously on another variable. The multiple baseline design allowed for each group undergoing baseline to act as a control group for other groups being manipulated. The same was true of groups undergoing follow-up while other groups were being manipulated.

The four managerial strategies employed were postulated in the literature by several authors as possible strategies to reduce stress in human service environments. However, there is little empirical support available for the positions offered and hence there is a need for a careful analysis of proposed solutions to stress in human service systems. As each group at some point served as a control measure, the design employed provided replication and control. The design also enabled the experimenter to measure the effects of communication between homes and personnel, to some degree.

Social validity measures (the degree to which consumers are satisfied with the results) were obtained upon completion of the study (Kazdin, 1977 and Wolf, 1978). The subjects were interviewed by the researcher.

In conclusion, as this study utilized human subjects it was presented to the Ethics Committee of the University of Calgary prior to inception where it was given approval.

Employee Self-Reported Questionnaire

The employee self-reported questionnaire was designed to delineate the presence or absence of stressors in work environments across 16 domains such as feedback, collaboration, support, etc. It

was designed to provide anonymity of response and care was taken to ensure that the information was kept confidential.

The questionnaire consisted of 90 questions. All questionnaire results were kept confidential until the study was completed. Experimenter and subjects were unaware of the results until the study was completed to prevent knowing or unknowing response to the data.

While 90 questions was lengthy, the questionnaire was devised in this way to ensure that the respondents after a second, third or fourth occasion were unable to recall previous items and the previous rating given to those items. All 90 questions were used in compiling the data.

The scores were used to measure the degree of difference between optimal responses and actual responses. It is inferred that the more similar the actual responses are to the optimal responses the less stress there is in the setting (environment).

Manipulations

Each home was manipulated in a different order and the multiple-baseline design did not allow manipulation of all homes on the same variable at the same time. The homes were randomly manipulated through the following order: young adults (A), women (B), men (C), and senior citizens (D). The employees in the homes were instructed by the Executive Director that the experimenter would be working with her for the next nine months and that the experimenter would work with one house before moving to a second house, and so on until all four houses were involved. Additionally, the employees of each home were told that the experimenter's purpose was to measure the effects of rehabilitation

settings on employees. Discussion of stress and burnout was avoided. All employees were informed that the data collected was confidential and that only the experimenter would have access to the data and not until the study was completed. The Executive Director fully agreed with the study and assured the experimenter that the proposal and procedures were acceptable.

A description of the study was presented to the Board of Directors of The Association and received approval. A consent form was presented to each subject which delineated the process of the study. The form clearly indicated that the subjects were asked to participate on a voluntary basis.

CHAPTER III

RESULTS

Introduction

The subjects of four group homes were participants in the use of four managerial strategies - goal setting, job enrichment/enlargement, client feedback, and managerial feedback. The study utilized a multiple baseline design across groups where the groups were sequentially exposed to the four strategies noted above. The multiple baseline design allowed for varying lengths of baseline and follow-up. Each baseline period was four weeks. After each baseline period and each treatment condition the subjects completed the self-report stress inventory. Each condition was sequentially introduced to each group of subjects in random order and four weeks following the introduction of each condition the employees completed the self-report stress inventory. Finally, the groups of subjects were assessed on the self-report stress inventory during varying lengths of follow-up.

Data obtained from the employee self-reported stress questionnaire were analyzed using nonparametric statistics (Siegel, 1956). These statistics were used in preference to parametric statistics due to the nature of the data, which invalidated the use of the tests with parametric assumptions.

The study employed the use of an intact group and, therefore, the assumption that the observations were drawn from a normally

distributed population was difficult to justify. Additionally, the small number of subjects (N=3) per group seriously challenged the validity of making decisions requiring arithmetic calculations of the raw data. The population was measured in an ordinal scale and, consequently, analyses using interval measures were inappropriate. Finally, it was felt, difficult to assume that the intact groups had the same variance.

The Kruskal Wallis Analysis of Variance by Ranks Test was used to establish if more than two independent groups differed in central tendency; The Friedman Two-Way Analysis of Variance by Ranks Test was used with related groups.

Self-Reported Stress Questionnaire

As noted in Chapter Two the original questionnaire was piloted with 10 college instructors. A week later the questionnaire was administered a second time. The questionnaires were labelled A to J to ensure comparison between forms while confidentiality was assumed. The author kept a list of the respondents' names and corresponding letter (A to J) and ensured that each respondent's form possessed the same letter. The first percentage agreement was calculated using the formula: $\text{agreements divided by agreements plus disagreements} \times 100$. The mean percentage agreement for each respondent ranged from 45.4 to 62.1 percent. The mean percentage agreement across all subjects and all items was 53.2 percent. Individual respondents were asked if they were able to remember ratings given on the first questionnaire when completing the second questionnaire. All respondents reported that they were unable to recall the ratings given on the first questionnaire.

A second percentage agreement score was calculated on the same data using the formula: agreements (+ 1 deviation score) divided by agreements and disagreements. The second percentage agreement test allowed the researcher to state agreement occurred between the first test score and the second test score when the variance on the second test score item was one full point or less. The second test of percentage agreement resulted in a range of 81.8 to 91.6 percent. The mean percentage agreement across all subjects, on all items on the second reliability test was 85.9 percent. The second percentage agreement test suggested that when one allows for slight variation from test to retest that the results are acceptable as being reliable.

Discussion of Baseline, Intervention, and Follow-up Data

Data was collected on 16 subjects in four residential settings for mentally handicapped adolescents and adults. Incomplete data for the subjects in group home B necessitated only using the data from groups A, C and D. The researcher was unable, upon completion of the study, to match forms because the subjects left off the identifying information on the cover sheet of the form. Therefore the researcher was unable to plot the data for the subjects over the experimental period. Incomplete data of one subject in groups A, C and D resulted in the analysis being conducted on three subjects in each setting (N=9) (The raw data is presented in Table XII).

Inter-Rater Reliability of Raw Scores

To check on the researcher's reliability in recording the data reported twenty-seven (20%) of the self-reported stress inventories were randomly selected from the questionnaires collected during the study (135). The inventories were coded to identify the

Table XII

Raw Scores (Self-Perceived Stress)
Per Subject Per Group Pre Condition

	Baseline	MF1	MF2	JEJE	GS	CLF	Follow-up			
GROUP A										
Subject A	237	201	183	187	183	185	199	199	179	---
Subject B	166	171	201	183	168	172	168	187	199	157
Subject C	210	214	187	210	207	202	236	183	189	145
			CLF	GS	JEJE	MF1	MF2			
GROUP B *										
Subject A	---	104	109	173	---	136	---	172	---	126
Subject B	241	---	257	---	256	---	---	187	145	141
				JEJE	MF1	MF2	CLF	GS		
GROUP C										
Subject A	206	240	246	200	233	232	222	172	227	237
Subject B	174	206	199	211	184	196	195	153	201	172
Subject C	202	191	236	211	200	169	160	154	156	236
					GS	CLF	MF1	MF2	JEJE	
GROUP D										
Subject A	---	139	---	157	141	124	138	129	127	133
Subject B	112	93	109	116	152	153	127	154	98	172
Subject C	170	---	176	152	147	153	129	177	213	229

Due to insufficient data Group B subjects were not included in the statistical analyses.

Key

MF1 - Management Feedback Type 1
 MF2 - Management Feedback Type 2
 GS - Goal Setting
 CF - Client Feedback
 JEJE - Job Enrichment / Job Enlargement

group, manipulation and subject (example, A-6-3). In the example, the inventory was from group A, sixth manipulation and third subject.

One rater transferred all scores of all items (90) to a rater form, then passed the form to a second rater who did the same. Each rater independently calculated the stress score by determining the difference between the score identified by the subject and the optimal score. The rater-form identified the optimal score and the rater subtracted the actual score from the optimal score and entered the difference on the form. Each rater then summed the differences to generate a stress value. The rater's stress values were then compared by a third rater. Twenty-four (24) of the 27 pairs of stress values matched.

Upon review, two of the three errors were due to calculation. The other error was due to illegibility of one item on the subject's form. Between-rater reliability was 89% (uncorrected) and 96% (corrected). The corrected scores (26) were then compared to the researcher's scores for each questionnaire. One-hundred percent agreement was found between the independent raters and the researcher's ratings on the 26 scores. The researcher's rating matched the lower rating of the inventory rated differently by the two independent raters. It was the practice of the researcher to disregard ratings marked illegibly or where more than one rating was assigned, to eliminate interpretive bias. The researcher chose to assign the lower score or eliminate the illegible score from the data to prevent interpretive bias. Selecting the higher score would likely have escalated the stress values while selecting the lower score ensures conservatism in the interpretation. It should be noted, however, that

a second score was only selected when the two numerals were clearly interpretable.

Comparison of Baseline Performances

The initial test scores of all subjects (N=9) of groups A, C and D were compared using the Kruskal Wallis Analysis of Variance by Ranks Test (two-tailed) in order to establish whether there were any significant differences among groups in baseline performance (see Table XII for raw data). No significant differences were found when scores were compared ($H=4.82$; $N=9$; $df=2$; $p > .05$). Therefore, it was assumed that the stress level of the subjects in the three homes were not significantly different prior to the inception of the treatment variables. The baseline results ranged from 112 stress points to 237 stress points. The highest stress score attainable in the inventory would have been 540. As all subjects scored approximately fifty percent or less when compared to the highest stress score attainable it was inferred that the stress scores of the subjects in this study ranged from moderate to low.

Comparison of Baseline to Treatment Conditions

The stress scores of each subject in each group (A, C and D) between baseline and treatment conditions were compared using the Friedman Two-Way Analysis of Variance by Ranks Test (two-tailed). No significant differences in Group A were found ($\chi^2=4.23$; $N=3$; $df=5$; $p > .05$). Significant differences were found in Group C ($\chi^2=7.95$; $N=3$; $df=5$; $p < .05$). No significant differences were found in Group D ($\chi^2=1.76$; $N=3$; $df=5$; $p > .05$). The multiple collection of treatments in Group C significantly reduced stress, as compared to baseline levels of stress for that group.

Comparison of Baseline, Treatment and Follow-up Conditions

The stress scores of subjects within the three groups across all conditions (baseline, treatment and follow-up) were compared using the Friedman Two-Way Analysis of Variance by Ranks Test. No significant differences were found in Group A ($\chi^2=1.3$; $N=3$; $df=6$; $p > .05$). No significant differences were found in Group C ($\chi^2=1.2$; $N=3$; $df=6$; $p > .05$). No significant differences were found in Group D ($\chi^2=1.3$; $N=3$; $df=6$; $p > .05$). The lack of significance in Group C suggests that gains during treatment (reduction in stress) were not maintained during follow-up.

A second comparison of baseline, treatment and follow-up conditions was conducted using the Friedman Two-Way Analysis of Variance by Ranks Test. The baseline, treatment and follow-up conditions were analyzed collectively as three conditions. This analysis was conducted to evaluate the visual analysis of the data. The visual analysis of the graphed data suggested a reduction in stress. (see Table XII and Figures 4,5,6 and 7). All subjects ($N=9$) were treated as one group. Each subject's baseline, treatment and follow-up score was analyzed. The comparison was conducted using the Friedman Two-Way Analysis of Variance by Ranks Test. A significant difference was found ($\chi^2=17.29$; $N=9$; $df=2$; $p < .05$). The stress level of the subjects was significantly lower under the treatment conditions than under the baseline or follow-up conditions.

Comparison of Gain Scores

The gain scores of each treatment were analyzed using the Friedman Two-Way Analysis of Variance by Ranks Test. (see Table XIV and Figure 8). No significant differences were found ($\chi^2=5.75$; $N=9$;

Figure 4

Stress Levels of Subjects of Group A

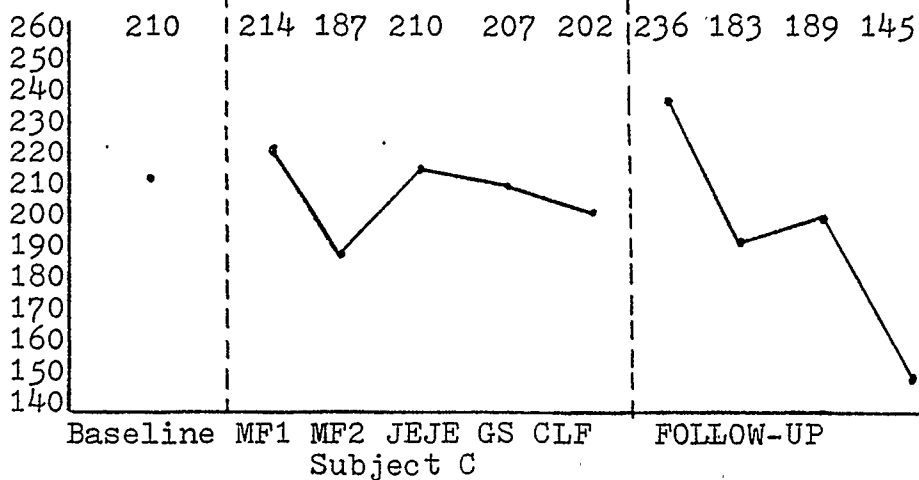
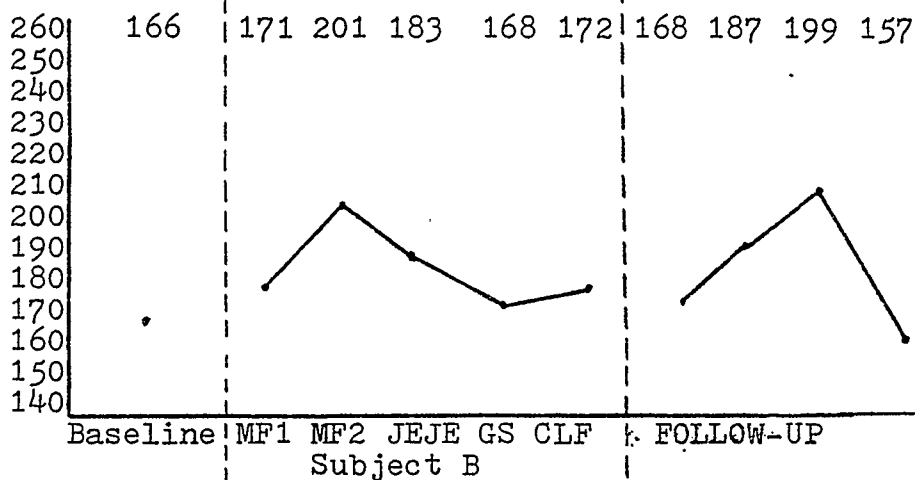
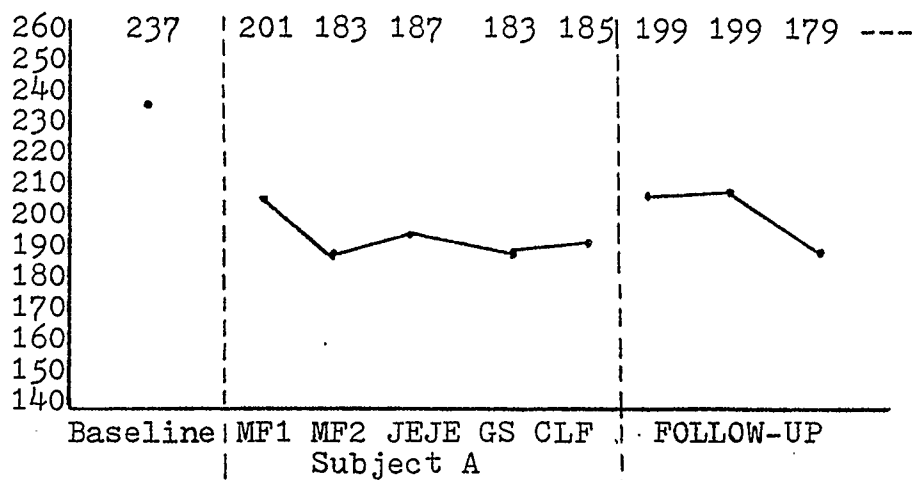


Figure 5

Stress Levels of Subjects of Group C

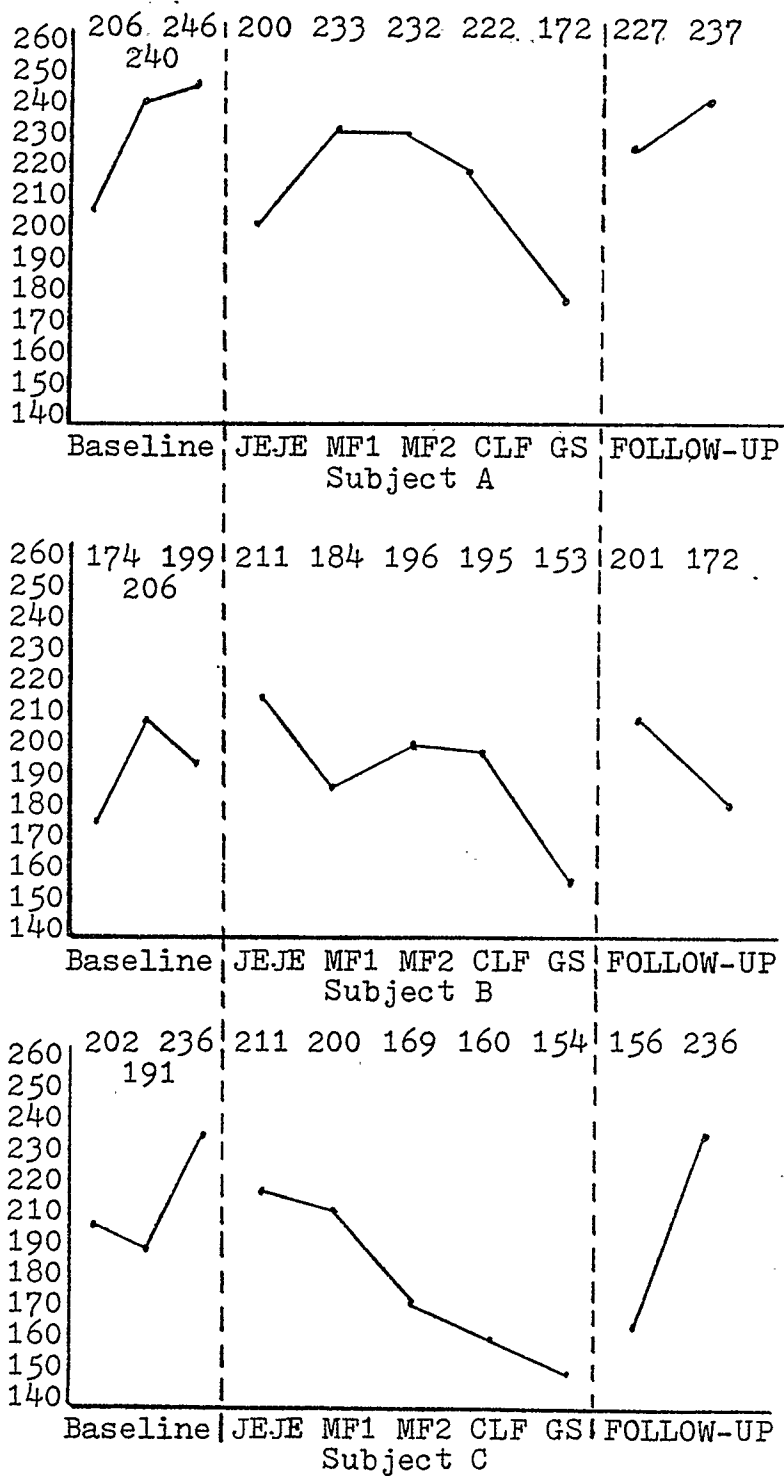


Figure 6

Stress Levels of Subjects of Group D

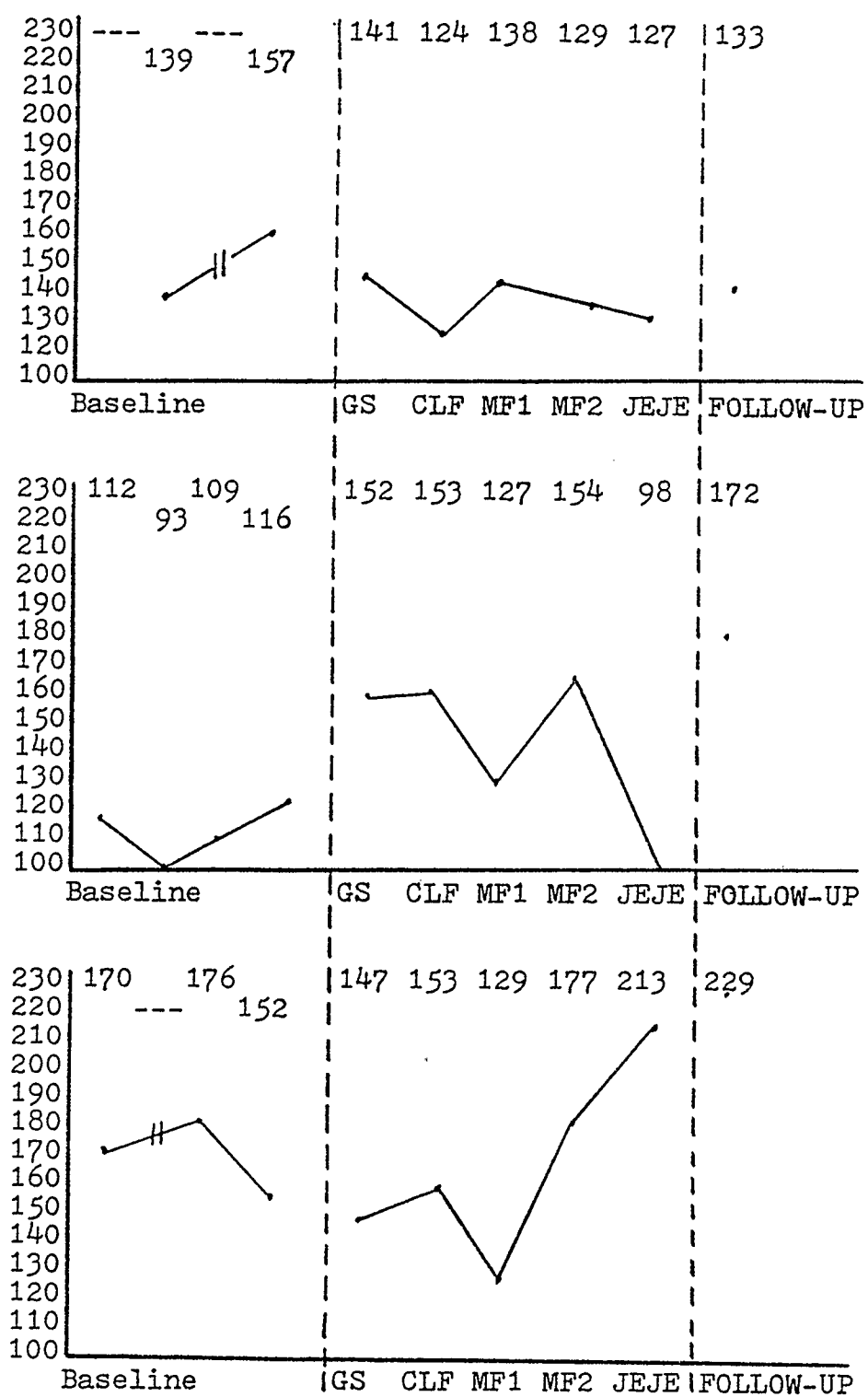


Figure 7

Mean Scores of Self-Reported Stress
For Groups A,C, and D Across All Conditions
(Baseline, Treatment and Follow-up)

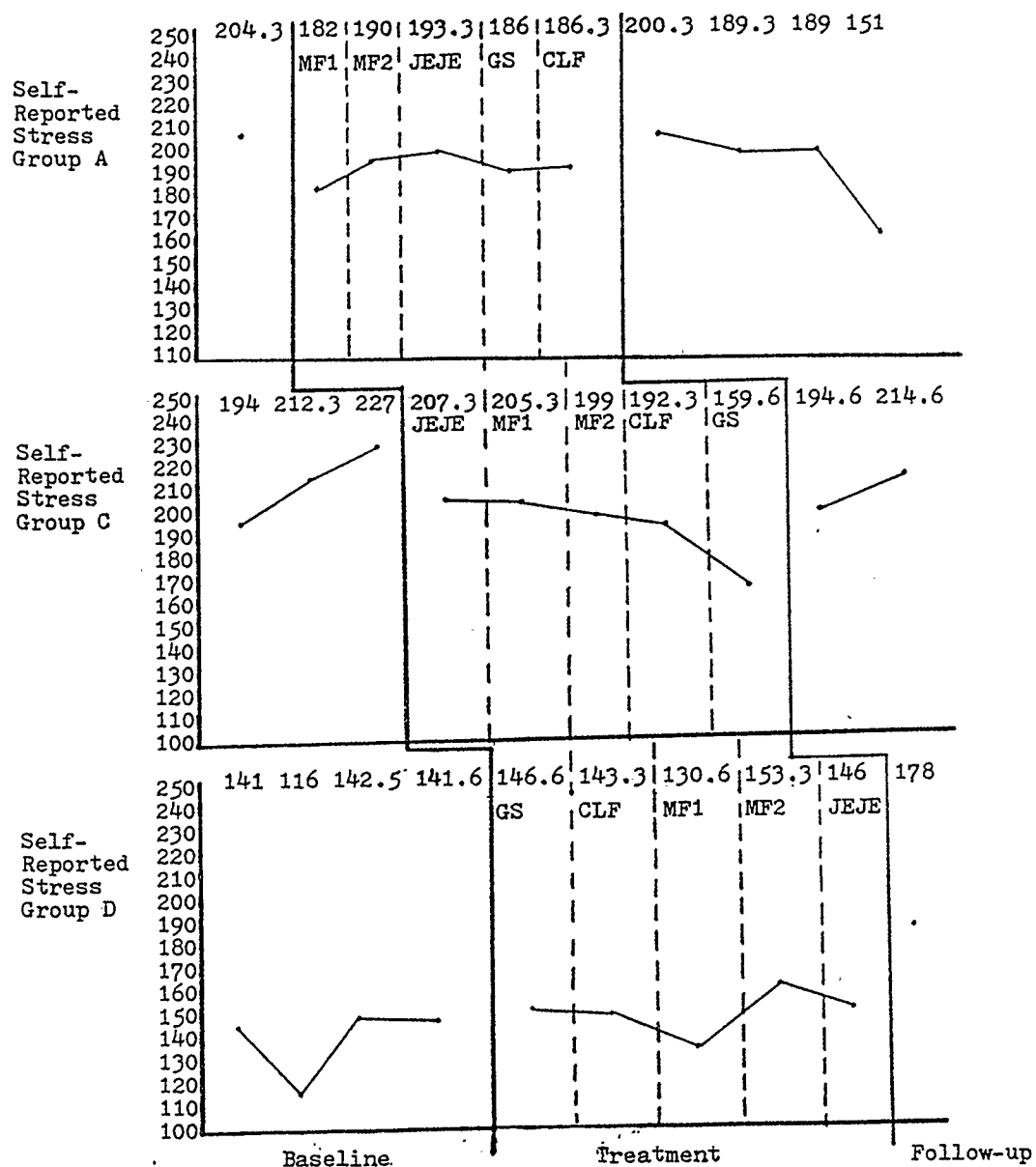


Table XIII

Mean Scores
Per Condition Per Subject Per Group

Group A	Baseline	Treatment	Follow-up
Subject A	237.0	187.8	192.3
Subject B	210.0	204.0	200.3
Subject C	166.0	179.0	177.8
Group C	Baseline	Treatment	Follow-up
Subject A	230.0	211.8	232.0
Subject B	193.0	187.8	186.6
Subject C	209.7	178.6	196.0
Group D	Baseline	Treatment	Follow-up
Subject A	162.7	163.4	229.0
Subject B	148.0	131.8	133.0
Subject C	107.5	137.2	172.0

df=5; $p > .05$).

The scores obtained under the goal setting condition showed the greatest gain (reduction in stress) and were analyzed in comparison with the baseline condition using the Friedman Two-Way Analysis of Variance by Ranks Test. No significant difference was found ($\chi^2=2.78$; df=1; N=9; $p > .05$). As goal setting resulted in the greatest gain, and no significant differences were found between the baseline and gain score, it appears that no single procedure significantly reduced stress.

The gain scores of the follow-up condition were analyzed using the Sign Test (one-tailed). Two analyses were conducted. Firstly, the follow-up gain scores were compared to the last treatment condition. Secondly, the follow-up gain scores were calculated and compared to the baseline condition.

In the first analysis (follow-up compared to last treatment condition) one subject showed a reduction in stress, while eight subjects showed an increase in stress. This was found to be significant ($p < .05$) where $x=1$ and $N=8$. When stress levels of the subjects during follow-up were compared to stress levels during the final treatment condition subjects were significantly more stressed during the follow-up condition.

The second analysis was conducted to examine how this increase in stress compared to the initial baserates of stress. Where $x=4$ and $N=5$, no significant differences were found.

Table XIV

Gain Scores
Per Condition Per Subject Per Group

GROUP A	MF1	MF2	JEJE	GS	CLF	FOLLOW-UP1	FOLLOW-UP2
Subject A	+36	+18	-4	+4	-2	-5	+45
Subject B	-5	-30	+18	+15	-4	-5	-10
Subject C	-4	+27	-23	+3	+5	+14	+22
GROUP C							
Subject A	-33	+1	+46	+30	+10	-60	-1
Subject B	+27	-12	-12	+42	+1	-33	+5
Subject C	+11	+31	+25	+6	+9	-42	-13
GROUP D							
Subject A	-14	+9	+2	+16	+17	-6	+65
Subject B	+26	-27	+56	-36	-1	-74	-64
Subject C	+26	-50	-36	+5	-6	-16	-63
Total	+70	-33	+72	+85	+29	-227	+20

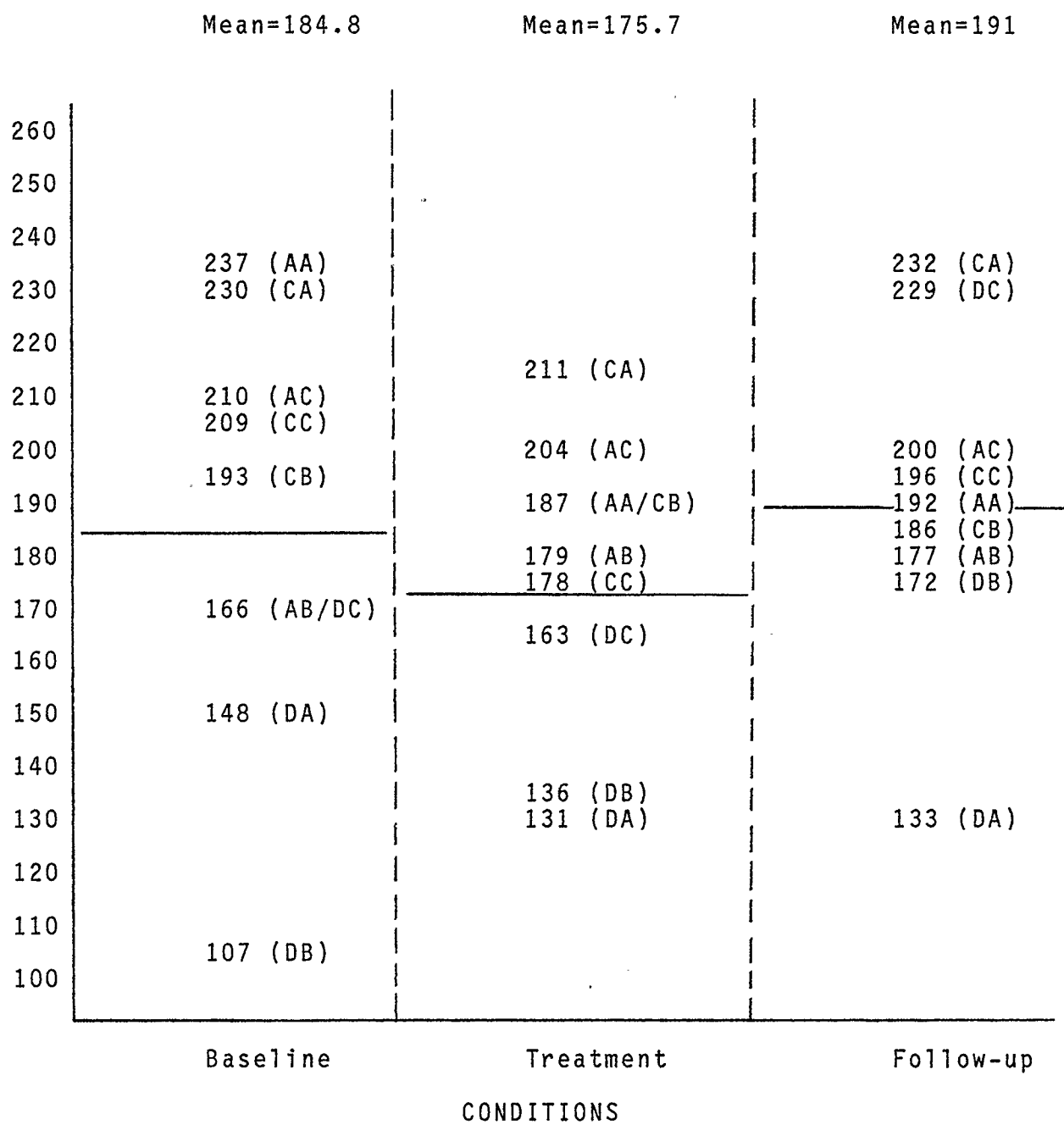
*A positive integer indicates a 'reduction' in self perceived stress.

Follow-up 1: Gain score - follow-up over last treatment condition.

Follow-up 2: Gain Score - follow-up over baseline condition.

Figure 8

Mean Scores of Subjects per Condition



Code: First letter indicates group and second letter indicates subject of the group.

Analysis of the Two Evaluation Conditions

(Goal Setting and Job Enrichment/Job Enlargement)

The two evaluation conditions (goal setting and job enrichment/enlargement) were analyzed using the Friedman Two-Way Analysis of Variance by Ranks Test. The two conditions were compared to the baseline condition. The conditions were similar in intent (provide a focus to the goals, objectives and philosophy of the setting) and, therefore, it was believed useful to compare the two conditions to the baseline condition. No significant differences were found ($\chi^2=4.16$; $N=9$; $df=2$; $p > .05$).

Analysis of the Two Feedback Conditions

(Management Feedback and Client Feedback)

The two feedback conditions (Management Feedback and Client Feedback) were analyzed using the Friedman Two-Way Analysis of Variance by Ranks Test. The two conditions were compared to the baseline condition. The conditions were similar in intent (provide a focus to the data regarding educational intervention in the home) and, therefore, it was believed useful to compare the two conditions to the baseline condition. No significant differences were found ($\chi^2=1.93$; $N=9$; $df=3$; $p > .05$).

Analysis of Follow-up Scores

The stress scores of all subjects ($N=9$) under the follow-up condition were analyzed using the Kruskal-Wallis One-Way Analysis of Variance by Ranks Test to establish whether there were any differences among groups during follow-up. No significant differences were found when stress scores were compared in the follow-up condition ($H=1.41$; $N=9$; $df=2$; $p > .05$).

Administrator's Questionnaire

Sixteen statements (see Table XV) were completed by the Executive Director of the Association prior to the study and upon completion of the follow-up in each setting. Any score which changed by an increase or decrease of .75 or more was identified as changing more favourably or less favourably, respectively. Four statements were more favourably rated by the administrator on post-evaluations as compared to scores obtained prior to the study. Eleven (11) statements were rated the same. One statement was rated less favourably on the post-evaluation as compared to scores obtained prior to the study. The scale ranged from zero (0) to four (4) with zero representing 'never occurs' and four representing 'occurs all of the time'. The statements rated more favourably were: 1) Staff speak of the client as a family member. 2) Staff show initiative. 3) Staff like their jobs, and 4) Staff (state) believe they have a lot to learn and accept that as part of the job. The one statement rated less favourably on the post-evaluation when compared to the score obtained prior to inception of the study was: Staff blame others (Government, etcetera) for their shortcomings.

Social Validity

The questionnaire (see Table XIV) was prepared to measure the consumers satisfaction with various aspects of the study. The employees were satisfied with relationships among staff (5.2) and the supervisor's support (5.1). Items 1, 2 and 4, which related to the treatments job enrichment/enlargement, goal setting and management feedback, respectively, were rated 5.1, 4.7 and 4.9 respectively. Client feedback (number three) was rated lowest at 4.3. When

Table XV

Mean Scores Per Question
Administrator's Questionnaire
On Pre and Post Evaluations

Question	Pre-study	Post-study	Gain/Loss
1. At meetings staff complain about their clients.	1.50	1.75	-.25
2. Staff complain about 'too much work' and 'too little time'.	1.25	1.50	-.25
3. Staff identify clients' progress and improvements during meetings.	2.25	2.50	+.25
4. Improvements are usually discussed more often than failures.	2.25	2.50	+.25
5. Staff speak of the client as a family member.	1.50	3.00	+1.50*
6. Staff focus attention to negative behavior rather than positive behavior.	1.50 2.75	1.50 3.75	0.00 +1.00*
7. Staff show initiative.			
8. Staff blame others (Government, etc.) for their short-comings.	1.25	2.00	+.75*
9. Staff are inactive.	1.00	1.00	0.00*
10. Staff like their jobs.	3.00	3.75	+.75
11. Staff are sure of what they are to do - rarely confused.	2.75	2.75	0.00
12. Staff ask for training opportunities.	2.75	2.75	0.00
13. Staff state (believe) that they have a lot to learn and accept that as part of the job.	2.00	2.75	+.75*
14. Staff see little chance of rehabilitation ever working the way it should.	1.50	1.50	0.00
15. Staff work here because of the work, not the money.	3.00	3.00	0.00
16. Staff seldom quit working here in the first year.	3.00	3.00	0.00

questioned whether something good would come of the study and whether the study was useful to the organization, the respondents rated the items 4.2 and 4.3 respectively. The subjects perceived their relationships among staff and supervisor's support to be quite satisfactory given that a rating of 6 reflects extremely satisfied.

Interviews

Interviews were conducted with 14 subjects (12 employees and two administrators) upon completion of the study (see Table XVII for questionnaire). The interviews were designed to assist the researcher in determining the subjects involvement with the instruments used in the study, on an historic and current basis. The administrators were interviewed in an effort to gather their perceptions of the instruments and treatments utilized in the study. Employee responses are presented in Table XVIII.

Employee Responses to Interview Questionnaire

Of the 12 employees interviewed, nine were involved or had been involved with the two management feedback forms. (see Table XVIII for results) All subjects were involved in the value priority scale (participated in the initial data collection and the meeting to discuss results). Nine of the subjects were involved in completing the client feedback form, or were familiar with the continued use of the form. Twelve of the subjects (N=12) participated in the initial data collection and the follow-up meeting to discuss the results of the employee inventory within the job enrichment/enlargement condition.

Table XVI

Mean Scores of Social Validity Questionnaire
Conducted Post-Study

<u>QUESTION</u>	<u>SCORE</u>	<u>TREATMENT</u>
1. I was _____ with the opportunity to select new responsibilities.	5.1	Job enrichment Job enlargement
2. I was _____ with the opportunity to participate in the selection/decision of organizational goals.	4.7	Goal Setting
3. I was _____ with the progress reviews.	4.3	Client Feedback
4. I was _____ with the supervisor/manager feedback regarding the quality/quantity of programs.	4.9	Management Feedback
<hr/>		
5. I was _____ with the supervisor's support.	5.1	
6. I was _____ with the relationships among staff.	5.2	
7. I was _____ with the opportunity to participate in the project.	4.9	
8. Something good will come of this project.	4.2	
9. This is useful to management.	4.3	

Table XVII
Post Study Interview Questionnaire

To each of the four instruments the following questions were asked of twelve (12) participants.

	MF1/2	GS	CLF	JEJE
1. Were you involved with this instrument (instrument shown)?	Y/N	Y/N	Y/N	Y/N
2. Is the instrument useful (instrument shown)?	Y/N	Y/N	Y/N	Y/N
3. Is this instrument still being used (instrument shown)?	Y/N	Y/N	Y/N	Y/N
4. Are you aware of the purpose of this instrument? Explain. (Instrument shown).	Y/N	Y/N	Y/N	Y/N
5. Was this instrument used in your home?	Y/N	Y/N	Y/N	Y/N
Is this instrument used by the administration as well?	Y/N	Y/N	Y/N	Y/N
6. Were the administrator's involved in the use of this form?	Y/N	Y/N	Y/N	Y/N

7. Was there follow-up?	Yes			
	No			
	Don't Know			
	Need More			
8. Was the researcher's role useful?	Yes			
	No			
	Don't Know			
9. Was the research project beneficial?	Yes			
	No			
	Don't Know			

Management Feedback Condition

When asked if the instrument was useful, eight of the nine employees familiar with the instrument felt the general feedback form (Table IV) was useful, while only six of the same employees felt the specific feedback form (Table V) was useful. Subjects who felt the more specific form was not useful felt that the general form (Table IV) could easily be adapted to accommodate the consultation component on the more specific form (Table V). Paperwork appeared to be the major concern. All subjects familiar with the general feedback form (Table IV) believed it was still used. However, it is noted that the form is now delivered to the administration office bi-weekly in two cases (groups) and monthly in another group, instead of weekly as originally designed. Eight of the nine subjects stated that the specific feedback form (Table V) is still being used.

All nine subjects accurately defined the feedback forms as instruments to help keep administration informed of the education and 'programming' of each client in the home. All subjects stated that they thought the administrators used the forms, while only four felt that there had been follow-up. Eight subjects stated that there should be more follow-up and five subjects were unaware or did not know if follow-up had taken place. Eighteen responses of 12 subjects were tallied as some subjects were coded in two categories (for example, a subject stated that there had been no follow-up and that more was needed). A general consensus (N=8) was that the forms needed minor revisions or modifications to accommodate the varying types of educations in the different homes. It was also a consensus that revision could be conducted (had been conducted in one home) without

altering the 'intent' of the original forms (N=8).

Goal Setting Condition

All subjects (N=12) were involved in completing the value-priority scale and the meeting to discuss the results. All subjects saw the form as useful (six subjects said the form was interesting; five subjects said the form made you think; and three subjects said the exercise helped clarify perceptions).

There was unanimous agreement that the form and results were no longer being utilized; four subjects stated that the form should be completed every six months to measure change from base rate. All subjects (N=12) stated that they believed no follow-up had taken place.

All subjects clearly articulated the purpose of the instrument as being an activity to clarify values and perceptions of rehabilitation from both the employee and administrative perspective. Six subjects stated that discussion of discrepancies between the employees goals of rehabilitation and the agencies' goals of rehabilitation were particularly interesting. Two subjects felt that involving the administrators by having them complete the value priority scale would have been an important addition to the task.

Eleven (11) of the 12 subjects stated that the administrators were involved initially (administrators attended the meeting at which the results were discussed). The only problem identified by the subjects was that follow-up should have been maintained (N=11).

Client Feedback

Nine of the 12 subjects were familiar with the client feedback form. Seven subjects felt the form was useful. Eight subjects believed that the form was still being used in the home.

Interestingly, seven subjects believed that the form was used by administrators even though the form was designed to be used in the home only. One homes does, in fact, send the forms to the administration office weekly with the management feedback forms. Six subjects stated that they felt the form was redundant of the two management feedback forms. Three subjects stated that follow-up was conducted at the monthly staff meetings regarding client progress. Two subjects did not know if follow-up had occurred and four subjects stated that no follow-up had occurred.

Job Enrichment/Enlargement

All 12 subjects were involved in the initial data collection and the subsequent follow-up meeting to discuss the results. Four subjects stated that the completion of the employee inventory facilitated an awareness of concerns. Four subjects stated that the inventory clearly identified strengths and weaknesses of the organization (within the home, between homes or, more generally, among the homes as they interact with the administrative system of the association). Three subjects stated that they felt the inventory provided a focus for the employees and administrators of the association.

Eleven of the 12 subjects stated that no follow-up had taken place. Of the 11 subjects that stated no follow-up occurred, all 11 felt the inventory was useful and seven subjects suggested that it should be used again. Two subjects suggested that the inventory should be used every six months. Other than the concern regarding lack of follow-up, no other deficiencies were noted.

In summary, follow-up on all interventions appeared to be

deficient. With the exception of the client feedback form, the interventions were perceived to be useful to the point that they should be continued to be used. The feedback forms and the time scheduling of feedback needed revision and revision had been initiated by two groups at the time of the interviews.

Managerial and Administrative Responses to the Treatment Conditions

The Administrator and Assistant Administrator were interviewed regarding all treatment conditions. The administrators felt, generally, that the study 'increased awareness', 'focused on little things that can bring about change', and 'confirmed a conviction to changes - some of which were already identified and others which were projected'.

Management Feedback Condition

The feedback forms (Tables IV and V) were delivered to the administration offices weekly (initially) and are continuing to be used and delivered, albeit on a modified schedule from the initial design. This corroborates the perceptions of the employees (eight of nine employees stated that the form is still being used). The administrators correctly defined the purpose of the instruments as being 'a way to stay in touch with things'. The administrators stated that they found the forms to be informative of the 'education' in the homes. The administrators identified that the forms had been revised (the schedule and the components) and projected that all homes will likely revise the forms similarly without altering the initial intent. Follow-up was stated to have been conducted at staff meetings. This information conflicts with the perception held by the employees (only four of nine employees stated that follow-up had occurred).

Table XVIII

Post Study Interview Results

<u>Question</u>		<u>Condition</u>					
		Numerals in questions 1 -6 reflect affirmative responses.					
		MF1	MF2	GS	CLF	JEJE	
1.	Were you involved with this instrument?	9	9	12	9	12	
2.	Is the instrument useful?	8	6	12	7	12	
3.	Is the instrument still being used?	9	8	0	8	0	
4.	Are you aware of the purpose of this instrument?	9	9	12	9	12	
5.	Was the instrument used in your home?	9	9	12	9	12	
6.	Were the administrator's involved with the use of this instrument?	8	6	11	8	11	

7.	Was there follow-up?	Yes	4	4	3	3	2
		No	0	0	12	8	4
		Don't Know	5	5	0	2	0
		Need More	8	8	0	0	10

8.	Was the researcher's role useful?	Yes	9				
		No	0				
		Don't Know	3				

9.	Was the research project beneficial?	Yes	10				
		No	0				
		Don't Know	2				

Goal Setting

The administrators agreed that the value-priority scale was useful in clarifying perceptions and discrepancies. Like the employees, the administrators stated that follow-up was lacking. The administrators believed that it would be appropriate to complete the forms again. Generally, the value-priority scale was believed to be useful in 'developing an awareness which leads to questions about why, which helped us (administrators) tune in'.

Client Feedback

The administrators were familiar with the form used in the client feedback condition, and agreed that the client feedback form was used in the homes as a feedback/evaluation tool for educational plans in the homes. As the form was designed for use in the home by the employees in the home and was not designed to be used by administration, there was admittedly no follow-up. It was identified, however, that one group of employees, of their own volition, was submitting a copy of the client feedback form weekly with their management feedback forms.

Job Enrichment/Enlargement

The administrators saw the use of the employee inventory as beneficial. Many managerial decisions were promoted or initiated as a direct result of the employees feedback regarding the association: 1) clarification/revision to orientation package to new employees in the homes; 2) need for a resource file (list of available resources); 3) job descriptions with standards of expectations; and, 4) clear definition of goals and objectives. No formal follow-up was conducted, but needs, as identified through the employee inventory, were targeted

and followed-up. The administrators also noted that improvements in communication and feedback were evident as a direct result of the employees' feedback through the employee inventory.

CHAPTER IV

DISCUSSION

Discussion of Contamination and History

Visual analysis of the data suggests that contamination from one home to another home was not evident, at least during the baseline conditions. It must be noted, however, that the employees of the four homes were found to discuss the various 'events' (treatments) being conducted in the homes during the study. Occasions existed when employees in one home would contact employees in another home regarding the various conditions (treatments) utilized in the study to obtain additional clarification or to generally discuss the instruments used in the treatment conditions. While it is difficult to determine the magnitude of cross-fertilization, sharing perceptions regarding the treatments appears to have only taken place when it was of common interest to the groups involved. While contamination was evident, the degree to which the contamination affected the results was not discernible.

Contamination and maturation are two problems in the study and must be addressed when discussing the results of the study. The study was designed to utilize realistic strategies (strategies which could be employed by managers in rehabilitation settings with the least amount of intrusion on the existing managerial and personnel activities) in existing settings.

There were two types of contamination which may have affected the results: cross fertilization from home to home during the treatment

conditions and sequential or order effect of the treatments applied to each home. As noted cross fertilization occurred when one home was being manipulated and the personnel in the home shared the information with participants in the other homes participating in the study. The effects of one manipulation, followed by a second, third and fourth manipulation created an order of events that may have confounded the results.

While the manipulations in one home may have contaminated the manipulations in the other homes in which no manipulation or different manipulations were taking place, it was also important to obtain data regarding the systematic application of managerial strategies and the concomitant effect of those strategies on staff perceived stress. An optimal study would have used a control group or groups to control for the maturation of the employees, but it was the experimenter's conviction that it would have been unethical to manipulate three of the four homes while using the fourth home as a control setting. Diener and Crandall (1978) support the author's position.

The multiple baseline design was selected as it enabled the researcher to observe the effects of staggered treatments across all homes. The extended baselines enabled the researcher to visually analyze the data when treatments occurred in some settings while not in other settings. Any noted change in baseline data might then be attributed to the treatments in the other settings. Additionally, the multiple baseline design enabled the researcher to use each home as its own control as each home was assessed prior to treatment, after each treatment, and in follow-up.

History may have also produced untoward effects in the data.

A history of change in the association would likely have affected the results differently than a history of rigidity. A history of this system, while under the direction of the current Executive Director, was collected through self-report from the Executive Director to establish a baseline of the Association's orientation to change.

The history of this Association appears to be one which has promoted considerable change. This history was borne out in some of the subject's behavior during the study. It appears that a climate of autonomy and self-directedness was evident in that there was no reluctance on the part of the subjects to alter the feedback forms in an effort to ensure that the effort invested in the activity was one which would prove to be functional to the agency and not just the researcher's study. This history of preparedness for change is also evidenced in the subjects willingness to participate in the study and the treatments as designed. It is the researcher's perception that the personnel, generally, were willing to attempt anything new that suggested that the resulting changes could possibly alter (improve) the situation. The personnel seemed to be proactively oriented to change and saw change as necessary as opposed to being a hardship.

While the effects of the employees willingness to participate was difficult to discern in the data, their willingness to participate must be considered when interpreting the results.

Discussion of the Statistical Analysis

There were no significant differences between groups on initial stress scores (baseline scores). Thus, it appeared that the groups were stressed to a similar degree, as measured by the stress inventory.

The effect of the treatment conditions on stress was analyzed through a comparison of baseline and treatment conditions across three groups. A significant difference (reduction in stress) between baseline and treatment conditions was found in Group C. No significant differences between baseline and treatment conditions were found in Groups A and D. As noted previously, Group B was not analyzed due to the loss of subjects and contamination which occurred during the study. The loss of Group B reduced the replications to three.

One possible explanation of the results is that the nature of Group C was unlike that of Groups A and D. Group A was involved in establishing a comprehensive Individual Program System for clients. Group D was a setting for 'elderly' women where the orientation in the home was one of 'maintenance' rather than 'development'. Group C was seemingly more prepared at the time the study was conducted to pursue educational and individual program goals than either of the other two settings. As two of the treatments focussed directly on the intervention with clients in the setting (management feedback and client feedback) and the other two treatments focussed on evaluating the organization of the setting in terms of philosophy, values, goals and objectives, (goal setting and job enrichment/enlargement) it appears that Groups A and D would be least likely to maximize the treatment objectives.

Group D subjects believed the feedback forms focussed too heavily on the growth and development of the client. As the clients under the care of subjects in Group D were elderly, it appears that feedback regarding growth and development was perceived to be inappropriate. Group A, on the other hand, focussed their

interventions on young adults. However, Group A was in the process of developing a comprehensive system to accommodate an individualized treatment system. Group A was attempting to develop a comparable system to Group C. The transitory state of Group A appears to have prevented the employees from capitalizing on the treatment objectives. The 'mission' of Group D (maintenance) and the transitory state of Group A (preparing Individual Program Planning system) appear to have limited the effectiveness of the treatments utilized. Hence, in Groups A and D, there was neither a significant increase or decrease in staff self-reported stress.

A second possible explanation for the results is that in Groups A and D a specific individual was assigned to complete the feedback forms, while in Group C the forms were completed by the individual assigned to a particular shift. The importance accorded the instruments in Group C by the personnel when interviewed upon completion for the study, may have facilitated a greater impact on staff-stress than in the other two settings. Group C personnel were all familiar with all instruments, whereas some individuals in each of Groups A and D were not familiar with the feedback forms. The greater awareness of employees in Group C may have contributed to a lessening of stress (self-reported) as the tools may have facilitated a greater awareness of the day-to-day events in the home and no or few perceptions of hidden agendas. The awareness of progress toward developmental goals in the home was the intent of the client feedback condition. In summary, the apparent lack of change in Group A may have been due to the 'unsettled' nature of the environment at the time. The ascending trend in Group D (increase in self-reported stress), although

not found to be significant, suggests that the application of treatment objectives which conflict with the 'agency intent' may accelerate stress.

A second comparison was conducted to evaluate the effects of the treatments across all three conditions; baseline, treatment, and follow-up. No significant differences were found. Hence, the significant reduction in stress found in Group C was lost during follow-up.

A possible explanation for these results is that the study clearly did not provide follow-up through continued intervention and support. The failure to provide a careful transition from mediation by the researcher to management by the administrator(s) clearly may have contributed to the loss of treatment effect gained by Group C, during the treatment conditions. The employees and the administrators felt the mediator and the mediation process were important components in the study in that, careful analysis was conducted, objective inference was reported, and clarity of issues was generated. Therefore, the mediation role appears to have been useful. Nevertheless, effective transfer of the locus of control from mediator to manager appears critical to effective follow-up.

A third comparison was conducted. The scores of each Group appeared, on visual analysis, to collectively reflect a decelerating trend (reduction in stress). Although no single group showed a significant decrease in stress across baseline, treatment and follow-up conditions, an analysis of the subjects as one group appeared worthy of investigation. The subjects were employed in the same association and, therefore, the similarity of governance issues appeared to warrant the

investigation. The analysis yielded a significant difference ($p < .05$). Treatment effects were significantly different from baseline and follow-up conditions. It appears that the four treatments collectively, across nine subjects, did reduce stress. While this analysis should be accepted with caution, the statistical analysis did confirm the visual analysis.

Caution in viewing this data is necessary, as three groups of subjects, from three currently different 'orientations' were grouped together. As well, treatment effects were reduced to a single mean score. Only after the composite set of conditions were applied was there a significant difference between groups. When each group was evaluated independently, no significant treatment effects were found across the three conditions -- baseline, treatment, and follow-up. A second contributing factor, not to be ignored is the very small sample size.

Gain scores across treatment were analyzed and no significant effects were found. As goal-setting is associated with the largest gain scores, the goal-setting condition was compared to the baseline condition to ascertain if a significant difference existed. Again, no significant difference was found. It appears that no single treatment was responsible for the significant difference found in the previous analysis. This data suggests that the composite set of treatments were interactive in producing the reduction in stress reported.

When follow-up gain scores were compared to the last treatment condition there was a significant increase in stress levels among the subjects. A possible explanation for this might be that the researcher was somehow able to "show" the subjects their value and importance to

the organization. It would seem at the very least that the researcher was able to show the subjects that they were valuable. The strategies employed were all of a developmental nature and therefore there was never an occasion to say that the subjects were inadequate, ineffective, or less-able to perform than any number of similar groups. As a consequence the subjects were always presented with a focus on "What can be done now? How will you proceed? Where do we go from here? etcetera. This orientation may have contributed to a perceived loss upon the researcher's withdrawal. That is to say that the employees may have believed that with the researcher "leaving" that the opportunities to feel valued and important were "leaving" as well. This might also suggest that interest and involvement are possibly stress reducers. Involving employees in more tasks, increasing their responsibilities or increasing the perceived responsibility of the existing role(s), and promoting autonomous activities may all lend themselves to stress reduction. To a great extent the texts In Search of Excellence and A Passion for Excellence have suggested that employees need to feel involved and important to their organizations. Howard, et al., 1978, suggest the sense of helplessness is what is debilitating, more so than too much work, activity, and responsibility. Finally, the data suggests that serious questions about the effect of the researcher in a process consultative model must be examined more closely. The suggestion, here, is that some very simple techniques of involving employees may be effective reducers of stress.

The follow-up scores were analyzed to examine stress levels after treatment. No significant differences were found between groups. Analysis of follow-up scores in comparison with baseline scores also

was found to not be significant. This data suggests that no group changed significantly from the baseline condition.

Administrators' Questionnaire

The administrators' questionnaire was administered prior to the inception of the study and upon completion of follow-up in all four homes. Four of the 16 areas across all four groups were perceived by the administrator to have improved, eleven areas were not perceived to have changed, and one area was perceived to have decreased. The administrator perceived that the employees improved in the following areas: speaking of the clients in the homes as family more often (changing from seldom to more often), showing initiative (changing from most of the time to almost all of the time), liking their jobs (changing from some of the time to most of the time), and believing that they have a lot to learn and accepting that as part of the job (changing from some of the time to most of the time). The staff were perceived to seldom blame others for their shortcomings prior to the study, and yet after the study, they were perceived to blame others for their shortcomings more frequently (some of the time versus seldom).

These data suggest that the employees began to see their jobs, at least in some small ways, as a challenge -- more initiative, having a lot to learn, and liking their jobs. The clients were also seen more often as part of the family. Interestingly, however, the results also suggest that, while staff began to assume a stronger personal locus of control, they, at the same time, began to see difficulties with external sources controlling funding and support. It is speculated that the study might have heightened the subjects' awareness of personal 'power' while at the same time generating suspicion towards the sources

of control that could unleash the personal power. Additionally, the employee inventory, which enabled the employees to identify the need for resources (coupled with the identification of resource groups and the awareness of the high cost of resources after some investigation) may have contributed to the generation of dissatisfaction with governing and funding bodies.

Social Validity

The social validity measures suggest that no treatment was perceived as unsatisfactory (all scored greater than three, which was neutral). In fact, the employee inventory (used in the job enrichment/enlargement condition), value priority scale (used in the goal-setting condition), and the management feedback forms (Tables IV and V) were rated as 5.1, 4.7 and 4.9 respectively.

These results suggest a moderate to strong degree of satisfaction with the instruments and the treatment condition. Client feedback forms were least-well endorsed during the interviews conducted upon completion of the study and, similarly, scored lowest on the social validity questionnaire (4.3). While the score of 4.3 assigned to the client feedback condition was not a negative score, the fact that it was also identified during the interviews as being the least useful instrument, suggests that the utility of the instrument must be seriously questioned. In contrast, the subjects reported during the interviews that the goal-setting, management feedback and employee inventory forms were interesting and useful.

The results regarding the client feedback condition are interesting in light of the literature available, which suggests that client feedback is a relevant variable to examine with regard to stress

among human service professionals. The suggestion in the literature is that client feedback is critical to job satisfaction. It is postulated that a lack of feedback regarding client progress is synonymous with a lack of feedback to teaching effectiveness. The dissatisfaction with the client feedback condition could be due to several factors: 1) the clients of the subjects in this study do not progress rapidly enough (in the interviews, this was suggested by two subjects); 2) the data analysis system devised for use by the staff was not sensitive enough to measure change in the subjects; and 3) the lack of feedback to the data collected by the subjects leads to a perception among the subjects that this activity was more like a 'make-work' project than one of relevance. While feedback is generally weak in all conditions, feedback in this condition could only come from the subjects themselves, as this form was not designed to be shared with the administrators. The ambiguity of the feedback form was, possibly, a contributing factor to the dissatisfaction reported, also. It would appear that failure to endorse the use of feedback devices and the importance of such data may foster confusion among personnel.

Summary of Issues

The climate of the different groups in the study in terms of goals, objectives, and philosophy may have a contributing effect on the stress levels of the subjects when interfaced with change variables, such as those used in this study. The transitory nature of the program or group appears to have prevented Group A from actively utilizing the interventions. The marked difference between the objectives of Group D and the intent of the treatments used in the study possibly contributed to an increase in stress among the subjects (although not significant).

The lack of planned follow-up by the Executive Director was a concern expressed by many subjects across most treatments. It should be noted that the perceived lack of follow-up was not a function of the Executive Director's role as delineated in the study. Therefore the lack of follow-up was a function of the inadequacy of the design. The lack of follow-up to the management feedback condition appears to have lessened any impact that the treatment may have had. The lack of follow-up on the goal-setting and job enrichment/enlargement conditions appears to also have had the same effect -- lessening the impact of the treatment. In the case of the job enrichment/enlargement and goal-setting conditions, it is interesting to note, however, that the follow-up, in terms of action by administration, has been profound due to the articulation of the needs of each group. The needs, as delineated by the groups, were of major importance to the administrators who had been actively attempting to remediate a variety of issues: 1) the goal-setting condition was the primary source of impetus into the alterations made to the orientation packages for new personnel; 2) the job enrichment/enlargement condition generated a typed list of available resources, an awareness of an existing network of resource sharing, an awareness among subjects of resource services and agencies, completion of job descriptions and standards, and greater clarity of goals and objectives. The action taken by the administrators has not been viewed by the subjects as follow-up. An explanation of these results might include: 1) the subjects were not informed of the action plans; 2) the subjects were not informed of how valuable their input was to the changes; 3) the subjects were not involved in the action plans; and 4) the subjects were 'blind' to the

impact that their behavior and participation has had on the organization throughout the study.

Suggestions for Future Research Follow

The goals, objectives and philosophy of the subjects and setting (agency) should be clearly delineated prior to any intervention to ensure that the interventions used are compatible with the goals, objectives and philosophy of the subjects and setting.

It appears that when the goals, objectives and philosophy are not compatible with the intervention stress levels may in fact increase. The necessary pre-requisite task would entail the generation of a set of expectations which would accommodate the intervention.

Follow-up, of a more intrusive nature, regarding the strategy and treatments, either by the mediator or the administrator, is essential during treatment and follow-up.

The mediator's role was well-received during the study. An investigation of the variables which facilitated the researcher's ease of involvement should be studied. Careful monitoring of the involvement and follow-up of the mediator and administrator seems apparent.

The data suggests that the four treatments may, collectively, reduce stress. Repeated studies using one factor at a time across a variety of groups would facilitate an analysis of which variables may have the greatest impact on reducing stress among rehabilitative personnel. For example, future studies could measure stress levels of a variety of groups and then simultaneously apply one variable, say management feedback. Subsequently, the effect of this one strategy on stress levels could be analyzed.

Specific Changes to Intervention

The management feedback condition involved the researcher discussing the use of the forms with the group home manager and then describing the process by which the forms were to be delivered to the administration office (weekly). In Group C, the manager shared the responsibility of completing the forms with his employees. In the other two settings (Groups A and D) the manager or assistant manager completed the forms. It would appear, based upon the subjects responses during the interviews, that many subjects of Groups A and D were unfamiliar with the forms. The impact of this intervention across all subjects is tenuous at best. Use of the forms, in the future, should be instituted only after all personnel are made fully aware of the forms' functions. Additionally, it is intimated that all subjects should be involved in completing the forms.

The client feedback condition required the manager to provide for the weekly review of client progress on established educational plans. This information was designed for use within the group and was not required by the administration personnel. Group C, however, delivered the forms weekly to the administration office with the management feedback forms. Again, not all employees were involved in completing the form. Like the management feedback condition, this form should only be utilized after all subjects are fully aware of the function of the form. Additionally, the subjects should all be involved in completing the form. A weekly schedule of staff meetings should have been established for review of the analysis with all personnel to establish a functional purpose to the exercise.

The goal-setting and job enrichment/enlargement conditions

were completed by all subjects. The primary difficulty with the conditions is the lack of follow-up regarding the needs realized through discussion of the results. A monthly follow-up would be advisable. Additionally, the conditions might be most useful if a formal follow-up was conducted (six months following the initial analysis) where the subjects once again completed the questionnaires and participated in a discussion of the same. A second analysis would enable the participants to obtain feedback regarding progress toward the needs identified in the initial analysis.

Follow-up to the client feedback condition would be facilitated through the weekly staff meetings. Follow-up to the management feedback form should be conducted through the monthly staff meetings attended by the administrators.

As the groups studied were quite satisfied with the relationships among staff and their supervisors' support, the effect of the treatments may have been diffused. Application of these same treatments to groups with varying levels of satisfaction among personnel and supervisors would elaborate more clearly the types of groups most suited to the manipulations. Conceivably, socially satisfied groups may be better suited to some interventions than socially antagonistic groups. The data in this study does not lend itself to interpretation of this issue.

The reported results of this study has held the one assumption that the Executive Director did not change. The study, however, may very well have changed the Executive Director's interactions and this, in turn, may confound the analysis of the results. The impact of this study on the Executive Director's behavior is difficult to discern from

the data collected. Because the Executive Director on several occasions expressed satisfaction and on occasion excitement regarding the treatment activities it might be best to assume that change in the Executive Director was possible, that change may have taken place, and that the changes may have affected the results of the study.

Practical Recommendations from the Study

A variety of issues were discussed. Some practical recommendations appear evident. The following recommendations are offered.

1. The nature of a setting (proactive, reactive, transitory, stable, clear mission statement, and so on) appears to contribute to the individual subject's reaction to the application of change events. It appears important that the change variables be consistent with the philosophy of the setting. The developmental treatment variables used in the study appear to be only desirable when the setting itself has a developmental focus.

Introducing developmental goals in settings with a maintenance philosophy or focus appears to result in little active change and in fact may seriously interfere with the existing contingencies and climate of the setting.

2. Feedback is a critical component. Staff in the homes studied repeatedly suggested that they did not see the effect of their behavior during the study having any impact on the organization. During all phases of the study feedback to the individual subjects from the administration was minimal. Time may have been a contributing factor. Intense attention to any one treatment variable was for only four weeks

and consequently the relevance and importance of each variable could have been inadvertantly de-emphasized. This appears to be a reasonable suggestion in light of the fact that every four weeks the researcher would focus the subject's attention to a new task which invariably required their full attention. The administration comprised of the Executive Director and the Assistant would also necessarily alter their focus. Considering that the administration needed to follow-up four groups it is not surprising that feedback was not optimal. This is further emphasized when the design of the study did not adequately consider the necessity of more intensive follow-up.

3. Feedback it is presumed is not a one-way street (administration to employee). Employees need to be assured, taught, or provided with opportunities to seek-out feedback when they perceive that there is a vacuum developing.

4. A mediator appears warranted, but the mediator must systematically plan to return the locus of control to the administrators of the system.

5. Analysis and evaluation of the values of the individuals and the organization can be a non-threatening activity. The failure to provide feedback regarding these activities appears to generate serious doubt among the personnel as to the importance or long-term effects of such strategies.

6. Feedback to the adminisration provided clarity within each setting regarding developmental activities and enabled the administrators to keep abreast of the activities with each client in each setting. Again, feedback regarding the usefulness of these activities must be maintained to ensure that all staff are actively

involved in the maintenance of the feedback system.

7. The treatments appear to be supported, additionally, by the staff because they were relatively easy to use while at the same time not requiring an inordinate amount of staff time to complete. Several of the staff report that the employee inventory and value priority scale should be conducted at least yearly.

8. The treatments demand a significant amount of time of the experimenter and therefore the experimenter would need to fully understand the time-commitment necessary of the mediator role.

9. The design of the feedback systems both within the home and between the home and administration should be designed with the participants and the mediator as opposed to being 'laid-on' by the mediator. This process would facilitate involvement and ease of use. The mandated forms used in the study were either changed by the personnel or were used disconcertingly because the nature of the setting made it difficult to transpose information easily. It seems that when activities did not fit neatly into the 'little boxes' that undue concern was generated among the personnel. Optimal utilization of the forms for their intended purposes would be enhanced through collaboration and consultation with staff.

10. The analysis of values and organizational variables can assume a proactive, developmental focus for organizational change and does not necessarily lead to fears and anxieties.

Focusing on the activities as 'developmental' (let us find out where it is we are and where we envision it is that we need to go) appears to be the 'reasonable' way to involve employees in the management of human services.

11. Involving the administration in feedback sessions enhances the commitment of all persons involved. It appears that the mediator's function was warranted as the mediator provided a careful analysis of data and interpretations, from a more clearly objective position, which lead to discussion between the employees and the administrators. The mediator could extrapolate issues from the data collected, expand on possible 'reasons' for the same, and express in objective terms a variety of alternative solutions. Because the mediator did not share ownership of the goals and objectives of the agency it was believed easier to raise uncomfortable issues in a proactive fashion. A person employed by the agency would necessarily have to balance agendas, which this mediator clearly did not have to consider. Additionally, the mediator could effectively seek clarification of issues raised in the data without creating an atmosphere of suspicion. The clarity of the mediator's role was clearly an advantage that an individual employed by the agency would have difficulty with, because of the hidden or perceived hidden agendas.

12. The processes of the mediator are clearly defined within the context of the study. However, the interpersonal processes were not described and it might be safe to assume that the effects of the treatment variables are confounded by the lack of clarity of the interspersal dynamics. An understanding of the dynamics appears critical to the immediate and long-term significance of the data presented in this study. Relatedly, the effects of the study on administration and the effects of the administration on the outcomes of the study are confounding variables.

Subjects and Design

Some of the problems in this study are outlined below. The diversity of backgrounds of the subjects, the small number of subjects, the loss of subjects due to the researcher's inability to identify forms and the varied nature of the settings were typical problems. Additionally, the 'tincture of time' presents problems of its own (Siegel, 1956).

The study was implemented with subjects who worked in rehabilitative settings and were termed rehabilitation personnel. Perhaps a study which focused on subjects with similar educational backgrounds and orientations would yield different results. Additionally, the fact that all subjects were members of an intact group (CARS) confounds the generality of the results.

As many rehabilitative settings with similar intents operate with varying philosophies it is difficult to discern the impact of a specific philosophy upon the interventions of the study. Equally difficult to determine, is the impact of the interventions of this study on the philosophy of the organization.

The formal and informal organizational variables within the system cannot be excluded from confounding the results. A study which carefully delineated the philosophy of the organization prior to the application of treatment variables may more successfully delineate the interactive effect of managerial strategies on staff stress levels. Additionally, a better understanding of how philosophical orientations impact on staff behavior may ensue.

A system for recognizing the individual subjects while maintaining anonymity must be designed. The use of the subject's

social insurance number was proposed as a solution to this concern. While the use of the social insurance number appears to be a better system than that utilized by the researcher of this study there may be serious ethical problems with using an individual's social insurance number during research.

The duration of the study is contaminated with the events of the Association which occurred concomitantly with the treatments in the study. The only discernible, major event was the movement of the Group Home assistants one month prior to the conclusion of the study. Changing the assistants in all homes seriously contaminates the data collected in the last follow-up in all four homes. The validity of the data collected during the last follow-up could be seriously challenged. While other major events could well have occurred the researcher is unaware of the kind or nature of them. In any event, a variety of events unrelated to the study, may have seriously affected the results. For example, subjects who were completing formative evaluations during the study might have experienced varying stress levels which conceivably distorted results. It may be necessary to control some of these variables in the future should a longitudinal study be undertaken.

Recommendations for Revisions to the Study

1. Follow-up was inadequate and would be of necessity to future attempts to measure the effects of managerial strategies of staff stress levels.
2. Action as a direct result of treatment(s) should be highlighted by

the administrator to ensure that all subjects are fully informed of the impact of their behavior on the organization.

3. Interventions should match the philosophy of the organization.

4. The interventions were successful in reducing stress in one setting. The nature of the setting must be carefully delineated to ensure that the set of variables which appear to correlate with the changes in stress levels are clearly identifiable.

5. Follow-up must be planned and conducted within the schedules of the settings.

6. Personnel must be fully informed regarding the feedback conditions and act as full participants in the data analysis and review. It is only after total involvement by all participants that the true impact of the feedback conditions can be assessed.

7. Targets of change must be tracked over time. The necessity to provide clarity to 'what is going on' seems imperative.

8. Follow-up through reassessment using the value priority scale and employee inventory appears warranted at least through the employees response to the post-study questionnaire. The subjects intimated that reassessment would be an adequate fashion by which to measure progress toward needs identified in the initial assessments.

9. The philosophy of the organization and its components need to be clearly delineated and the impact of these orientations should analyzed.

10. Controlling major events such as employee evaluation appears necessary, if possible, when conducting a longitudinal study.

11. Modification of the design to allow for various packages of treatments used would shorten the length of the study while ensuring

that each 'home' received the same interventions. This revision might entail using only one treatment in one setting, the feedback treatments in a second setting, evaluative strategies in a third setting and all treatments in the fourth setting. A strategy such as this with pre and post measures of stress would reduce the study to two months in duration while at the same time allowing for analysis of the various treatment components.

In conclusion, further analysis of the effects of managerial strategies on staff stress levels is indicated. Managerial strategies may, when matched to specific settings, accelerate or decelerate stress among its personnel. The strategies used in this study suggest that the stress levels of staff are in part effected by managerial decisions, albeit inconclusively. Secondly, the study suggests, at least minimally, that the nature of the setting with regard to philosophies may cause personnel to react differently to managerial strategies. The type of management style coupled with the particular managerial strategies may more importantly be the unit of analysis, when investigating the stress levels of personnel. It appears to be necessary, now, to improve the utilization of the instruments used in this study while at the same time delineating the 'context' of the setting in which the procedures will be applied before replication is undertaken.

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APPENDICES

APPENDIX 1
STRESSORS, BEHAVIORAL MANIFESTATIONS
OF STRESS, AND SOLUTIONS

A. STRESSORS

- A. Reality Shock
- B. Work Environment
- C. Monetary Issues, Pay, Benefits
- D. Public Perceptions
- E. Feedback (Employer & Consumer) & Planning
- F. Workload
- G. "Teacher" Expectations
- H. Roles/Job Definition/Job Descriptions
- I. Time Management/Paperwork
- J. General

A. Reality Shock - failure of "training" to prepare employee for job demands - need for biculturalism - bring "theory" into line with "reality".

A.1 inadequate teacher training (Meadows, Truch, Edelwich/Brodsky, Cherniss)

A.2 not prepared for the reality of the job (Hollefreund) (Mercer)

B. Negative/Punishing Work Environment

B.1 negative reinforcement - employees are directed to behave in specific ways to avoid punishers (Truch)

B.2 rigid control over employees (Truch)

B.3 punishment of controversiality (Truch)

B.4 Too many variables - "mish-mash" of too many things preventing the employee from "righting the ills" (Edelwich/Brodsky)

B.5 environments (organizational) which are restrictive and unresponsive to individuals (employees) (Mattaliano)

B.6 setting goals at the top and then coercing people to follow and attain the goal (Mattaliano)

B.7 negative student attitudes (Olson/ Matusky)

B.8 administration blocking goals/thwarting innovations (Hyson)

B.9 little or no control over the environment and their (teachers) circumstances (Morracco/McFadden)

B.10 little or no sense of control (Koff, etal.)

B.11 when consequences are perceived to be

severe (Koff, etal.)

- B.12 deadlines (Anderson)
- B.13 pressure from supervisors (Anderson)
- B.14 compliance with policies (Gmelch/Swent)
- B.15 incapable of influencing own work situation (Meadows)

C. Monetary Issues

- C.1 no payment in terms of effectiveness, only in terms of service and educational experiences (Truch)
- C.2 few benefits (Whitebrook)
- C.3 low pay (Whitebrook)
- C.4 low pay (Edelwich/Brodsky)
- C.5 inadequate program funding (Edelwich/Brodsky)
- C.6 inefficient use of resources (Edelwich/Brodsky)
- C.7 people work to make a living; not work to make money; when work becomes dissatisfying, money becomes an issue (Edelwich/Brodsky)
- C.8 inadequate pay (Olson/Matusky)
- C.9 low salary (Anderson)

D. Negative Public Perceptions

- D.1 high public visibility with popular misunderstanding and suspicion (Edelwich/Brodsky)
- D.2 lack of community respect (Weller)
- D.3 lack of public support for programs (Gmelch/Swent)
- D.4 poor public perception (Huidekoper)

E. Lack of Feedback/Planning (reactive not proactive)

- E.1 no process for monitoring, maintaining, enhancing effective teaching (rather than a punitive model, a developmental model is necessary (Truch)
- E.2 lack of sense of achievement in work (Meadows)
- E.3 inadequate institutional support (Edelwich/Brodsky)
- E.4 failure by administration to support and encourage ideas (Edelwich/Brodsky)
- E.5 not appreciated by supervisors (Edelwich/Brodsky)
- E.6 not appreciated by students (Edelwich/Brodsky)
- E.7 evaluation/supervision (Gmelch/Swent)
- E.8 lack of appreciation (Anderson)
- E.9 little administrative support (Huidekoper)
- E.10 feeling unimportant (Huidekoper)
- E.11 while meeting other's needs, own needs unmet (Edelwich/Brodsky)

F. Workload

- F.1 heavy workload (Bensky, etal.)
- F.2 preparation (Bensky, etal.)
- F.3 after hours work (Bensky, etal.)
- F.4 work overload (Olson/Matusky)
- F.5 large class size (Olson/Matusky)
- F.6 heavy workload (Gmelch/Swent)
- F.7 heavy workload (Anderson)
- F.8 heavy workloads (Scully)

- F.9 heavy workload (Anderson, C.A.)
- F.10 heavy workloads (Mercer)

G. Inappropriate Teacher Expectations

- G.1 noble aspiration coupled with high initial (Edelwich/Brodsky)
- G.2 inability to make a difference in students' lives (Edelwich/Brodsky)
- G.3 expectations of dramatic success (Edelwich/Brodsky)
- G.4 unreal or misguided goals (Edelwich/Brodsky)
- G.5 not doing job set out to do (Edelwich/Brodsky)
- G.6 system not responsive to student needs (Edelwich/Brodsky)
- G.7 opposing philosophies (Goens/Kuciejczuk)
- G.8 inability to foster

H. Roles/Job Descriptions/Responsibilities

- H.1 role conflicts (Cherniss/Egratious)
- H.2 poorly defined objectives (Cherniss/Egratious)
- H.3 sudden changes in personnel roles (Cherniss/Egratious)
- H.4 diffuse jobs (Meadows)
- H.5 role conflict (Kahn)
- H.6 role ambiguity (Kahn)
- H.7 constant changes in environment - requirements, procedures, schedules, and supervisors (Matteson/Ivancevich)

- H.8 lack of stability/input into changes
(Matteson/Ivancevich)
- H.9 lack of criteria (criterion) to measure
accomplishments (Edelwich/Brodsky)
- H.10 irregularity of events (Koff, et al.)
- H.11 role prisoner (Gmelch/Swent)
- H.12 being accountable to too many persons
(Mercer)
- H.13 role conflict/ambiguity/confusion
(Dragan)

I. Time/Paperwork

- I.1 minimum opportunity to interact with
others through the day
(Matteson/Ivancevich)
- I.2 lack of time (Gmelch/Swent)
- I.3 too many meetings (Gmelch/Swent)
- I.4 excessive paperwork (Cherniss/Egratious)
- I.5 too much paperwork (Edelwich/Brodsky)
- I.6 excessive clerical work (Olson/Matusky)
- I.7 little time (Mercer)

K. General

- K.1 merging life with the job (Meadows)
- K.2 poor working conditions (Whitebrook)
- K.3 lack of mobility (Whitebrook)
- K.4 higher order needs unfulfilled - Maslow
(Sweeney)
- K.5 low level ability students (Sweeney)
- K.6 complexity and size of company increases
stress (Matteson and Ivancevich)

- K.7 frequent physical danger
(Matteson/Ivancevich)
- K.8 upward mobility which serves to distance
instructor from students
(Edelwich/Brodsky)
- K.9 no job security (Edelwich/Brodsky)
- K.10 distrust of administration (Weller)
- K.11 stress is predominantly job related
(Niehouse)
- K.12 large numbers of new staff (Scully)
- K.13 communication difficulties (Anderson,
C.A.)

B. BEHAVIORAL MANIFESTATIONS OF STRESS

- A. ABSENTEEISM
- B. FEELINGS OF INADEQUACY, ISOLATION, LONELINESS
- C. PRODUCTIVITY/WORK PERFORMANCE
- D. MOTIVATION
- E. EFFECTS ON STUDENTS
- F. EFFECTS ON OTHER STAFF MEMBERS
- G. TURNOVER
- H. PHYSICAL/PSYCHO SOMATIC ILLNESS
- I. INTERACTION WITH SUPERVISOR
- J. GENERAL

INDICATORS OF BURN-OUT

A. Absenteeism

- A.1 (Truch)
- A.2 (Matteson/Ivancevich)
- A.3 Reluctance to go to work (Niehouse)
- A.4 (Morracco/McFadden)
- A.5 (Christensen)
- A.6 Avoiding work-situation (Lavandero)
- A.7 (Dragan)

B. Feelings of Inadequacy, Isolation, Loneliness

- B.1 Feelings of inadequacy (Truch/Meadows)
- B.2 Depersonalization - self and others (Iwanicki)
- B.3 Feelings of lack of personal accomplishment (Iwanicki)
- B.4 Sense of isolation/loneliness (Kirk/Walter)
- B.5 Feelings of powerlessness (Weller)
- B.6 Tired (Niehouse)
- B.7 Poor self-concept (Morracco/McFadden); (Goens/Kucieyczyk)
- B.8 Fight/flight behavior (Goens/Kucieyczyk)
- B.9 Depression (Christensen)
- B.10 Emptiness (Christensen)
- B.11 Meaninglessness (Christensen)
- B.12 Self-doubt (Lavandero)
- B.13 Over-reliance on self (Lavandero)

- B.14 Paranoia (Lavandero)
- B.15 Guilt (Lavandero)
- B.16 Internal motivational conflicts (Dragan)
- B.17 Loss of self-esteem (Dragan)

C. Productivity/Work Performance

- C.1 Low productivity (Matteson/Ivancevich)
- C.2 Less creativity (Matteson/Ivancevich)
- C.3 Less decision making
(Matteson/Ivancevich)
- C.4 Doing the job, but nothing more (Weller)
- C.5 No risk taking (Weller)
- C.6 No creativity (Weller)
- C.7 Inadequate work performance
(Morracco/McFadden)
- C.8 Sabotaging unpopular administration
policies (Goens/Kucieyczyk)
- C.9 Fool-hardy risk-taking (Lavandero)
- C.10 Avoiding risk-taking (Lavandero)
- C.11 Inability to meet job requirements
(Dragan)
- C.12 Reduced output (Dragan)
- C.13 De-evaluation of job (Weller)

D. Motivation

- D.1 Loss of eagerness (Whitebrook)
- D.2 Lack of enthusiasm (Weller)
- D.3 Avoiding students (Weller)
- D.4 Confusion (Morracco/McFadden)

- D.5 Unchallenging instruction
(Goens/Kucieyczyk)
- D.6 Boring instruction (Boredom) (Goens/
Kucieyczyk)
- D.7 Procrastination (Goens/Kucieyczyk)
- D.8 Day dreaming (Goens/Kucieyczyk)
- D.9 Loss of Charisma (Lavandero)
- D.10 No challenge (Weller)

E. Effects on Students

- E.1 Negative attitudes toward students
(Iwanicki)
- E.2 1/3 of all sick days are stress related
(Morracco/McFadden)
- E.3 Stress affects the teacher and in turn
affects teacher's effectiveness in the
classroom (Morracco/McFadden)
- E.4 Teacher involvement with students is
reduced (Goens/Kucieyczyk)
- E.5 Assigning work which keeps
student/teacher involvement to a minimum
(Goens/Kucieyczyk)
- E.6 Censure students excessively
(Goens/Kucieyczyk)
- E.7 Tight schedule to keep students busy
(Goens/Kucieyczyk)
- E.8 Pressing for quiet/seated behavior
(Goens/Kucieyczyk)
- E.9 Bursts of anger (Christensen)
- E.10 Spend less time with students (Lavandero)
- E.11 Diminishing physical contact (Lavandero)
- E.12 Rigidity (Lavandero)

F. Effects on Other Staff

- F.1 Confrontations with fellow staff members
(Goens/Kucieyczyk)
- F.2 Gossiping about fellow workers
(Goens/Kucieyczyk)
- F.3 Bursts of anger (Christensen)
- F.4 Disruptions (Lavandero)
- F.5 Irritability (Lavandero)

G. Turnover

- G.1 "Quitting" (Whitebrook)
- G.2 (Matteson/Ivancevich)
- G.3 "Exodus" from the ranks (Weller)
- G.4 Increased staff turn-over (Dragan)

H. Physical/Psychosomatic Illness

- H.1 Fatigue (Whitebrook)
- H.2 Irritability (Whitebrook)
- H.3 Physical exhaustion (Kirk/Walter)
- H.4 Emotional exhaustion (Kirk/Walter)
- H.5 Attitudinal exhaustion (Kirk/Walter)
- H.6 Illness (Matteson/Ivancevich)
- H.7 Alcoholism (Matteson/Ivancevich)
- H.8 Cynicism (Niehouse)
- H.9 Chronic fatigue, frustration,
irritability (Niehouse)
- H.10 Depression (Morracco)
- H.11 Anxiety (McFadden)

- H.12 Ulcers, hypertension, headaches, insomnia
 (Morracco, McFadden)
- H.13 Alcohol and drug abuse (Goens/Kucieyczyk)
- H.14 Loss of appetite (Christensen)
- H.15 Fatigue (Christensen)
- H.16 Physical illness (Lavandero)
- H.17 Chemical dependency (Lavandero)
- H.18 Acute anxiety, heightened confusion,
 hysteria symptoms (Dragan)
- H.19 Psychosomatic disorders (Dragan)

I. Interactions With Supervisors

- I.1 "Frustration" over proposals that meet
 even "small" opposition (Niehouse)
- I.2 Erosion of confidence in supervisors
 (Dragan)
- I.3 Interpersonnal roles suffer (Loss of
 trust in boss, loss of esteem for boss,
 increasing resistance) (Dragan)

J. General

- J.1 25-34 crucial years (Sweeney)
- J.2 Pre-mature retirement (Matteson/
 Ivancevich)
- J.3 Workaholism (Lavandero)
- J.4 Loss of personal life (Lavandero)
- J.5 Pre-occupation with work events (Dragan)

C. SOLUTIONS

- A. DECISION MAKING/ADMINISTRATION/RULES AND REGULATIONS
- B. JOB DESCRIPTION
- C. FEEDBACK/REINFORCEMENT/REWARDS/EVALUATION/REVIEW
- D. WORK ENVIRONMENT
- E. PEER SUPPORT SYSTEM
- F. PUBLIC RELATIONS
- G. WORKLOAD/SCHEDULES
- H. TRAINING/EDUCATION/BENEFITS

SOLUTIONS

A.1 Decision Making/Administration/Rules and Regulations

- A.1 Better communication (Maslach/Pines)
- A.2 Increase communication (Whitebrook)
- A.3 Increase staff involvement in decision making - policies and hiring (Whitebrook)
- A.4 More input/involvement of staff (Whitebrook)
- A.5 Establish clean lines of authority throughout organization (Iwanicki)
- A.6 Involve teacher in selection/evaluation process (Iwanicki)
- A.7 Train teachers/administrators in conflict-resolution skills (Iwanicki)
- A.8 Preventive maintenance - always more cost effective than repair work (Matteson/Iwanicki)
- A.9 Meaningful rules and regulations which are clearly stated and adhered to and developed with adequate representation to foster morale (Weller)
- A.10 Participatory management (Weller)
- A.11 Joint decision making and planning efforts (Weller)
- A.12 Teacher input is crucial to teacher morale and their sense of belonging (Weller)
- A.13 Informal teacher/supervisor brainstorming activities (Weller)
- A.14 Solicitation of suggestions through questionnaires and personal conferences (Weller)
- A.15 Improve communication (Gmelch/Swent)
- A.16 Administration needs to build trust (Gmelch/Swent)

- A.17 Development of rules which facilitate the attainment of goals of education and not the perpetuation of bureaucracies (Gmelch/Swent)
- A.18 Supervisory leadership essential (Goens/Kucieyczyk)
- A.19 Supervision which is caring, understanding, supporting, attentive, communicative, and flexible (able to work with people) (Goens/Kucieyczyk)
- A.20 Isolate conflicts to specific issues and do not generalize (Goens/Kucieyczyk)

B. Job Descriptions

- B.1 Develop clear teacher job descriptions (Iwanicki)
- B.2 Emphasis on personal/professional growth is essential (Goens/Kucieyczyk)
- B.3 Let teachers know clearly and unambiguously what is expected of them (Goens/Kucieyczyk)
- B.4 Designing, organizing, arranging work environments so as to provide channels through which the energies of personnel can be directed toward accomplishing the goals of the organization (Scully)
- B.5 Clearly articulated functions linked to effective functioning (Dragan)
- B.6 Develop clear job descriptions based upon needs assessments of consumers (Dragan)

C. Feedback/Reinforcement/Rewards/Evaluation/Review

- C.1 Provide incentives (Truch)
- C.2 Maximize teacher achievements (Truch)
- C.3 System where teachers can hear from colleagues, students, and administration that someone knows and cares about the time, effort and creativity that goes into lessons, planning and projects

(Truch)

- C.4 Incentives, rewards for most dedicated and talented teachers, as the hardest working teachers are most likely to be the primary candidates to suffer from burnout (Freudenberger)
- C.5 Education, experience and competence equals dollars (Whitebrook)
- C.6 Increase salaries and benefits (Whitebrook)
- C.7 Involve teacher in the development of realistic system wide (as well as individual) set of goals and objectives (Iwanicki)
- C.8 Provide ongoing and frequent review of teacher's performance (Weller)
- C.9 Develop evaluation practices that strengthen need areas (Weller)
- C.10 Self-actualization -ensuring that teachers become everything they can become (Weller)
- C.11 Giving (by teachers) must be balanced with receiving and refuelling (by administration) (Scully)
- C.12 Find ways to tap into whatever pools of potential energy are available, which personnel bring to the work situation (Scully)

D. Work Environment

- D.1 Changes in job assignment (Truch)
- D.2 Negotiate changes in pace, pattern, plans, situation, approaches (Truch)
- D.3 Conscious school wide efforts by administrators to help teachers and staff members to build positive attitudes can yield rich rewards in terms of increased morale, and can generate renewed enthusiasm for the job (Truch)
- D.4 Variety of tasks (Whitebrook)

- D.5 Improve quality of worklife
(Matteson/Ivancevich)
- D.6 Rotating committee assignments (Weller)
- D.7 Decrease paper work (Gmelch/Swent)
- D.8 Time out from the class during the day
(Truch)

E. Peer Support System

- E.1 Establish support system - developed by
staff with support of the administration
- E.2 Increase peer support (Whitebrook)
- E.3 Organize effective teacher support groups
(Iwanicki)
- E.4 Develop peer support system (Weller)
- E.5 Develop teacher support system
(Christensen)
- E.6 Ensure participation in activities
outside working hours (Gmelch/Swent)

F. Public Relations

- F.1 Increase public awareness of the job to
reflect level of skill, training and
commitment of employees (Whitebrook)

G. Workload/Schedules

- G.1 Lower teacher/student ratios
(Maslach/Pines)
- G.2 Dependable breaks - Mandated if necessary
(Maslach/Pines)
- G.3 Fewer interruptions (Gmelch/Swent)
- G.4 Reduced workload (Gmelch/Swent)
- G.5 Time management strategies (Gmelch/Swent)
- G.6 Frequent breaks (Whitebrook)

H. Training/Education/Benefits

- H.1 Mental health days

STRESS: THE WORK ENVIRONMENT

STRESSORS

Reality Shock
Negative/Punishing
Administration
Low Pay/Benefits
Negative Public Perceptions
Lack of Administrative
Rewards
Lack of Student Feedback/
Rewards
Lack of Proactive Planning
Heavy Workload
Inappropriate Teacher
Expectations
Unclear Job Descriptions/
Responsibilities
Lack of Time
Too Much Paperwork
Lack of Security

MANIFESTATIONS OF STRESS

Absenteeism
Turnover
Inadequacy
Isolation
Loneliness
Low Productivity
Poor Performance
Low motivation
Negative Approach to Students
Dislike of Students
Rigidity
Anger
Frustration
Gossiping
Irritability
Ulcers, etc.
Alcoholism/Drug Dependency
/Chemical Dependency
Psychosomatic Disorders
Inability to Collaborate
Deterioration of Interpersonal
Roles
Workaholism
Turnover (Quitting)

SOLUTIONS

Increase/Improve Communication
Involve Employees in Decision-making
Proactive Planning
Joint Decision-making
Clear Job Descriptions
Opportunity for personal/professional
Growth
Clearly Articulated Roles
Provide Incentives
Maximize Teacher Achievements
Reward Competence
Increase Salaries/Benefits
System/Individual Goals/Objectives
Assessment of Staff which Strengthens
Need Areas
Climate/Work Environment Studies
Job Enrichment
Job Enlargement
Foster Self-Actualization
Peer Support System
Increase Public Awareness of the
Complexity of the "Job"
Reduced Workload
Frequent Breaks
Fewer Students
Increased Education/Training
Opportunities