

Phase movement and small group environment : a theory of mood diffusion in T-groups

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PHASE MOVEMENT AND SMALL GROUP ENVIRONMENT:
A THEORY OF MOOD DIFFUSION IN T-GROUPS

by

Brian Alexander Gerrard

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of the requirements for the degree of
Doctor of Philosophy in
The University of New South Wales.

1973

ABSTRACT

The thesis investigates the transaction of mood between small group and environment by studying mood diffusion processes between two T-groups and their environments. The relevant small group and emotion literature is reviewed and criticism made of the fact that despite the presence of small group open system models relating to emotion variables no coherent theory of the relationship between small group and environment exists. A model is then outlined describing the mood diffusion process as it occurs in social networks and a rudimentary theory of mood diffusion advanced. The diffusion of three basic moods: Euphoria, Anger, and Depression, was measured by polar word questionnaires administered at the end of each T-group and during each week for environment, and an open-ended *Remembered Mood Diffusion Questionnaire* filled out at the end of the T-group course. Phase movement processes were measured by the content analysis of self mood references in reports written by members at the end of each T-group. The content analysis categories used were a modification of Dunphy's Interpersonal Action Analysis category scheme. Different kinds of diffusers were measured on the characteristics that were felt to affect diffusion: personality, role behaviour, centrality, involvement, and type of social network.

Using these measures a variety of hypotheses about the extent of, and the factors influencing, mood diffusion, were investigated. It was found that over the fourteen week T-group

course, members reported an average of 2.05 incidents of mood diffusion. These examples illustrate how a mood, originating in one group situation, can be carried to another group situation and there have impact. The overall amount of mood diffusion was found to be small but significant. The major factors affecting the mood diffusion impact of the T-group were leader experience, style and personality and the personality composition of the groups. Outward mood diffusion occurred more significantly than Inward mood diffusion - indicating the greater impact of the T-group on its environment than vice versa. Depression was found to be significantly associated with high group impact and a theory of depression as an integral part of the learning-growth process was advanced. A phase movement model relating to mood diffusion in T-groups was proposed. The model predicts the sequences: confrontation with the leader; defensive depression; premature euphoria; resistance to openness; affiliation; intimacy-depression; and separation. The phase sequences are essentially similar to those described by previous researchers. Outward mood diffusion was found to occur maximally during the intimacy-depression (or internalization) phase. Moods of Euphoria and Depression diffused most, and moods of Anger diffused least. The low diffusion of Anger was attributed to its object-specific nature. T-group members were divided into nine categories of diffuser depending on the mood diffused and its direction. These categories were found to be significantly associated with meaningful clusters of different individual variables (mentioned above).

The study concludes generally that mood diffusion is a

significant social-psychological process which links together the emotional climates of disparate groups.

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CHAPTER 1
INTRODUCTION

ORIGIN OF THE THESIS TOPIC

While participating in a T-group at the University of Manitoba, Canada, in 1967, the researcher noticed that the group underwent distinct phases during which certain moods (Euphoria, Anger, and Depression) and interpersonal behaviours appeared to dominate meetings over a period of weeks. Co-terminous with this particular small group phase movement, the researcher noticed what seemed to be a similar phase sequence among the student community in the residence in which he was living at the time: University College Men's and Women's Residence (n=250). During the Euphoria phase there would be a great deal of partying, sing-a-long get-togethers, whistling and humming in public areas of the residence; during the Anger phase there would occur a great upsurge in 'pranks' and 'practical jokes' with aggressive overtones. (On one occasion students on one floor took all the furniture out of the recreation room and piled it up to the ceiling opposite the door of a sleeping student - effectively barricading him into his room for a portion of the following morning). During this period, raids by one residence on another resulting in occasional property damage were frequent; during the Depression phase there was a conspicuous absence of activity - social gatherings decreased, more and more people seemed to stay in their rooms, conversations were characterized by "sad" faces and a general lack of zest so characteristic of the Euphoria phase,

and there appeared to be an increase in the number of drunk students returning to residence at midnight (when the pubs closed).

This suggested that both the residence community and the T-group (only one of whom was a University College member) were experiencing essentially the same general "phase movement", one which logically seemed connected with the University campus of which they were a part. Two questions evolved as worth investigation:

- 1) Was it possible for a social group as large and as disparate as a University campus to undergo a phase movement - even of the most general kind? and
- 2) Could this phase movement have impact on the developmental processes (i.e. phase movement) of a small group such as a T-group? That is, could an 'external' phase movement process in a small group's environment so overlay the small group process as to heighten or retard the small group's 'internal' developmental processes?

A pilot study designed to explore the first question was undertaken during the period October, 1967-April, 1968 as a credit for a course in small group Sociology. Objective data gathered on various indicators of group moods for the University (e.g. counselling statistics, student health statistics, figures for attendance at dances and other university social functions) were shown to bear some correlation to several measures used to tap mood shifts within the University College residence (e.g. a polar-word questionnaire administered at fortnightly intervals to tap

self-reported mood change, acoustical analysis of recordings of sound levels in the residence dining hall, and content analysis of a diary kept by the researcher which recorded all aspects of the "emotional" life of the residence that he was able to notice.) While the study lacked the methodological rigor to make a conclusive statement possible, it indicated that further research into the problem was warranted.

The research done in this pilot study sensitized the researcher to the possibility that the small group and the organization/community could be linked to their multiple group environments by mood processes (in addition to the traditional sociological linking pin: the role and multiple-role occupancy). Just what the relationship between small group and environment, with respect to mood, was, remained a mystery.

In January, 1970, the researcher began a Master's thesis in Sociology (at the University of New South Wales) titled: "Phase Movements in Large Populations". Derived from the previous pilot study the thesis as originally conceptualized was designed to test for the presence of a synchronized mood phase movement involving most of the people in an urban population: Sydney. The rationale for this unusual hypothesis was developed in a 200 page paper which reviewed the relevant previous research on phase movement, expectation, and mood diffusion networks. A model of the city as an enormous extended network system within which moods diffused was developed. A large number of measures designed to tap the city's "mood" were selected, and, after nine months selection and collection all of these measures were dropped. It was decided that the methodological problems connected with

measuring the "city" as a whole (especially problems in validation) were too severe to permit adequate control and statistical handling of the data.

On re-examining the theoretical basis for the urban thesis, it became clear to the researcher that the central issue was not that of an urban phase movement but one of mood spreading from one group situation to another; how often in a small group are moods brought in by group members which affect the functioning of the group? how often are moods taken out by group members into external situations or groups which are then influenced by that mood? In short, the researcher had turned to an examination of what was essentially the "second question" formulated above. The greater control of variables and the reduction in validation problems associated with small group analysis made it appear more likely that the problem could be "got round".

THE SIGNIFICANCE OF THIS STUDY

The literature abounds in the examples of this mood diffusion - the "carrying" of a mood from group to group - that show how the internal emotional processes of one group may be linked up with the internal emotional processes of another, sometimes completely unrelated, group. And yet there exists no linking theory to tie together these disparate examples. This thesis will attempt to formulate such a theory.

Most small group researchers are in agreement that the small group is an open system of some sort: there is an interaction or exchange between the small group and its environment. But *what* is exchanged, in what *direction*, to what *degree*, and with what

effect has not always been made clear. The current state of theorizing about the small group open system model seems to stress only that the small group and its environment are like two rooms connected by a single door through which there is some sort of inflow and outflow of "something". What we need to know now is how wide open the "door" is, exactly what sorts of things pass in and out; whether the environment "room" is better thought of as a variety of rooms with different passages connecting with the small group "room"; in which direction material tends to flow (inwards or outwards) and whether inflow or outflow is tied to certain things; the specific variables that affect inflow and outflow (e.g. group characteristics). What is needed is a more specific open system model (or models) of the small group. By focusing on mood which has a lower viscosity (i.e. diffuses more easily across group boundaries) than many other behaviours, this thesis will attempt to formulate hypotheses relevant to a more specific open system model.

LIMITATIONS OF THE STUDY

The chief limitation of the study is that it involves a small sample of 2 T-groups (Total N=25) over a relatively short period (14 weeks). For certain measures this greatly hinders statistical treatment. It should be made clear, however, that this is a field study, not an experimental one, and having as its main objective the generation of relevant hypotheses, rather than the testing of hypotheses.¹ The researcher feels that this approach

¹ Similar small sample studies using 2 or less groups have been reported by Dunphy (1968), Mills (1964), Mann (1961), Hartman (1969), Slater (1966).

is warranted by the absence of theory and empirical work in this area.

ORGANISATION OF THE THESIS

Chapter II reviews some classic and current small group models and critically analyzes their value for investigation of exchange between small group and environment.

Chapter III reviews previous research on boundary exchange and defines some basic terms used in the thesis. Special attention is paid to studies emphasizing the impact of the T-group on its environment and the environmental impact on the T-group. Studies on phase movement in T-groups are reviewed to identify the ways the group makes a selective emotional impact on members over time.

Chapter IV outlines previous research in psychology, social-psychology and sociology, on emotion and mood. The relationship between mood and other behavioural levels is discussed and some evidence for mood diffusion is presented. A tripartite classification of mood is then synthesized from an examination of several typologies of mood/emotion.

Chapter V presents a model of the mood diffusion process linking small group with environment. Basic terms in the mood diffusion model are defined and several hypotheses and areas for generating hypotheses are presented.

Chapter VI outlines the nature of the sample, the measuring instruments used, and the scoring of reports, questionnaires, and other tests.

Chapter VII presents and analyzes the results.

Chapter VIII summarizes and indicates some important

implications of the results. Finally, some suggestions are made to guide future research on mood diffusion.

CHAPTER II

THE DEVELOPMENT OF THE OPEN SYSTEM SMALL GROUP MODEL

The significance of open system models of small group behaviour is that they attempt to specify the nature of the relationship between the small group and its environment. Closed system models ignore the interaction with environment much as early studies on personality in psychology ignored the interaction between group and person that affects "individual" behaviour.¹

A model, defined loosely, is an image or analogy of how something operates. Atoms, for instance, cannot be seen, but physicists, through the progressive development of models, ranging from descriptions of the atom as a hard round ball to the notion of different particles arranged in solar system fashion about a central nucleus with electron movement forming an "electron cloud", have been able to predict with increasing accuracy how atoms will behave. By taking a relatively unknown phenomenon and saying it is "like" something else that we are already familiar with, we increase our conceptual grasp on the phenomenon.

A more stringent definition of a model is offered by Dunphy who defines a model as "a formal identity between a conceptual organization and a real phenomenon, made in order to organize the

¹•Berne has written: "Theories of internal individual psychodynamics have so far not been able to solve satisfactorily the problems of human relationships. These are transactional situations which call for a theory of social dynamics that cannot be derived solely from consideration of individual motivations". (Berne, 1964, p.59). For a discussion of Sullivan's notion of "The Illusion of Personal Individuality" that forms part of his interpersonal theory of personality, see Hall and Lindzey (1957).

data on the phenomenon in a meaningful way and to suggest important areas for further study" (Dunphy, 1972, p.82).

The significance of models in the study of small groups has been underlined by Mills who describes the sociology of small groups as a self-conscious attempt to create workable models of groups:

. . . workable in the sense that they help organize disparate data into a more coherent whole, that they are stated clearly enough to be understood by others, that they seem to be consonant with our intersubjective experience of reality, and that their implications can be examined and tested and modified in terms of alternative ones, Like the group member, the sociologist builds his model out of experience and knowledge; and, like the member, his model affects his orientation to groups: it provides a frame for defining what is relevant or irrelevant, what is observable and what is not, what is comprehensible and what is not, what is testable and what is not, and so on.

(Mills, 1967, pp.10-11).

CLOSED SYSTEM MODELS

The closed nature of most early models of small groups is probably due to an early concern with defining exactly what a small group was.² By focusing solely on internal processes it is easier to draw a boundary separating group from environment. Only after specifying what a group is and does, does it make sense to show the interconnections between group and environment. Thus, the early closed system models were functional in drawing the boundary separating what a group was from what it was not.

²Disagreements over an adequate definition still continue.
See Golembiewski (1962).

A more critical appraisal of closed system models has been given by Dunphy:

One of the problems in many theoretical schemes and models that have been proposed for understanding small group behaviour is that they treat the small group as a closed system. Historically this seems to have taken place because most small group theory has derived from the study of experimental groups where the experimenter has adopted the polite "scientific fiction" that he has controlled all the relevant environmental variables; or if the effect of environmental variables has been studied, one or two are systematically varied and the effects of this variation observed on one or two variables internal to the group. In studying primary groups in field settings, it is seldom possible to achieve such controls, and complex interrelationships between the small group and its environment must be looked at realistically.

(Dunphy, 1972, p.90)

A brief review of some of the closed system small group models will now be made giving special emphasis to where reference is made to articulation between small group and environment.³

- 1) The Quasi-Mechanical Model describes the small group as an interaction machine: group interaction follows universal and unchanging laws and is "like a game that is played over and over again so many times that one knows both the game and the players well enough to predict what will happen next" (Mills, 1967, p.12). Although this model acknowledges that environment may have some effect on the group, the effect is negligible compared to the group's internal process.

³. This review is based on Mills' succinct analysis of small group models in Mills (1967).

- 2) The Organismic Model compares the small group to a biological organism: like a plant it forms, grows, and reaches maturity. The relationship of the group to its environment is one of self-preservation: the group protects itself from external danger and exploits the environment to fulfil its own needs.
- 3) The Conflict Model presents the group as a Hobbesian arena of endless conflict and struggle between members. Although the group may mirror conflict in the larger society, conflict in the small group originates from within the group itself. This is the most closed of the group models, making few, if any, specifications about group-environment processes.
- 4) The Equilibrium Model is homeostatic, it describes the group as a system tending toward equilibrium in the face of internal or external disturbance. Bales' equilibrium model states that "a push toward achieving the group goal disrupts solidarity and consequently tends to be followed by efforts to pull the group together again - and that, since this reconsolidation deflects energy from goal achievement, it tends to be followed by a renewed push toward the goal. And so it goes, until a point of equilibrium is reached between the pushing and pulling tendencies . . ." (Mills, 1967, p.15). This model, although mainly closed in emphasis, does highlight the fact that the environment can affect the group's internal process.

- 5) The Structural-Functional Model defines the group as a goal-seeking, boundary-maintaining system whose survival is dependent on the fulfilment of four central demands: adaptation, goal attainment, integration, and pattern maintenance.⁴ This model is more open in its emphasis on the environment because it "acknowledges the role of learning and, consequently, the role of culture and its accumulation" (Mills, 1967, p.18). There is input from the environment that can form a vital part of the group. This is the most open of the closed system models and its placement in the closed category is mainly one of convenience. Since all of these models have a certain amount of openness, they should be thought of as lying on a continuum. We turn now to several models that place greater emphasis on the environment.

OPEN SYSTEM MODELS

- 6) The Cybernetic-Growth Model treats the small group as an information-processing system potentially capable of increasing its capabilities: through monitoring itself, altering its direction, and learning how to determine its history, the group grows (Mills, 1967, p.19). The group can attain consciousness, a system's awareness of itself: "From the viewpoint of the cybernetic-growth model of Deutsch, small groups are a source of experience, learning,

⁴.For a more detailed statement see Parsons, Bales, and Shils (1953).

and capabilities, rather than just recipients". (Mills, 1967, p.21). In outlining indicators of group growth for this model, Mills refers to environmental connections in three of four demand areas:

1. Adaptation

- a) ". . . an increase in openness - that is, an increase in the range, diversity, and effectiveness of [a group's] channels of intake of information from the outside world . . ."
- b) Capacity to extend the scope of the group's contacts and obligations beyond current boundaries.
- c) Capacity to alter the group's customs, rules, techniques, and so on, to accommodate new information and new contacts.

2. Goal-attainment

- a) Capacity to hold goal-seeking effort in abeyance while alternative goals are being considered.
- b) Capacity to shift to, or add, new goals.

3. Integration

- a) Capacity to differentiate into sub-parts while maintaining collective unity.
- b) Capacity to export resources without becoming impoverished and to send emissaries without losing their loyalty.

4. Pattern-maintenance and extension

- a) Capacity to receive new members and to transmit to them the group's culture and capabilities.
- b) Capacity to formulate in permanent form the group's experience and learning and to convey them to other groups and to posterity.

(Mills, 1967, p.21)

The emphasis placed on exchange with environment in the demand areas of adaptation, integration, and pattern-

maintenance and extension make the model an open system one.⁵

- 7) Lewin's Field Theory Model - This model is derived from Lewin's term "field theory" (borrowed from physics⁶) used to describe his holistic approach to the study of groups and individuals.

The momentary field is comprised of any element, and all elements in combination, which exert an active influence (a push, a pull, a block, a detour, and so on) upon what a person does or does not do. The field is a momentary, cross-sectional view of the multiple causes of a bit of human behaviour.

(Mills, 1967, p.93)

To describe how behaviour is a function of elements in the field, Lewin used the formula:

$$B = f (P.E)$$

where: B = Behaviour

f = Function of

P = Personality

E = Environment

(P.E) = The Field

While Lewin's actual model of the small group itself has not proved productive to most researchers, the importance of field theory in emphasizing the significance of the environment for the group cannot be understated (Dunphy, 1972).

⁵ Mills also presents his own adaptation of this growth model in Mills (1967), Chapter 7.

⁶ For example, the notion of a magnetic field whose lines of force are arranged systematically around the magnet.

- 8) Mills' Field Theory Model - Mills' model of the small group has two important components. The first is its division of interpersonal processes into five distinct levels: behaviour, emotions, norms, group goals, and group values. Each level is organized into sub-systems with distinct characteristics and principles of organization: the behavioural levels with their sub-systems are shown below:

<u>Behavioural level</u>	<u>Subsystem</u>
1. Behaviour	Interaction System
2. Emotions	Group Emotion
3. Norms	Normative System
4. Goals	Technical System
5. Values	Executive System.

According to Mills the five systems are empirically interrelated "for certainly our feelings are affected by what we and others do, our actions are influenced by our ideas, and our rules often change with a change in our goals". (Mills, 1967, p.59). The rationale for using such a system is: a) the intrinsic differences between the behavioural levels, and b) the fact that at any one time all or part of the group may be participating at a specific level (Mills, 1967, p.59).

This classification is useful in pointing out areas of neglect (e.g. level 2) as opposed to those areas already given a great deal of attention by researchers (e.g. levels 1 and 4).

These five levels of interpersonal processes are

integrated with the model's second component: a classification of elements in the momentary situation. Mills has expanded on Lewin's formula for the momentary field with his own formula delineating the elements in the momentary situation:

$$E_g = f (P.G.C)$$

where: E = a given group event

f = is a function of

P = [elements in] Personality

G = Group

C = The Group's Context.

(Mills, 1967, p.94)

With this tripartite division of the field, Mills presents a table (reproduced as Table 1) showing the relevant behavioural levels for each division in the group's field.

The significance of this model lies in its emphasis on the ways different behavioural levels interconnect with the environment. The model is considerably more explicit than Lewin's model and is the most open model we have discussed thus far. Mills emphasizes in particular that the multiplicity of environmental factors can have more than superficial impact on the group:". . . the inverse of possible causal elements spreads far beyond the physical and organizational boundaries of the group itself, at the same time, penetrates into the deeper recesses of personalities" (Mills, 1967, p.94). As presented the model is fairly static, but elsewhere Mills has presented a

TABLE 1
CLASSIFICATION OF ELEMENTS IN THE MOMENTARY SITUATION^a

PERSONALITY	GROUP	CONTEXT
<i>Behaviour Traits</i> How person tends to act and interact under given circumstances	<i>Interaction System</i> The pattern of interpersonal behaviour among members	<i>Physical and Social Contacts</i> Environmental resources and limits; the pattern of contacts with outside persons, groups, and societies.
<i>Personal Needs and Feelings</i> The structure of physical and psychic needs and affective processes, and the conscious or unconscious processes associated with them.	<i>Group Emotion</i> The distribution of emotional states, and the structure of affective relations among members (conscious and unconscious).	<i>Emotional Relations</i> The distribution of libidinal attractions, enmities, and alienations between the group (and its members) and outsiders, including the member's nation and other societies.
<i>Internalized Norms</i> The set of conscious and unconscious ideas about how one should feel, and what one should do.	<i>Normative System</i> The set of shared ideas (conscious and unconscious) about how persons, as group members, should feel, and what they should do under given circumstances; ideas about what the interaction system and group emotion should be.	<i>Contractual (or "treaty") Relations</i> The set of reciprocal obligations and privileges between the group as a unit, and outside bodies.
<i>Beliefs and Values</i> Explicit and implicit definitions of the world, and of preferences among alternative objects, ideas, and states of affairs.	<i>Group Culture (in addition to norms)</i> The set of shared (explicit or implicit) definitions of reality; preferences among objects, ideas, and states of affairs; and standard procedures for pursuing the desirable--all as collectively defined.	<i>Cultural Interchange</i> Definitions and evaluations of one another by group members and outsiders; the content of information, ideas, ways of learning etc., exchanged between group and outsiders.

<i>The Ego</i>	<i>The Executive</i>	<i>The Inter-Group Executive System</i>
The persons's capabilities for assessing realities and for rearranging his habits, feelings, norms, beliefs, and goals according to new circumstances and to new purposes.	The group's capabilities for developing consciousness, for rearranging itself, and for altering its goals according to new circumstances and to new purposes.	The capabilities of the group, together with outsiders, to assess, negotiate, and renegotiate their contacts, emotional relations, obligations, exchange, and, in general, their degree of interdependence.

^aSource: Mills, 1967, p.95.

dynamic model of growth.⁷

The significance of this model for this study is that it emphasizes the interaction between group and environment at an emotional level.

- 9) Dunphy's Dynamic Open System Model is derived mainly from general systems theory in its emphasis on openness.

More specifically, Dunphy's model is composed of four general classes of variables; adaptive variables - system parts specializing in adaptation to the environment (e.g. maintenance of group boundaries and input/output interchange with the environment); structure variables - system parts relatively fixed or constant over time; content variables - "the class of variables which comprise the group culture, the systems of meanings evolved in the

⁷See Mills, 1967, Chapter 7.

group setting" (Dunphy, 1972, p.96); and process variables - the dynamic regulated interchanges between different parts of the structure.

Each of these classes of variables is subdivided by Dunphy into five different areas:

- a) The Global Pattern - gross undifferentiated characteristics of the group.
- b) Interaction - interchange within the group and between the group and its environment.
- c) Differentiation - specialization of group functions.
- d) Resource Allocation - the distribution of resources within the group.
- e) Integration - the maintenance of group equilibrium. (Dunphy, 1972, p.96)

In this model the group is an open system.⁸ In discussing open systems Dunphy employs Allport's succinct definition:

If we comb definitions of open systems we can piece together four criteria: there is intake and output of both matter and energy; there is achievement and maintenance of steady (homeostatic) states, so that the intrusion of outer energy will not seriously disrupt internal form and order; there is generally an increase of order over time, owing to an increase in complexity and differentiation of parts; finally, at least at the human level, there is more than mere intake and output of matter and energy; there is extensive transactional commerce with the environment. (Allport, 1960, p.303)

This definition is interesting because it highlights connections with previous small group models that are incorporated in the open system model. Criteria 1 represents a basic tenet of field theory; criteria 2 the essence of the equilibrium model; criteria 3 the central

⁸. See Dunphy (1972), pp.88-95.

thesis of the cybernetic-growth model; and criteria 4 - something new - the notion of interaction and transaction (i.e. the possibility of patterned relationship) with the environment. A fifth criterion given by Dunphy is that the group is a system of interrelated parts: and here we see connections with the structural-functional model.

In clarifying the issue of the open system's boundary, Dunphy states: "an open system is one with a boundary sufficient to maintain a certain degree of inner integrity and distinctiveness, yet sufficiently flexible and permeable to be able to use the environment in maintaining and perpetuating its own existence. Consequently, interaction within the group and between the group and its environment will differ both quantitatively and qualitatively." (Dunphy, 1972, pp.91-92). Furthermore, Dunphy indicates that inputs and outputs across the group's boundary are not necessarily equivalent (Dunphy, 1972, p.92). This is an important point which we will return to in Chapter V.

An overview of the scope of the model is given by Dunphy in the table reproduced below:

TABLE 2 DUNPHY'S DYNAMIC OPEN SYSTEM MODEL^a

GLOBAL PATTERN

1. *Global pattern--adaptive: "adaptive stability"*

The major settings in which the group operates and those persons, groups, or collectivities which exercise a significant influence on the group or are influenced by

it. The stability of the relationships which are involved.

2. *Global pattern--structure: "group characteristics"*
The physical, temporal, and membership (personnel) boundaries of the group and the basic activities in which the group members are involved as a group.
3. *Global pattern--content: "group composition"*
Member characteristics which are properties of individual members but which influence the character of the group, e.g. age, sex, social class, roles held in the secondary system. Differential participation in different settings.
4. *Global pattern--process: "member turnover and attendance"*
Rates of recruitment, graduation, desertion, and expulsion from the group. Fluctuation in attendance in group settings.

INTERACTION

5. *Interaction--adaptive: "the connection network"*
The transactional channels between the group and significant social objects in the environment.
6. *Interaction--structure: "the communication network"*
The interactional channels within the group, i.e., who communicates with whom and how often.
7. *Interaction--content: "the communication content"*
The major kinds of information circulating within the group.
8. *Interaction--process: "the communication processes"*
The sequences of information transmission in the group.

DIFFERENTIATION

9. *Differentiation--adaptive: "mediation roles"*
Roles specialized in mediating with the group's environment.
10. *Differentiation--structure: "internal roles"*
The differentiation of functions within the system and their allocation to specific positions in the group.
11. *Differentiation--content: "norms"*
The formulation of requirements for adequate role fulfilment by individuals.

12. *Differentiation--process: "role differentiation and role specialization"*

The processes by which roles become more or less differentiated and/or specialized.

RESOURCE ALLOCATION

13. *Resource allocation--adaptive: "adaptive systems"*

The input and output of resources to and from the system.

14. *Resource allocation--structure: "status systems"*

The distribution of rank or status of various kinds among group members.

15. *Resource allocation--content: "values, symbols, and goals"*

The key systems of meaning and orientation in the system which represent the important cultural resources of the group.

16. *Resource allocation--process: "resource distribution"*

The processing, modifying, and distributing of group resources.

INTEGRATION

17. *Integration--adaptive: "enclosure"*

The degree of definition of group boundaries and the sharing of external reference groups and persons.

18. *Integration--structure: "cohesiveness and consensus"*

The attractiveness of the group to its members and the consensus which exists on this.

19. *Integration--content: "rituals and myths"*

The extent to which developed and accepted rituals, such as rites of passage, exist and the extent to which common myths exist about the nature and purposes of the group.

20. *Integration--process: "member satisfaction and socialization"*

Outputs to the personality from the system which affect the level of individual satisfaction and personal growth.

^aSource: Dunphy, 1972, pp.97-98.

This is the most sophisticated open system model of the small group to date, differing from previous models in its distinction between adaptive, structure, content and process variables, and emphasizing in particular the open and dynamic nature of the group.⁹ Of particular significance for this study, is the model's emphasis on the connection network (Interactive - adaptive) and the adaptive systems (Resource allocation - adaptive).

The variables employed in the models of Mills and Dunphy are comparable. Mills' variables: interaction, normative system, beliefs and values, cultural interchange, and emotion are similar to Dunphy's variables: interaction, differentiation, integration, resource allocation, and integration, respectively. Both models emphasize the openness of the small group, to a high degree. Mills emphasizes emotion more, and structural factors less, than Dunphy does.

The exact relevance of these two models for this study is that they highlight a) the interpersonal *connections* between the small group and its environment (Mills' "Physical and Social Contacts"; Dunphy's "connection network") *inputs and outputs*, transactions with the environment (Mills' "Emotional Relations", "Contractual Relations", "Cultural Interchange", "The Inter-group Executive System"; Dunphy's "adaptive systems"). This study

⁹ "A model that is open and dynamic in character is strongly favoured; the outline above is a compromise between this ideal and previous models which have been, on the whole, relatively closed and static in character" (Dunphy, 1972, p.99). It is this emphasis on openness and dynamics that prompted us to name Dunphy's model the Dynamic Open System model. Doubtless, other categorizations are possible.

focuses on mood input/output which is carried from small group to environment via interpersonal or social networks.

A criticism that can be made of Mills' model and Dunphy's model is that neither presents a total theory about the relationship between small group and environment. The two models together, however, delimit and clarify the specific area of small group-environment interaction this study investigates ("mood diffusion") and provide a framework for relating that area to other variables in a complete group model. In the broadest sense, these small group models are of general theoretical value because they represent microcosms, models of the larger society within which the small group occurs.

Building on the variables specified in these two models, a model of the mood diffusion process and the T-groups' social network within which diffusion occurs is developed in Chapter V .

We turn now to an examination of what is known about boundary exchange between the T-group and its environment.

CHAPTER III

BOUNDARY EXCHANGE AND THE T-GROUP

SOME DEFINITIONS

1) The term boundary exchange is frequently used in functionalist theory to refer to the exchange or movement of items between different subsystems of the social system.¹ Boundary exchange as used in this study refers to the exchange or movement of anything: ideas, values, emotions, behaviour, skills, objects, between the small group and its environment. T-group researchers often refer to "the transfer of learning" from the T-group to the back-home situation. This is an example of boundary exchange. The rationale for using this more general term is that it helps to place information about interaction between the small group and its environment in a wider theoretical perspective.

2) Diffusion is a term used in anthropology to indicate the process by which culture traits or complexes spread from one society to another, or one part of a society to another (Theodorson, 1969). A classic example of between-culture diffusion is the British adoption of the Indian habit of wearing pyjamas (Parkinson, 1963). When diffusion occurs in a short space of time and lasts only temporarily the term social contagion is sometimes used. Theodorson defines social contagion as "the

¹. For a detailed discussion of boundary exchange between the economy (the adaptive subsystem) and its "environment" (society's other subsystems) see Parsons and Smelser (1956).

spread of ideas, moods, or forms of behaviour in a rapid, emotionally toned manner, as in the case of rumors and fads" (Theodorson, 1969). Diffusion as used in this study refers to the spread of an idea, mood, or behaviour from one person to another, or from one group situation to another group situation.

For example: At time₁ a mood originates or is induced in individual 'X' in group situation A, and he "carries" this mood with him into group situation B so that it exerts some influence on him at time₂ although he is in an ostensibly different group situation. A common example of this occurs in the businessman who has a "bad" day at the office, comes home, and has a "fight" with his wife. This is an example of mood diffusion.

As with boundary exchange, the term diffusion helps to place this study in a wider theoretical perspective. Diffusion may refer to boundary exchange which is one way (e.g. from small group to environment only) or two way (e.g. from small group to environment and from environment back to small group).

3) The T-group or sensitivity training group (or self analytic group) is a primary group. Its primary characteristics are that it is:

- a) a small group which persists long enough to develop strong emotional attachments between members;
- b) having at least a set of rudimentary, functionally differentiated roles, and
- c) a sub-culture of its own including an image of the

group as an entity and an informal normative system which controls group-relevant action of members.

(Dunphy, 1972, p.5)

The T-group differs from other primary groups (such as the family, the peer group, and informal organizational groups) in that it is a resocialization group (similar in most respects to therapy and rehabilitation groups). The unique characteristics of the resocialization group are explained by Dunphy in the following quote:

What do these groups do? Because socialization takes place predominantly in primary groups, resocialization must also take place in primary groups. Resocialization groups function to change the ways in which people view their behaviour by providing "open feedback" from fellow participants about the meaning of each individual's behaviour for them, by increasing the range of behavioural phenomena consciously perceived by the individual, by making apparent and challenging in a variety of ways the working assumptions about human behaviour held by him.

(Dunphy, 1972, p.32)

According to Tannenbaum, Weschler, and Massarik (1961) there are three main features distinguishing the T-group from a conventional group discussion:

- 1) The training is primarily 'process-oriented' rather than 'content-oriented': stress is placed on the feeling level of communications rather than on the informational or conceptual level.
- 2) The group is unstructured: the members are not told what they ought to talk about.

As they concern themselves with the problems caused by this lack of direction, they begin to act in characteristic ways: some people remain silent, some are aggressive, some tend consistently to initiate discussions, and some attempt to structure the proceedings. With

the aid of the staff member, these approaches or developments become the focal points for discussion and analysis.

(Cooper and Mangham,
1971, p.v)

- 3) The group is small enough to permit a high level of participation, intense involvement, and free communication.

RATIONALE FOR STUDYING T-GROUPS

In this study, the T-group has been selected as the small group for research into boundary exchange because:

- 1) T-groups are known to generate a high level of emotional involvement (i.e. produce diffusable moods).
- 2) The values of "openness" and "scientific validation of data" in the T-group movement makes them more receptive to being researched than some other types of primary groups where a great deal of suspicion must first be overcome before some (if any) research can be done.

Although this research focuses on T-groups for reasons of methodological necessity, it is hoped that the results will have theoretical implications for small group theory as a whole.²

I OUTWARD DIFFUSION: THE IMPACT OF THE T-GROUP ON ITS ENVIRONMENT

There are quite a few studies available - based on empirical

². For a more detailed description and definition of T-groups see Bradford, Gibb, and Benne, 1964.

research - that indicate that T-groups cause change in group members. The changes vary from increased job effectiveness and interpersonal competence to changes in attitude, perception, personality and diagnostic ability (Cooper and Mangham, 1971). In studying the effects of the T-group, researchers - who are often trainers themselves - have been primarily concerned with the question "Is training transferable?" probably because they feel a positive answer justifies the use of T-groups. Consequently, research on T-groups relating to boundary exchange tends to focus on transfer of learning skills (interpersonal competence) rather than on those aspects of mood diffusion that are more relevant for this study. Furthermore, most of these studies are "before-after" studies which ignore ongoing interaction processes between the group (and group members) and the environment.

Some of the more common changes that are reported by group members after participating in a T-group have been shown by Miles (1965), Bunker (1965) and Moscow (1969) to be:

- Receiving Communications: more effort to understand, attentive listening.
- Relational Facility: cooperative, easier to deal with.
- Awareness of Human Behaviour: more analytic of other's actions, clearer perception of people.
- Sensitivity to Group Behaviour: more conscious of feelings of others, more sensitive to the reactions of others.
- Sensitivity to Other's Feelings: sensitivity to the needs and feelings of others.
- Acceptance of Other People: more tolerant, considerate, patient.

Tolerant of New Information: willing to accept
suggestions, less dogmatic.

(Cooper and Mangham, 1971, p.3)

In these studies the changes reported by experimental groups (T-groups) are significantly higher than those reported by members of control groups.

A study by Schutz and Allen (1966) on 71 T-group participants, who completed questionnaires before and after training, reports that 83 per cent of all responses indicated favourable effects of the T-group experience; 4 per cent indicated unfavourable change; and 13 per cent indicated no change. Participants reported increased understanding of interpersonal situations and increased interpersonal competence. In addition, "a great many of the respondents felt that their insight and awareness about people had increased and many found specific applications to their back-home jobs. Participants also reported a decrease in personal feelings of tension, an increase in flexibility, honesty, confidence and acceptance in their relations with other people. Some reported no change and still others reported worsening of relations with others. However, the latter, in almost every case reported, felt the overall effect was positive even though the initial results were not rewarding" (Cooper and Manghan, 1971, p.4).

Three additional findings presented by Schutz and Allen are relevant:

- 1) They found that depending on the initial personality of members, people were changed selectively by the T-group experience (e.g. the overly dominant became less dominant;

the overly submissive became more assertive).

- 2) It took the T-group up to 4 months to make its impact on members noticeable.
- 3) Members attributed their changes virtually entirely to the T-group experience.

Several other studies indicate that compared with more conventional human relations training programmes, T-groups are more effective in producing change: Boyd and Ellis (1962), Argyris (1965).

A more productive approach to the study of the impact of the T-group on its environment is evidenced in studies focusing on the effects of the T-group within a particular organization. Here the "environment" is held in common by all group members and may be objectively studied. Argyris (1964) studied the effects of 5 T-group sessions on the behaviour of a board of directors as measured by two independent observers working from tape recordings. When Argyris compared pre-T-group board meeting scores for antagonism, concern for others, feelings and ideas, openness, and helping others with scores for board meetings 8-12 months after training, he tentatively concluded that a significant growth in interpersonal competence had occurred. (His results are tentative because no control group was used.) This study is similar to Friedlander's study (Friedlander, 1967) of organizational training laboratories in focusing on a complete work group (e.g. the board as opposed to a composite group made up members from all levels of the organization). Friedlander found that work groups receiving organizational training (mainly task oriented groups with some emphasis on interpersonal and intra-group processes) showed significant changes in group effectiveness, mutual influence among

members, personal involvement and participation (Friedlander, 1967). Bennis (1963), Shepard (1960), Harrison (1962), and Mann (1962) report that organizational members who do not attend as a team have little effect on their organizational environment (although some personal change in participants may result).

The above review is selective and is not meant to be comprehensive.³ Its purpose is to present some typical findings from research into outward diffusion from the T-group.

RESEARCH ON PHASE MOVEMENT

Studies on changes within the group over time indicate a tendency for T-groups to go through developmental phases (i.e. phase movement) which are quantitatively and qualitatively different from each other. The significance of these findings for boundary exchange is that they indicate that the specific impact of the T-group varies over time. If we assume the theoretical possibility of outward diffusion occurring throughout the group's life, then it seems reasonable to assume that during different phases different "things" will be diffused or taken out of the group (e.g. anger during an "anger" phase). An examination of phase movement research is therefore relevant to this study.

Lakin (1960) carried out a case study on participants' interpretations of a T-group using a recall measure. Members were asked to describe their feelings and reactions during the meetings they remembered as the best and the worst. The reported themes

³. For a review of some of the more equivocal studies on organizational and individual change in T-groups see Cooper and Mangham (1971), Chapters 1,2,3.

centred around symbolised authority, peer conflict, self-exposure and self-insight. The worst meetings were characterized by authority conflict, inconsistency and disagreement. Although this study does not focus primarily on developmental sequence, it indicates the types of phases that make a conscious impression on members.

Some of the early work giving intuitive descriptions of developmental phases in self-analytic groups was done by Bion (1959) and Bennis and Shepard (1956). Bion emphasized the ways group issues of dependency, fight-flight, and pairing tended to dominate groups before a work oriented phase was begun. Bennis and Shepard describe a detailed developmental sequence of dependence, counter-dependence, resolution, enchantment, disenchantment, consensual validation. During the dependence and counter-dependence phase the group deals with the issue of Authority. When the initial responses of submission and rebellion are resolved during the third phase, the group moves to a concern with Interpersonal Relationships. During the phase of enchantment group members have high expectations about the satisfactions they hope to receive from the group (i.e. each other). Under the myth of mutual acceptance and universal harmony the group appears to be happy, cohesive and relaxed. The disenchantment phase occurs when the fantasied expectations of group life are not met and members experience feelings of depression and disappointment. During the phase of consensual validation members begin to work on real problems.

Two of the earliest studies concerned with empirically measuring phase movement were conducted by Heinicke and Bales

(1953) and Philp and Dunphy (1959) using laboratory groups that were mainly task oriented. These studies demonstrated that as task activity drops, social-emotional behaviour rises. During the second session, however, there is a leadership struggle which generates hostility.⁴

Mills (1964) and Mann (1961) conducted empirical studies on phase movement in T-groups in academic settings. Both studies produced comparable findings in phase sequence which Dunphy has summarized as follows:

. . . an initial phase of personal frustration and expression of hostility among members, then a shift to a re-evaluation of instructor-peer relationships, to a stage concerned with internalization and affection; next a work-oriented phase, followed by a final phase where members are primarily concerned with the termination of the group.

(Dunphy, 1968, p.199)

In his own study of phase movement in two T-groups, Dunphy (1964) found an early period (phases 1-3) where counter-personal relationships and negativity were predominant. This early period is characterized by the attempt to import external normative standards. Phases 2-3 are characterized by rivalry and aggression. Phase 4 shows concern with negativity, absenteeism and communication. Phases 5 and 6 have emotional concerns, especially affection, relatively high. These phases are described as being similar to those in previous studies of self-analytic groups (Dunphy, 1968, p.214).

Hartman (1969) studied phase movement in two T-groups and

⁴ A review of phase movement research which preceeded the study of developmental phases in self analytic groups is given in Dunphy (1968).

distinguished four distinct periods that were comparable in each group. Phase 1 was characterized by distress and revolt against the leader. Phase 2 saw an attempt to create a utopian group through honesty and closeness. Phase 3 realized the impossibility of utopia and was characterized by disappointment and sexual rivalry. Phase 4 centred around feelings of sadness associated with separation. In addition, Hartman demonstrated that shifts in the level of anxiety in the group were associated with changes in "phase".

The studies mentioned above are fairly consistent in the developmental tendencies they describe. More equivocal findings have been produced by other researchers: Reisel (1959), Lakin and Carson (1964) and Lubin and Zuckerman (1967). Focusing on the dimensions: involvement, degree of emotionality, and satisfaction, Reisel found a variety of patterns in these variables amongst the three T-groups studied: all groups seemed to maintain the pattern of involvement (though only one group showed this to a significant degree); satisfaction tended to be high at the beginning, declining over time, for all groups; and for emotionality no consistent patterns across groups appeared. Reisel's conclusion was that T-groups develop in a systematic fashion although "each group develops an individualized personality, patterning or identity, coupled with generally meaningful regularities of development." (Reisel, 1959).

A similar conclusion as to the uniqueness of each T-group's experience was made by Lakin and Carson (1964). They investigated perceived changes in the group process of four T-groups and found significant variations in participant ratings over time. Although

competitiveness declined and cooperation showed an increase in all groups, other variables (especially group atmosphere) did not show a discernable trend.

Lubin and Zuckerman (1967) studied affective and perceptual cognitive patterns in four T-groups. The five cognitive variables studied were: worthwhileness of session, degree of activity, degree of open sharing of feelings, level of conflict, and relevance of discussion to issues within the group. The affective variables studied were: anxiety, depression, and hostility. The authors conclude that there are significant differences among sessions, implying some degree of similarity of group trends over sessions, but no consistent trends common to all groups. Lubin and Zuckerman also report some significant association between different variables: the negative affect variables show high intercorrelations ranging from .81 to .92; the perceptual-cognitive variables show intercorrelations ranging from .41 to .85; and there is a general tendency for the affective variables to be negatively correlated with the perceptual-cognitive variables. Lubin and Zuckerman state:

To the extent that participants feel that sessions are worthwhile, they report less anxiety, depression, and hostility . . .

There is a significant negative relationship between the affect variables and the degree to which feelings are openly shared in the group. As feelings are shared more openly, participants report experiencing less anxiety, depression and hostility . . .

It is interesting to find that there is a significant negative relationship between Q5 (Relevance of discussions to issues within the group) and the affect variables. Overall, as discussions focus more upon issues within the group, Ss report experiencing less disturbing affect . . .

There is some suggestion also that participants experience less negative affect in those sessions in which they have been more active and in which there has been conflict within the group. The last statement refers to the possibility that confrontation and conflict, within the levels occurring in training groups, may be experienced by participants as stimulating rather than disturbing.

(Lubin and Zuckerman, 1967,
pp.227-230)

The differences between the findings of the last three studies and those preceeding (Mills, Mann, Dunphy) is possibly due to the fact that the latter, who have fairly consistent findings, used comparable variables, used a greater variety of variables, and tended to focus on the relevant group issues associated with the rise and fall of different variables (e.g. hostility and "the group revolt"). The studies of the former use fewer and widely differing variables, and tend to ignore relevant content in sessions that relate to significant group issues. Nevertheless, we note in all of these studies a fluctuation over time in various mood related variables indicating that the T-group can effect differing kinds of emotional impact at various times in the group's existence.⁵

FACTORS AFFECTING GROUP IMPACT

The central factors affecting the impact of the T-group experience on participants seem to be group composition,

⁵. This review of phase movement research has been highly selective. For a more comprehensive review see Tuckman (1965), who summarizes most theories into a model having the developmental stages: forming, storming, norming, and performing, and reviews by Dunphy (1964), Mann (1967) and Hartman (1969).

personality, involvement, and trainer behaviour.

Several researchers have claimed that heterogeneous groups foster greater change and learning: Bennis and Shepard (1956), Schutz (1958), Harrison and Labin (1965) and Harrison (1965). Stock (1964), however, has argued that homogeneous groups can facilitate communication and empathy and produce a better learning climate. Summarizing the research on group composition, Cooper and Mangham (1971) conclude that as composition increases from minimum to maximum heterogeneity there is a corresponding increase in participants' learning. At a certain critical point, however, further heterogeneity is associated with decreasing success (Cooper and Mangham, 1971, p.153).

It is clear from the research that groups composed mainly of particular personality types or interpersonal orientations will experience quantitatively different behaviours than groups otherwise composed. Schutz (1961) found that groups selected according to homogenous criteria, seemed to settle on different topics which were dealt with at greater depth than in other groups. Lieberman (1958) composed one T-group of individuals with a marked preference for each of the five modalities of fight, pairing, dependency, counter-dependency, and flight and a second group similar to the first except that it excluded individuals high on the pairing dimension. He found that counter-dependents changed least in the group that excluded pairers, and that authority issues preoccupied this group for its entire life. "A climate obtained of continuous counter-dependent struggle". (Cooper and Mangham, 1971, p.149). This study also highlights the significance of role specialists (e.g. persons high on one dimension such as

counter-dependency or pairing) for the types of behaviour that occur in the group. The importance of role specialists for developmental phases has been investigated elsewhere by Dunphy (1964).

A study by Vroom (1960) on the effects of personality on decision making participation in work groups has some implications for T-group situations. He found that participation was satisfying for persons having a high need for independence and low authoritarianism scores; those with low need for independence and high authoritarianism scores found participation less satisfying. Miles (1960) found that ego strength, flexibility, and need for affiliation were not related to gain at the end of the training course, "rather, ego strength, flexibility, and need for affiliation played a clear role in the person's interaction with the lab, permitting him to unfreeze, become involved, and receive feedback. These process factors, in turn, were the major determinants of learning." (Miles, 1960). That is, the change effect that ego strength, flexibility, and need for affiliation have depend on their interaction with other variables: commitment, involvement, feedback, trainer behaviour.

Reviewing these studies, Steele (1968) concludes that personality may be an important factor limiting participation. Persons who are most stereotyped, rigid and authoritarian tend to become dissatisfied and/or drop out of the group. In her review of personality factors influencing outcome, Stock (1964) suggests that receptivity, involvement, lack of defensiveness and openness are important factors aiding learning. Steele (1968) conducted an important study into the effects of personality on T-group

behaviour using the Sensation-Intuition (S-N) scale of the Myers-Briggs Type Indicator which classifies persons according to their preferred mode of perception: Sensation or Intuition.

Sensation (S): This is the process of becoming aware of things directly through one of the five senses. The focus here is on factual stimuli in the environment. The type of individual who prefers this process focuses on facts, attention to detail, realism, practicality, and thoroughness.

Intuition (N): This is, by contrast, the process of indirect holistic perception, where the perceiver adds to whatever is given (in the stimulus situation itself) through ideas and associations generated from within. The individual who prefers intuition cares as much about the multiple possibilities that occur to him as he does about the actualities. This type of person is characterized by insight, originality, ingenuity, grasp of the complicated, comfort with abstract thought and a bent for experimentation.

(Steele, 1968)

Steele found a general connection between stable preferences for Intuition and a general factor he calls the "laboratory style" of behaviour which encompasses high activity, individuality, collaboration, helping, experimenting, dealing with feelings, involvement, and understanding interpersonal processes. Steele also refers to the laboratory style as requiring the adoption of a scientific posture toward the world.

Harrison and Lubin (1965) investigated differences in interpersonal behaviour and learning in T-groups between highly person-oriented and highly work-oriented participants. They found that person-oriented members behaved more expressively and warmly and were more comfortable and effective in the training situation than were work-oriented members. Contrary to expectation the researchers found that the work-oriented members learned more than

the person-oriented members. Harrison and Lubin give the following explanation:

It is hypothesized that the person-oriented group found the laboratory a kind of psychic home without much challenge, whereas the work-oriented members experienced 'culture shock', and that this in fact pushed them toward change.

(Harrison and Lubin, 1965, p.286)

Several studies indicate that involvement must be high for the group to have impact on participants: Stock (1964); Miles (1960); Reisel (1959); Cooper and Mangham (1971). Reisel in particular notes that the greater the trainee involvement, the greater the emotional reaction. He also reports that there is a strong suggestion that the greater the emotional reaction, the more dissatisfaction is experienced. This suggests that the intense involvement that leads to personal change involves a stressful, perhaps painful period of growth (i.e. leading to growth). Cooper and Mangham describe intense involvement as an essential feature of T-groups and state: "On the face of it this involvement should be of advantage in producing lasting changes in the attitudes and behaviour of participants. It is certainly true that most studies report few attitudinal changes for participants who show low involvement in training activities" (Cooper and Mangham, 1971, p.v).

A number of studies indicate that the trainer's behaviour has a significant impact on the T-group. Stermerding (1961) compared the effects of two trainers on their groups. Trainer A used a group oriented approach while Trainer B used a more individual centred approach. Correspondingly, group A accenuated the 'group' aspect of learning, described a central case study in process-

analytic terms, and were perceived by their trainer as sensitive and effective, whereas group B emphasized equally self learning and their jobs, described the case study in role functioning terms, and were perceived by their trainer as being primarily task oriented. Mann (1966) in his study of the member-to-trainer relationship concluded that differences in the timing and intensity of the developmental stages: appraisal, confrontation, re-evaluation, internalization, and separation, were a result of the way in which each group dealt with the trainer in the confrontation period. By confronting and appraising the authority position of the leader vis-a-vis their dependency, group 1 resolved these issues and moved forward to a phase of internalization. Group 2 expressed hostility without appraisal during the confrontation phase, became distressed at the outburst of aggression, and failed to resolve the authority-dependency issue in a satisfactory manner. Consequently, group 2 failed to enter the internalization phase to a significant degree. Unresolved issues were still being felt. Mann makes the following observations about differences between leaders: leader 1 is described as younger (late twenties), less experienced in trainer role, and more volatile and likely to express impatience or irritation; leader 2 was older (late thirties), more experienced in trainer role, and more distant in dealing with group members. "The range of personal feelings expressed by the S1 trainer was greater, and the psychological distance between him and the group was correspondingly less than for the S2 trainer." (Mann, 1966, quoted in Cooper and Mangham, 1971, p.245).

Mann's study is of particular importance as it highlights

the interactive effect of group and trainer on group process. The exact nature of this interactive effect is not made clear, however.

Peters (1966) found that participants who identified with the trainer, showed personal learning. For certain participants, certain leaders stood out as desirable role models.

Culbert (1968) concludes that trainers who are more self-revealing speed the process by which groups reach a higher level of self-awareness. Furthermore, self-revealing trainers have groups in which members enter relationships more often with other members. Bolman (1969) found that trainer congruence-empathy was directly related to participant learning.

A fuller review of studies on trainer impact has been made by Cooper and Mangham (1971).⁶ The few studies quoted above indicate some of the major dimensions of trainer behaviour affecting the T-group experience of participants. We turn now to a consideration of the effect of the environment on the T-group.

II INWARD DIFFUSION: THE IMPACT OF THE ENVIRONMENT ON THE T-GROUP

Empirical studies documenting the effect of the environment on processes within the T-group are virtually non-existent. Mills' study (Mills, 1967) is unique in its emphasis on the ways the "environment" makes significant impact on the T-group. Because his argument is so focal to this study, Mills has been quoted at length on the following pages. Certain parts of Mills' analysis have been underlined to emphasize passages particularly relevant to this study.

⁶Of more general relevance is Redl's classic study on group emotion and leadership (Redl, 1955).

Absences remind members, as well as students of groups, that the group is neither complete unto itself nor detached from other systems but instead is interlaced with them. Processes in the group are subject to processes within this more complex network. Absences signal loyalties--greater loyalties--to systems other than the group (one's family, one's friends, other courses, other interests). A frequent fantasy upon the absence of the leader, for example, is that he has abandoned this group for another he likes better . . .

Accordingly, the observed cyclical movement occurs because of the group's interrelationship with other segments of society.⁷ It results from alternating demands, first, from commitment to the group's task (negative peak), then from reactions to commitments to other systems (positive peaks). Regularity of peaks and troughs may be accounted for by the regularity of absences or separations, which in turn are due to the regularity of the academic calender--or put another way, due to the regularity with which other systems demand an expression of loyalty. In short, the swings are between two poles: this group and systems other than this group. The regularity is determined by factors which ramify into an ancient chronology and an institutionalized provision that various collectivities of a society have their season . . .

In any case, the data indicate the inadequacy of an explanation based solely upon the immediate group as a closed system. The implication for group theory is simple and important. Small groups are not closed systems. A theory of their dynamics must extend beyond the immediate scene and incorporate those demands which make themselves felt in a systematic way upon the immediate scene . . .

Counting waking and sleeping hours, members of this learning group spend, at best, less than two per cent of their week in the group. Members have many other commitments: their personal interests; friends; other classes; religions, political, familial, peer, and many other associations. Reference-group theory has helped emphasize the fact that a member may refer privately to one of these units as a basis for his beliefs and standards. As essentially part of the same

⁷ Mills refers here to the cyclical movement of positive over negative scores for the T-group.

process, he may express within the group strains (or satisfactions, as the case may be) which are born elsewhere--just as he may wait until he is in other contexts before he overtly manifests internal processes begun within the group. This conveyance⁸ on the part of members renders the group a nontotal institution. That to which and from which there is conveyance is within the field of the group, and, as such, is part of its periphery. There is no question that ramifying the group into this often widely dispersed field complicates theory-building; but, on the other hand, bounding the group by physical walls and by what can be seen and heard must leave many processes unexplained.

This barrier is especially obvious when connections to external collectivities are not idiosyncratic but instead are common among members and reactions to them are shared, scheduled, and routinized.⁹ Christmas vacation is one of the clearest of many examples: The university closes down; all ways are opened for a return home; there is no choice of meeting or not meeting; separation is enforced; there can be no giving and getting from the group during this period; group process is suspended. The giving and getting--the gift exchange--is in another context among other authorities and peers. Traces of the group are taken to the family, and family traces are returned. There is an exchange, but the unequivocal act of moving from one collectivity to another as an acknowledgment of loyalty to the second is what makes the exchange possible. Just what loyalty is felt may be important for some investigators. The more general point, however, is that provisions for the move, for taking traces to the family, for re-enacting facts of the group's process and returning with new traces--society's provision for this is patterned. Society's calendar schedules a particular impact upon the group. Without meeting, its members go through similar experiences; without meeting, the group changes in systematic ways. These patterned influences during dispersal of a group need to be brought within the field of group theory.

(Mills, 1964, pp.92-94)

⁸.i.e. Diffusion.

⁹.i.e. Synchronized inward diffusion.

The essence of Mills' argument is that inward diffusion, whether synchronized (by the calendar) or originating in the environment of a particular member, can alter processes within the T-group. His evidence is not conclusive, however, since his measuring instruments are designed to tap the T-group only. The methodological problems in measuring the processes in a T-group's environment are fairly severe--which probably accounts for the absence of research in this area.

Mills also clarifies what "the environment" is for most T-group members: personal interests, friends, other classes, and religious, political, familial, peer and other associations. The term environment is used very loosely in the literature, as though it were identical for each group member. In reality, it is more likely that members have unique environments composed of varying types of primary and secondary groups having differing impacts on the individual. As Mills has noted, on certain occasions (e.g. holidays) certain features of everyone's environment are synchronized. For the most part, however, it may be more appropriate to speak of member-specific environments.

OTHER RESEARCH ON ENVIRONMENT

Dunphy (1972) has presented a detailed theory of the coordination of the primary group with the larger social system which emphasizes in particular structural relations between small groups and their environment.¹⁰ Depending on the amount of control

¹⁰ This theory fills in details about adaptive-global pattern ("adaptive stability") referred to in Dunphy's primary group model in Chapter II above.

over goals and means permitted by the environment, primary groups develop along different lines. Apathetic groups such as retreatist drug addict groups, and apathetic work groups in industry--for instance--derive their apathy from occupying a subjugated position with no control over the environment (no ability to influence goals or means). At the opposite end of the continuum are conservative groups such as large stockholders and upper elite families who exert a high degree of control over goals and means in the environment (Dunphy, 1964, pp.65-66). The significance of this theory is that it portrays the environment as a key determinant of the general type of primary group formed. The theory also predicts the dominant roles and group behaviours arising in groups under these environmental constraints (e.g. erratic groups with the dominant role of the aggressor and dominant feelings of frustration frequently leading to explosive behaviour.)

A second area of research which emphasizes the effect of the environment on the small group are the organizational studies of mental hospitals: Caudill (1958); Stanton and Schwartz (1954); Rapoport (1956); Stotland and Kobler (1965). These studies treat the hospital organization as an environment in which collective disturbances may occur having impact on individuals and small groups. Stanton and Kobler (1965) give several examples of diffusion in their study of the life cycle of Crest Hospital. The authors describe a "sick" Halloween party held by the staff which becomes violent with a brawl and widespread breaking of glass (and two divorces which were reportedly started that night). The unit director is quoted as saying that the party was "simply a symptom of the ills of the hospital". (Stanton and Kobler,

1965, pp.144-145). Instances of diffusion between staff and patient groups are also frequent:

The low morale of the ward staff, the staff's low level of motivation to be therapeutic, their sagging self-esteem and self-confidence, created hopelessness and anxiety among the patients.

(Stanton and Kobler, 1965, p.146)

Stanton and Kobler also describe how factors in the outside environment can affect the hospital environment:

Patient behaviour, for example, is subject to more influences than the hospital can control--acute upsets are bound to occur. The staff, too, are not immune to upsets stemming from sources outside the hospital; personal problems affect the clinical performance of therapeutic personnel.

(Stanton and Kobler, 1965, p.218)

Caudill (1958), in his study of a mental hospital, describes it as a small social system of interrelated parts such that "events occurring at one point would have ramifications throughout the system" (Caudill, 1958, p.4). Caudill presents empirical evidence which shows how behaviours in daily administrative conferences of staff are influenced by collective processes involving the entire hospital (Caudill, 1958, Chapter 12). His study also traces the interconnections between different staff role groups and shows how inadequately expressed disagreement and dissatisfaction among staff role groups fostered collective disturbance among the patient group.

The emphasis these studies place on the mood diffusion impact of "mood sweeps" in mental hospitals has particular significance for this study.

Although there is general agreement among small group theorists now that the small group is some sort of open system, the

empirical research on transactions with environment has been meagre and in some instances (with respect to inward diffusion) virtually non-existent. This lack of research can be attributed to the cultural bias concerning the myth of individuality (discussed in Chapter IV), the "scientific fiction" employed by researchers investigating experimental laboratory groups that environmental variables were not relevant, the difficulties involved in empirically measuring "the environment", an imprecise definition of "environment", and perhaps a reluctance on the part of researchers to probe the private world of the small group member.

The next chapter discusses the social significance of emotion and mood, and indicates the relevance of emotion for small group research.

CHAPTER IV
THE SOCIAL SIGNIFICANCE OF EMOTION

EMOTION AND SOCIAL RESEARCH: A NEGLECTED AREA

For methodological reasons the study of emotion has been largely neglected by sociologists and social psychologists: emotion is the most private of subjective experiences and its presence in an individual can only be inferred from secondary sources - verbal reports, vocal tension, subtle shifts in kinesic patterns (Arnold 1968; Mills, 1967):

While a sensory experience can be verified by others, given the same object or situation, an emotional experience is essentially unique even though the emotion can be recognized by others. For this reason, the fortunes of emotion as a scientific category have fluctuated sharply. Whenever subjective experience was frowned upon and repeatable experience or observable behaviour was emphasized, emotion fell into disrepute.

(Arnold, 1968, p.9)

Empirical research on emotion is fraught with difficulty. The difficulty has been further compounded by the fact that psychologists have long disagreed as to a basic definition of emotion. Writing in 1928 Claparède states:

The psychology of affective processes is the most confused chapter in all psychology. Here it is that the greatest differences appear from one psychologist to another. They are in agreement neither on the facts nor on the words. Some call feelings what others call emotions.

(Claparède, 1928, Chapter 9)

A similar complaint was made by Duffy in 1941:

For many years the writer has been of the opinion that 'emotion', as a scientific concept, is worse than useless.

(Duffy, 1941, p.283)

Although some consensus as to what emotion is, what causes emotion, and what the basic emotions are, was attained by the 1950's, the late arrival of consensus on a definition of emotion and the absence of adequate methodology has certainly retarded emotion research among psychologists.

While the same factors have retarded research into emotion among sociologists and social psychologists, a particular cultural bias has probably interfered with their seeing the interactional, the sociological aspects of emotion. This bias is the tendency of the Westerner to see individual behaviour in "individual" or closed system terms. An example of what Galbraith calls "conventional wisdom" (however foolish) is the mainly un verbalized belief by many people that they are 'unique individuals' possessing a 'free will' and having separate, personal, unique and entirely individual 'emotional states'. The linking thread through these beliefs is the notion of separateness: "I am separate from you; my internal dynamics are not influenced by your internal dynamics." Social psychological research has demolished the 'reality' of this myth, but the myth persists. It is rooted in our culture.

Similarly in human affairs we have a long cultural tradition that predisposes us to think in terms of causation rather than of interaction. Our systems of morals, ethics and law, from the time of the Jews, Greeks and Romans, have been predicated on a sort of simple, causal type of psychology. Western culture has viewed man as an individual self-determining psyche, which (for good or evil) causes the body in which it resides to carry out certain

actions. Each person, as an independent agent, must therefore, be responsible for the actions of the body he controls.

(McCall and Simmons, 1966, p.54)

This cultural bias is contra-sociological in nature, for sociology, as Homans (1962) defines it, is the study of how men influence other men; and if a man's behaviour is continually being 'influenced' by others, then he can hardly be considered an 'independent agent'. This would be especially so if his emotions - those most personal and private of subjective experiences - were a function of varying social situations. This in fact is what occurs: current research had demonstrated the interaction between emotion and social situation.¹ And yet the myth of 'individuality' persists. It is difficult to formulate a social psychological theory of emotion in the face of such bias.

It seems reasonable that social psychologists have favoured concepts such as role and norm which have been defined with greater consensus and have yielded more readily to objective measurement. Now that both theory and research techniques have reached a level that permits empirical research on emotion,² the time has come to integrate the emotional dynamics of groups with more traditional concepts used by social scientists.

As Slater has pointed out, research on small groups that ignores emotional dynamics is bound to be restrictive: Slater

¹For example: Mills (1967), Mills (1964), Redl (1955), La Piere (1938), Durkheim (1952), Lewin, Lippitt and White (1939), any text or chapter on collective behaviour, the studies on phase movement reviewed in Chapter III above.

²See Mahl and Schulze (1964), Birdwhistell (1952), Horwitz and Cartwright (1953), Torrance (1955), Mills (1964), Mann (1964).

refers to "the imprisoning and blinding effects of the traditional psychological and sociological units of person and role" (Slater, 1966, p.251):

I wonder if the favored sociological unit - the disembodied role, divested of the needs, the motives, the feelings which, however group-specific they may be, nonetheless derive from a breathing organism - has not also exhausted its limited fertility. While most progress in the sciences has come from systematically ignoring large portions of the data at any given time, I cannot see how an understanding of groups can proceed beyond its current level unless the unit of analysis in some way embodies that segment of an individual's instinctual life which he commits to a group. Social scientists have too long tried to operate under the implicit assumption that when more than a few people are gathered together their emotionality and animality can somehow be disregarded.³

(Slater, 1966, p.251)

Mills (1967) in his discussion of group emotion, makes clear why emotion must be carefully regarded in small group research:

1. Emotions are always present in interpersonal situations.
2. In interpersonal situations emotional interaction occurs frequently (usually at a covert level). One's emotions both influence, and are influenced by, the emotions of others.
3. This emotional interaction produces a complex configuration called group emotion.
4. Primordial roles are conferred by the system of group emotion (e.g. "the scapegoat", "the person everyone loves") and can have a strong influence on 'individual' behaviour. In Mills' words: "'the darling' of the group tends to be kept just that while 'the instigator' is egged-on." (Mills, 1967, p.71).

³.The underlining is my emphasis.

5. The particular structure of group emotion that occurs can either limit or advance group and individual growth.

(Mills, 1967, p.71).

The essence of Mills' argument is that an understanding of emotion in groups helps *explain* social behaviour.

Homans (1964) makes a similar point in his article "Bringing Men Back In" where he launched an attack on functionalism in sociology. Dismantling Smelser's structural-functional study of innovations in the British cotton textile industry, Homans shows that the actual explanation of innovation given by Smelser is not a functional one involving role and social system, but a psychological one involving emotion.

From the foregoing section we can conclude two things:

- 1) Social science research on emotion has been neglected.
- 2) Some social scientists believe emotional factors are of central importance in explaining social behaviour.

SOME DEFINITIONS OF EMOTION

1. Emotion as Interference - According to Whittaker (1966) the word emotion is derived from the Latin "emovere" which means to stir up, to agitate or excite. This definition implies the opposite of a calm, relaxed, and (some say) a rational state, viz. "He is too emotional to make a rational decision." This stirred up aspect of emotion is incorporated in theories of emotion as interference: a result of conflict, an arrest of action tendencies that result in a disorganized

and disorganizing response called emotion. (Rapaport, 1950; Dumas, 1948; Hebb, 1941; Claparède, 1928; Leeper, 1948; Pradines, 1958).

Dumas (1948), for instance, speaks of "emotional shocks" that strike and disorganize us. Munn (1946) states:

Perhaps as satisfactory a definition as can be given at the present time describes emotion as 'an acute disturbance of the individual as a whole, psychological in origin, involving behaviour, conscious experience, and visceral functioning'. . . We say acute because emotion comes over us suddenly and, after a time, weakens and disappears. . . We say disturbance because all but the mildest emotions disturb or upset whatever activities are in progress at the time of arousal. We say of the individual as a whole because when an individual is emotionally disturbed, he is disturbed all over.

(Munn, 1946, p.263)

The disorganizing effect that emotion can have on our behaviour is further borne out by Morgan and King:

On the other hand, when our emotions are too intense and too easily aroused, they can get us into a good deal of trouble. They can warp our judgment, turn friends into enemies, and make us as miserable as if we were sick with fever.

(Morgan and King, 1965)

The emotions we experience have impact on us, they are tied up with our whole existence, our consciousness, our self-identity, our being.

2. Emotion as Organized Tendency - This definition of emotion emphasizes the organizing, directional, purposeful aspect of emotion:

The word emotion is derived from Latin roots meaning "to move out". This conveys the idea of an outward expression of something inside, which is one aspect of emotion. "To move out" also implies a second aspect of emotion - its motivational quality. Emotion supplies the motive power for a great deal of our behaviour.

(Morgan and King, 1965)

The most notable studies treating emotion as organized tendencies and as motives are Arnold and Gasson (1954), Young (1961), Leeper (1963), and Lazarus (1966). This approach to emotion is significant because it emphasizes the need to understand emotion in order to fully comprehend a person's behaviour. Emotion has a motivational aspect: it directs and explains behaviour. Our actual behaviour in a social situation may not be the result of our conscious goal and expressed aim, but directed by an "emotional need" that impels us in another direction. Much of psychodynamic theory from Freud to Berne is based on this analysis of hidden or covert "scripts". In sociology Pareto (1935) has emphasized the effect of non-logical factors or "sentiments" in determining social behaviour. Goldthorpe (1969) has shown that this Paretian method of analysis of covert behaviour ("sentiments") underlies many sociological studies ranging from C. Wright Mills' exposé of political myths in *The Power Elite* to the Hawthorne studies.

* * *

These two somewhat opposite definitions of emotion - ironically derived from the same Latin root - are significant to the social scientist because they emphasize that:

- 1) emotion can have a disorganizing effect; it can

disrupt our normal activity, our social intercourse;

- 2) an understanding of the motivational aspect of emotion is necessary to fully explain overt behaviour.

THEORIES OF EMOTION: CAUSATION

There are four main theories of emotion which are concerned with establishing the antecedents or causes of emotion.

1. The Conventional Wisdom Theory is the "general" belief that the physiological changes typical of strong emotions follow the conscious experience of the emotion. There is no empirical evidence that supports this theory.
2. The James-Lange Theory holds that the reverse is true, that the physiological changes must precede the conscious experience of emotion. The emotional experience occurs after the bodily change. Instead of "we see a bear - are afraid - and run", this theory asserts that "we see a bear - run - and are afraid" (James, 1884). Numerous experiments have thrown doubt on this theory. Maranon (1924) in particular has demonstrated that the physiological changes normally associated with emotion are not in themselves sufficient to produce a true emotional experience.
3. The Cannon-Bard Emergency Theory asserts that both the conscious experience of emotion and the physiological changes are activated simultaneously by the hypothalamus. This theory plays down the role of cognitive factors in producing emotion (Cannon, 1927).

4. The Cognitive Theory comes in two forms, both of which stress the importance of cognitive factors (evaluation, interpretation) in producing emotion. Schachter and Singer (1962) state that the emotion which we feel is an interpretation of stirred-up bodily states. They propose that the state of emotional arousal is almost identical for many different emotions.⁴ However, we interpret and label the bodily state and *then* we experience the emotion that seems appropriate to our situation.

The second form of the cognitive theory suggests that both the emotional experience and the bodily state (i.e. associated physiological changes) are the result of interpretation. Duffy (1941) defines emotion as the conscious aspect of a response, or group of responses, which the individual makes to a stimulating situation which he interprets as having marked significance for himself, favorable or unfavorable.

Hence, 'emotion' is the individual's response to situations which promise well or ill for the attainment of his goals. The term refers to how the individual *feels* and how he *acts* when his *expectations* in regard to a situation are that it will, or it will not, permit him to reach some rather strongly desired goal. . . . the response of the individual, or the 'emotion' he manifests, is that which is appropriate to the situation as *he interprets it*, not that which would be appropriate to the situation in the opinion of other individuals . . . Older children, for example, fear situations which younger children do not fear. Their expectations in regard to these situations are different.

(Duffy, 1941, p.285)

⁴ See also Duffy's concept of energy level in emotion (Duffy, 1941).

The interpretative element is similarly stressed by
Arnold and Gasson:

Emotions, we have said, are aroused as the
result of a value judgement, made primarily
on the basis of sensory appeal or repulsion.

(Arnold and Gasson, 1954, p.294)

Several other studies concur in the importance of prior
cognitive factors: appraisal, judgement, evaluation, interpre-
tation, attitude in determining emotion: Arnold (1960), Berkowitz
(1962), Peters (1963), Lazarus (1966).⁵

EMOTION AND OTHER BEHAVIOUR LEVELS: THE INTERRELATED WEB

The significance of the cognitive theories of emotion for
the sociologist and the social psychologist is that the evaluative,
interpretative, cognitive activity that leads to the emotion is
itself structured by cultural and situational influences ranging
from widely held social norms about what situations are to be
feared or regarded with joy (and the socially approved manner of
expressing our fear and joy) to idiosyncratic personal definitions
of the situation. By structuring our interpretations of
situations, society affects our emotional responses, delimits our
range of feeling, and the manner in which we express our feelings.

Cognitive and affective levels of behaviour, then, are
interrelated. The exact nature of this relationship is further
borne out by Mills (1967) who relates emotions to the other five
behaviour levels: behaviour (overt actions), norms, goals, and
values. According to Mills: "These five systems are empirically

⁵. For a review of neurological theories of emotion see Arnold
(1960).

interrelated, for certainly our feelings are affected by what we and others do, our actions are influenced by our ideas, and our rules often change with a change in our goals." (Mills, 1967, p.59). Mills points out that activity at the cognitive level affects the affective level (emotion) and that the reverse can also occur: emotion can affect our other behaviour levels. Furthermore, this interactive effect occurs on both individual and group levels:

What a person in a group does makes a difference to other members; how one feels has a contagious effect upon the feelings of others; and one's needs, or signs of those needs, arouse emotional responses in others. There is perhaps constant interplay among the emotional experiences of persons in groups.

This "contagious" person-to-person spreading of mood has been well documented in studies of dyads, small groups, crowds, and communities: Sullivan (1955); Lewin, Lippitt, and White (1939); La Piere (1938); Johnson (1945); Cantril (1940).⁶

Four important studies in sociology bear out this inter-relationship between cognitive, affective, and behavioural levels. The first, by Lubin and Zuckerman (1967) has been reviewed in the previous chapter. Briefly, this study traces out the interconnections between three affective variables (anxiety, hostility, and depression) and five perceptual-cognitive variables during the life of a T-group. The authors demonstrate that there is a significant correlation between the two behaviour levels.

Two other T-group studies are comparable to this one. Hartman (1969) has shown that phase movement appears to be a function of

⁶ This is not intended to be a comprehensive list of emotional contagion studies.

shifting intensities of anxiety. Hartman describes the phases (e.g. work, group revolt, millenarianism) as solutions to the eruption of anxiety. Changes from one phase to another were due to new eruptions of anxiety and new group solutions to relieve the anxiety. This theory postulates that group development is basically due to changes at an emotional level. Dunphy (1964) has argued that concurrent with shifts in phase that are characterized by moods of varying intensities, there is a shift in the prevalent group mythology (e.g. the myth of the instructor as weak and impotent is associated with anomie, confusion and scapegoating behaviour; the myth of the instructor as a cold, rejecting, evil authority figure is associated with a phase where aggression is high). Dunphy concludes that "these images derive primarily from the inner emotional experiences of the group members at successive stages in the cultural evolution of the group" (Dunphy, 1968, p.222).

The fourth study is Durkheim's investigation of suicide (Durkheim, 1952). Durkheim's theory of suicide is actually an ideational theory of social change: he explains suicide with reference to disconfirmed expectations. Durkheim classified suicide into three types: egoistic, anomic, and altruistic, each of which he has explained in terms of expectation and the factors which change expectation.

1. Egoistic suicide varies inversely with the degree of integration of the social group of which the individual forms a part. When the ties between the individual and the group are weakened by a disintegration or weakening of cohesion in religious,

domestic and political society, egoistic suicide occurs. The well integrated group disciplines the expectations of the individual: when a group's integration weakens or dissolves then the individual's expectation is undisciplined, it aspires to unrealistic levels, reality brings disappointment, and suicide occurs.⁷

2. Altruistic suicide occurs when the individual is not detached enough from the group; he has importance only in relation to the group. This prepares the individual psychologically to sacrifice himself for the group: any act which is apt to bring disgrace or dishonour to the group is atoned for by self-sacrifice. Altruistic suicide occurs when the individual fails to live up to the expectations of the group which, in a sense, become his own self-expectations. The failure demands sacrifice.⁸

3. Anomic suicide is caused by a disturbance in the social equilibrium, by a state of anomie, or normlessness, during which the conduct of the individual ceases to be regulated by the norms set by society. Anomic suicide typically occurs when society is subject to abrupt transitions

⁷ Aron (1967), pp.29-32; Durkheim (1955), p.248.

⁸ Aron (1967), p.33.

that significantly alter the relationship between expectation and reality. Sudden economic change resulting in prosperity or depression, and divorce, foster anomic suicide. Of divorce, Durkheim states:

The divorced man returns to indiscipline, to the disparity between desires and satisfaction. As he has the right to form attachment whenever inclination leads him, he aspires to everything and is satisfied with nothing.

(Durkheim, 1955, p.271)

And during sudden prosperity:

Social existence is no longer ruled by customs; individuals are in endless competition with one another; they expect a great deal of life, they demand a great deal from it. They are in perpetual danger of suffering from the disproportion between their aspirations and their satisfactions. This atmosphere of restlessness and dissatisfaction is favourable to the growth of the suicidogenic impulse.

(Aron, 1967, p.33)

Durkheim's theory of suicide is actually a theory of satisfaction in large populations, in which the chief explanatory concept is expectation. Satisfaction is a function of the size of the gap between expectation and reality ("the coefficient of aggravation"): where the gap is large, satisfaction is low; and when satisfaction is extremely low, suicide occurs. What Durkheim is saying is that satisfaction (affective, emotional level) is a group phenomenon and that it is a function of expectation (cognitive level). Where satisfaction is very low, it manifests itself in a particularly dramatic form of overt

behaviour: suicide. Suicide is therefore a barometer that measures the general level of satisfaction, mood, and expectation in society. The significance of Durkheim's theory is that it makes explicit some of the interconnections between cognitive, affective, and interactional levels of behaviour in large populations. Further, his study suggests that the most fundamentally psychological phenomena (emotion) is essentially social, collective in origin.

* * *

Although the *repertoire* of emotions available to all men appear to be similar and the product of genetic factors,⁹ the manner in which emotions are expressed is largely determined by cultural factors. "Men in our culture", says Whittaker, "seldom cry, while women are much more easily given to tears. French men, on the other hand, cry more easily than American men . . . Children raised in our culture often show displeasure by sticking out their tongues. A Chinese, however, may indicate surprise through the same behaviour." (Whittaker, 1966, pp.137-138). The proper expression of emotion is learned.

Social norms govern not only the manner of emotional expression, but also the degree of expression. The open expression of aggression is taboo in most civilized societies. Instead, anger is expressed by adults in our culture in more subtle and indirect ways: the insult, the "humorous put-down", vocal tension, kinesic "aggression", the withholding of affection. Similarly, there are un verbalized (i.e. not openly acknowledged) norms restricting the

⁹Watson (1924); Goodenough (1932); Whittaker (1966).

expression of affection. A common problem experienced in T-groups is that of the person who cannot "unfreeze" and easily express his strong but "locked-in" feelings of love and anger. The commonness of this problem is testimony to the repressive aspects of society in overcontrolling the expression of certain emotions.

Furthermore, according to McKellar (1968) society shields us from situations that produce strong and unpleasant feelings such as fear, anger, disgust and jealousy. A study conducted by Hebb and Thompson (1954) showed that despite the commonness of death, out of a group of 198 persons (including nurses and returned servicemen) 37 had never seen a dead person, 91 had only seen a corpse after it had been ritually prepared by the undertaker: a total of 66 per cent had been shielded by society from the emotional upsets of death. McKellar states:

There are many such taboos which serve to insulate people from emotional excitement, to which people in general are so susceptible. As our lives are usually arranged, with our comfortable repertoire of taboos of this kind, we can also maintain the self-deception that as a species we are unemotional.

(McKellar, 1968, pp.235-236)

The foregoing discussion has dealt with some of the sociological aspects of emotion. We turn now to a consideration of the classification of emotions.

TYPOLGY OF EMOTIONS

In a most general sense, emotion can be defined as a state of arousal or excitement, or as Duffy (1941) prefers, as a change in energy level.

. . . emotion represents a change in the energy level, or degree of reactivity of the individual. The excited individual has an energy level which is higher, and the depressed individual an energy level which is lower, than that which he ordinarily experiences.

(Duffy, 1941, p.285)

This state of activation (or lack of activation) can be separated into different categories or emotions. Psychologists are in general agreement that the basic emotions are: anger, love, sadness, fear, anxiety, happiness. Each of these is capable of further subdivision. For example, anger can include feelings of rage, anger, annoyance; happiness can include ecstasy, joy, happiness, pleasure, serenity, calmness.

Several psychologists have presented typologies of emotion. The simplest category system divides emotions into two categories: positive and negative.¹⁰ Freud (1922) used such a category system in his writings on the pleasure principle in his postulation of a "pleasure-unpleasure" agency. Young (1961) in a study on affective processes in animals, refers to a hedonic continuum which is labelled positive and negative at opposite ends. Young writes:

According to the hedonic hypothesis, neuro-behavioural patterns are organized that minimize negative affectivity (distress) and maximize positive affectivity (delight).

(Young, 1961, p.153)

Leeper (1948) in espousing his motivational theory of emotion, makes reference to the 'pleasurable' or 'positive' emotions and the

¹⁰. This does not mean that positive emotions are always useful and that negative emotions are always useless and to be avoided.

'unpleasurable' or 'negative' emotions. Arnold and Gasson (1954) in their sophisticated typology of emotions, classify emotions according to a) their aim as directed toward a suitable object and away from a harmful one (positive and negative emotions) and b) their degree of operation or impulsion depending on whether conditions are favourable or unfavourable (impulse and contending emotions). Positive emotions like love, desire, hope, delight and joy, they define as tending toward suitable or desirable objects. Negative emotions: hate, dislike, sorrow, despair, anger, fear are defined as those tending away from harmful objects. Spitz (1963) makes frequent reference to negative and pleasurable expression of emotion in his paper on emotional development in the infant.

The utility of the positive-negative dichotomy is evidenced by the frequency with which it is used by psychologists and laymen alike. Terms like pleasure-pain, happy-unhappy, joy-sorrow are in common use and reflect the same basic polar dichotomy.

Positive and negative emotions are easily broken down into finer categories. The fourfold classification scheme (positive, negative, impulse, contending) of Arnold and Gasson (1954) has been noted above. Plutchik (1962) has devised a category system that is noteworthy in that it classifies emotions around "basic types of adaptive behaviour" (shown in Table 3 as "dimensions") and gives an intensity rating based on mean scores from a group of 30 raters.

TABLE 3 THE MEAN JUDGED INTENSITY OF SYNONYMS FOR EACH OF THE EIGHT PRIMARY EMOTION DIMENSIONS

Destruction	Repro- duction	Incorpor- ation	Orien- tation	Protection	Deprivation	Rejection	Exploration
Rage (9.90)	Ecstasy (10.00)	Admission (4.16)	Astonishment (9.30)	Terror (10.13)	Grief (8.83)	Loathing (9.10)	Anticipation (7.30)
Anger (8.40)	Joy (8.10)	Acceptance (4.00)	Amazement (8.30)	Panic (9.75)	Sorrow (7.53)	Disgust (7.60)	Expectancy (6.76)
Annoyance (5.00)	Happiness (7.10)	Incorpor- ation (3.56)	Surprise (7.26)	Fear (7.96)	Dejection (6.26)	Dislike (5.50)	Attentiveness (5.86)
	Pleasure (5.70)			Apprehen- sive (6.40)	Gloominess (5.50)	Boredom (4.70)	Set (3.56)
	Serenity (4.36)			Timidity (4.03)	Pensiveness (4.40)	Tiresome- ness (4.50)	
	Calmness (3.30)						

In connection with Plutchik's findings, Morgan and King (1965) have pointed out that negative emotions have higher levels of activation. Moore, in a study of the effects of emotions on mental functioning, had college students work at cognitive tasks (e.g. mathematics) after anger, fear, and embarrassment had been artificially induced. He concluded that both fear and anger have the most detrimental effects on mental work.

A simpler category system is provided by Duffy (1941) who classifies emotions into three basic categories related to goal expectation level. Anger and fear occur in situations which are interpreted as threatening or thwarting. When an individual expects that his goal *may* not be attained his emotional response is characteristically one of increased energy (negative emotion). Joy and elation occur in situations which facilitate progress towards an important goal. When an individual expects that his goal *will* be attained he responds with increased energy (positive emotion). Depression and sorrow result from situations where an individual's progress toward a goal is completely blocked by some circumstance which he interprets as an insuperable obstacle. In this situation the individual expects that he *will not* attain his goal (negative emotion). In depression, the energy level is very low: the individual has "given up" or is "resigned". In this classification it is useful to subdivide negative emotion thus: active negative emotion (anger) and passive negative emotion (depression).

There are other emotions not included in the schemas above. Some mentioned by Spitz (1963) are:

. . . jealousy, envy, possessiveness,
demanding attitudes, anger, rage, love
amusement, laughter, boredom (yawning and
fatigue) . . . doubt, hesitation, quizzical
attitudes, trust and mistrust . . .

(Spitz, 1963, p.59)

In the absence of a classification scheme one is apt to be left confused by the variety and subtle nuances of emotional state our language has words to describe. Fortunately, Spitz's list (and others similar) can be shortened by considering that some of his "emotions" are actually feelings (e.g. fatigue); some are better thought of as attitudes (e.g. trust); others are derived directly from a more primary emotion (e.g. boredom as part of Plutchik's "rejection" dimension mentioned above); and some are a mixture of more primary emotions. With respect to the latter, Plutchik advocates an emotion analogue to the theory of colour mixture:

In order to develop this analogy, it is necessary to conceive of the primary emotions as hues which may vary in degree of intermixture (saturation) as well as intensity, and as arrangeable around an emotion-circle similar to a color-wheel.

(Plutchik, 1962, p.110)

An example, given by Arnold (1960) illustrates how an emotion like homesickness can be related to other more basic emotions:

To guess at these effects [of homesickness], we must consider the kind of emotion to which homesickness might be related: sadness and grief at the absence of what we love; hope alternating with despair, depending on our confidence at a given moment that we may go back or the suspicion that we shall never do so.

(Arnold, 1960, p.224)

But what are the most basic or primary emotions? The most

frequently mentioned in articles on emotion seem to be four:

1. Happiness/Joy/Love.
2. Anger.
3. Depression/Sorrow.
4. Fear.

Cluster 1 represents positive emotions; clusters 2, 3 and 4 represent negative emotions. It is significant that each of these basic emotions (or emotion areas) occurs with distinct physiological reactions (Arnold, 1960). It should be emphasized though that agreement among psychologists as to exactly what the basic emotions are is not complete: some, for example, omit depression from their list; others add on anxiety, and so forth. Despite a lack of complete consensus, it is most probable that these four emotional areas represent the most primary emotions.¹¹

EMOTION AND MOOD

Several authors have distinguished emotion qualitatively from its near 'relatives'. McDougall (1928), for instance, distinguishes emotions from feelings and Shand (1922) distinguishes emotions from sentiments. Some psychologists agree, however, that the difference between emotion and mood is one of duration or quantity, not quality. Arnold and Gasson (1954) define feelings as affective states where the psychological reference is to how a particular object affects the individual's sensory and motor functioning (and not how it affects him as a person). Emotion

¹¹ See McKellar (1968), p.211; Dumas (1948), p.89; Languier des Bancelles (1921); Whittaker (1966), p.115.

they define as an affective state where the psychological reference is to the individual's 'person' not his physiological functioning. Mood is defined as a protracted feeling state which may be initiated by a specific emotion. Arnold and Gasson play down the connection between mood and emotion, treating mood as an after-effect - mainly physiological - of a prior emotion. An earlier article by Lehmann (1914) suggests that the attitude or interpretation that causes a specific emotion (what Lehmann refers to as "a change of the self") is also present in mood:

. . . experiments show that the bodily accompaniments of emotion continue beyond the emotional episode proper. The abnormal physiological state can be observed as long as the subject is aware of his mood. Since no definite images can be found in awareness which are causally related to such moods, it is possible to consider the changed organic sensations as the content of mood. This view, however, does not seem altogether satisfying. The results of my experiments show that any indifferent or deliberate activity, whether carried on for a long or a short time, can cancel out the expression of mood; as soon as this activity is finished, the original mood appears again. It is not easy to see how heart, blood vessels and respiration can bring about this reversal. Only a central cause which has not been abolished by the intervening activity can reproduce the earlier bodily state. Consequently, we are forced to assume that mood, like emotion, depends on a central process, a change of the self, which reflexly arouses an adequate reaction, the physiological accompaniment.¹²

(Lehmann, 1914, p.421)

For Lehmann, then, mood *is* a protracted emotion. Duffy (1941) similarly treats mood as prolonged emotion. In *A Modern Dictionary*

¹² Underlining is my emphasis.

of *Sociology*, Theodorson (1969) defines mood as:

. . . a temporary and often recurrent emotional feeling (happiness, anger, sadness, etc.) that is relatively mild¹³ but persists beyond the situation that created or aroused it.

(Theodorson, 1969, p.263)

It would probably be fair to say that this definition of mood as protracted emotion is the one most commonly held by psychologists.

MOOD DIFFUSION

Emotion has impact on the person experiencing it. According to Whittaker (1966) this impact is of two types: selectivity and dominance. Selectivity describes how any strong emotion causes concentration on certain stimuli, while excluding other competing stimuli.

The old saying "love is blind", for example, refers to the difficulty people in love have in seeing faults or shortcomings in the person to whom they are attracted. The strong emotion of love focuses the individual's conscious awareness on positive attributes, causing him to pay little attention to the negative.

(Whittaker, 1966, pp.117-118)

But whether a person is dominated by the mood of objectless depression or the enraged excitement caused by some object, he always lives more in himself than in his environment because in his depression he does not see things that might please him if he were calm, and because in his 'blind' rage he risks acting against his better intentions.

(Klages, 1950, p.161)

Dominance refers to the characteristic effect of strong emotion

¹³. This does not mean that a mood cannot be intense and long lasting.

in dominating conscious experience.

A terrified person can think of nothing but his fear. He does not eat, has difficulty sleeping, and cannot carry out his normal daily activities.

(Whittaker, 1966, p.118)

Because mood is protracted emotion, mood effects the twin "impacts" of selectivity and dominance.

The social psychological significance of mood is that it permits mood diffusion to occur. It makes it possible for emotions generated in a specific situation to "live beyond" that situation and influence the individual in other and different situations.¹⁴

If we return to the quote by Lehmann, above, we note:

. . . experiments show that the bodily accompaniments of emotion continue beyond the emotional episode proper.

(Lehmann, 1914, p.421)

Duffy has explained how this diffusion or spread of mood from one situation to another occurs in depression:

[In depression] This lack of responsiveness, this low energy level, may persist for a considerable length of time and may affect the individual's responses to other goals which are not in themselves unattainable. Because the individual has given up hope of reaching some highly desired goal, other goals have lost their appeal. There is no longer sufficient 'motivation' for normally vigorous action.

(Duffy, 1941, p.286)

An example of anger mood diffusion is recounted in detail by

¹⁴. The term mood diffusion as used here does not refer to the spread of a mood from one person to another: it refers to the carrying of a mood from one situation to another by the same person.

Karl Menninger in his book *The Vital Balance*. Out driving with his family Menninger accidentally runs into the back of another car. He experiences fright, then anger (when he realizes no one has been hurt) at the other driver. This anger is intensified by the rudeness of the other driver who points out (correctly) that the accident was Menninger's fault.

In embarrassment and relief, no doubt, he laughed. This greatly intensified my anger and I felt impelled to do something to change his arrogant, callous, unrepentant manner--hit him, perhaps. This being both imprudent and impossible, I asked in a tone of forced calmness for his name and address. He refused to give it, retorting that the accident was my fault, and it was just luck that I had not damaged his car. This, insult added to injury, excited in me a painful degree of suppressed rage, plus mortification at my helplessness to express it effectively. Yet there was nothing to do but to note down his license number and drive on in silence.

Well, scarcely silence. Driving along, acutely uncomfortable, I recited the entire event to my wife (who, of course, had seen and heard it all). I emphasized the recklessness of the man's driving, saying nothing about the fact that I was obviously driving too close behind him for safety. (I kept myself completely oblivious of this fact for some time, and even when my wife suggested it a little later, I rebutted it vigorously.) I proclaimed the danger of sudden slowing in traffic. I formulated various retorts that I should have made to the man when he accused *me* of being careless. I repeated over to myself several times his license number, which I had noted, and resolved to call the state Vehicle Department to get his name, despite his refusal to give it. I would "do something about it." Fantasies of *what* I would do raced through my mind: I would find out all about him and prove that he was an incompetent scurrilous ne'er-do-well who ought not to be permitted to have a car, let alone a license. I would report him to the police. I would write him a vitriolic letter.

Evidently these Walter Mitty fantasies of direct action had relieved the tension somewhat by the time we had arrived at my

father's house. I described the event at supper, passing over the unpleasantness lightly. It did not seem quite so important now. It recurred to my mind, however, several times during the evening as we were playing cards, and I noticed that I felt a little shaky and uneasy. That night I did not go to sleep immediately, and a few more fantasies returned, but when I did fall asleep I slept well. (I may have dreamed about the episode, although I do not recall doing so.)

The next morning it all seemed amusing. But it was obviously still on my mind. I told several people about it as a joke on myself--how I had averted an accident by skillful driving only to be accused of having almost caused one! Gradually other matters claimed my attention more completely, and I ceased to think at all about the event. Then, an evening or so later, while I was engaged in teaching a psychoanalytic seminar, the whole thing suddenly popped into my mind as an example of something we were discussing and seemed *most* apropos!

Some tension remained, even after this controlled distribution of the aroused aggression, and various well-known means of tension-reduction were employed such as talking out, repetition, humor, and intellectualization. We shall shortly discuss these systematically. Afterward the incident rapidly paled in importance and vividness for me, and only at the insistence of my co-authors is it used in this chapter, because it now seems almost unreal.

(Menninger, 1963, pp.131-132)

Ainslie Meares describes numerous examples of mood diffusion in his book *The Way Up* which deals with interpersonal problems in business:

The man has a bad time at work. He is frustrated and hostile; but he controls his hostility because his job depends on it. But at home his wife makes some minor slip and all his hostility is vented on the innocent woman . . . Similarly an executive may be frustrated at home, and vents his pent-up anger on some junior at work. It is all so simple; but it happens so frequently. And

it is just because people have not learned to cope with themselves . . .

Sometimes people like to think that their domestic life and their business life are water-tight compartments quite independent of each other. This is simply not true. We live life as a whole. Tensions and anxieties which arise in one part are carried over to the other . . . everybody brings to work with him the nervous tension which is created in the home.

Anxiety in the mind affects the muscles of the body. A quarrel at home, and it takes longer to sign the cheques in the office. A setback from the boss and one's sexual response may be impaired. Anxiety can seep through our whole life.

(Meares, 1970, pp.68-78)

These quotes from Meares are significant because they underline the occurrence of diffusion between the work organization and one's family life and personal environment. In these examples the mood diffusion occurs in two directions: organization to home; home to organization. Disparate groups are linked by men who "carry" their moods.

This mood diffusion seems to occur because of man's capacity for recall and imagination; two cognitive activities which put him in touch with past and future (anticipated) situations thereby "bringing" these situations into his "present". Morgan and King provide an illustration:

Human beings, in the third place, are particularly prone to anxiety because they have the ability to recall and imagine experiences. By thinking of fear-provoking situations that have happened or might happen, people elicit in themselves the same fear or anxiety that they would have if they were in the real situation.

(Morgan and King, 1965, p.257)

The role of thought in mood diffusion is further borne out by Whittaker:

. . . man not only reacts to objects and events immediately present, but also to symbols of these events or objects that he carries in his mind. Thus, a stimulus for fear or anger need not be present to create intense emotions in man - an idea or memory may be just as effective as some concrete visible stimulus in producing emotion. A person who becomes angry or fearful at the office may continue to be angry or fearful when he is at home. He may continue to react as if the anger- or fear-producing stimulus were still present, and this reaction may persist for days or even months.

(Whittaker, 1966, p.130)

We are reminded of Hamlet's phrase that "thinking makes it so."

An example from Lindgren, Byrne and Petrinovich (1961) shows how moods of love and anger can diffuse from the situations in which they originate to other situations which are considerably altered by the presence of the "alien" mood:

The idea that emotional behaviour is disorganizing probably stems from incidents like these. A taxpayer who expected to get a five-dollar refund for overpayment of income tax was surprised to get a check for a million and five dollars in the mail. It turned out that a lovelorn clerk had inadvertently both punched a wrong key in making out his check and omitted punching a key for a check to be sent to a large corporation, and the errors balanced. The errors should have been caught by the accountant in charge of the office, but he had just concluded an angry telephone conversation with his wife. Emotional factors certainly had disorganizing results in these two events - not because love or anger are inherently disorganizing, but because they organized the two individuals for something different than what they were doing. The clerk was emotionally organized for activities related to being with her boy friend, and the accountant was organized to do battle with his wife. In both instances they were organized for activities at cross purposes with their assigned responsibilities.

(Lindgren, Byrne, and Petrinovich, 1961,
p.215)

The essential process in this mood diffusion example is that both clerk and accountant were *thinking* about situations (unconnected with their jobs) that produced in them a mood sufficiently strong to disrupt their job activity.¹⁵

That the above examples are all anecdotal is testimony to the virtually complete absence of empirical research on mood diffusion. Despite numerous examples of mood diffusion in social science literature, there has been, to this researcher's knowledge, no attempts to empirically measure and clarify the mood diffusion process. The reason for this state of affairs is possibly attributable to the few studies (until recently) on emotion in small groups. The reliance of early small group researchers on small, temporary, laboratory groups that lasted only a few hours and generated little emotional data, is probably a key reason for the absence of research on emotion on small groups. These transitory experimental groups were probably not very emotionally involving; and where no or little emotion is produced, none or little is observed; the researcher's conclusion is (wrongly) that emotion is not a terribly relevant variable.

One of the factors influencing the lack of research on emotion in sociology, is the belief by many sociologists that personality and related variables like emotion are not an appropriate field for sociological research. By defining emotion as "psychology" it is magically removed from the researcher's set of variables for investigation. This attitude still persists

¹⁵. For an example of mood diffusion between T-group and environment, see Mills' discussion in Chapter III.

among some sociologists despite the presence of a rationale - put forward by several sociologists - for incorporating personality and other "psychological" variables within a sociological framework. Parsons (1964) in *"The Superego and the Theory of Social Systems"* in *Social Structure and Personality* advocates bringing the theory of personality and the theory of the social system within essentially the same general conceptual scheme. Inkeles (1959) in an article titled *"Personality and Social Structure"* advocates the articulation of sociology and psychology for certain specific purposes under specific conditions. He writes:

But the action of individuals in any situation are personal, however much they reflect the determining influence of the social environment. And that environment, in turn, can be reflected in individual action only to the extent that it is mediated through the personal system as personality. A full understanding of any social situation and of its probable consequences, therefore, assumes, a knowledge not only of the main facts about the social structure - the gathering of which is presumably the special province of sociological study - but also of the main facts about the personalities operating in that structure. What is required, therefore, is an integration or coordination of two basic sets of data in a larger explanatory scheme - not a reduction of either mode of analysis to the allegedly more fundamental level of both.

(Inkeles, 1959, p.273)

We have already noted the incisive comments of Slater and Homans, (above) with which this researcher is in complete agreement.

The study of mood diffusion requires the analytic and conceptual tools of both psychology and sociology. When mood passes from one group situation to another, we are dealing with

a "psychological variable" (mood) in a "sociological context" (intergroup and small group situations). This problem can *only* be investigated by employing some sort of synthesis of psychology and sociology. It is easy to see how a rigid definition of what is appropriate research material has restricted the investigation of mood diffusion among sociologists and psychologists alike.

Despite the absence of empirical research on mood diffusion, there is one important study of attitude diffusion which clarifies the mood diffusion process. Druckman (1967) investigated dogmatism, prenegotiation experience, and simulated group representation as determinants of dyadic behaviour in a bargaining situation. The object of this research was to investigate the relative contribution of personality (dogmatism) and situational variables as determinants of bargaining behaviour in a non-zero-sum, simulated, labor-management bargaining game. Druckman compared the behaviour of groups that had formulated a bargaining strategy before entering the bargaining dyads (unilateral position), with groups that had not previously decided on a strategy, but had instead taken a bipartisan stand in looking at "both sides of the case": labor's side and management's side (bilateral position). After being subjected to one of the two types of prenegotiating experience, bargaining dyads were formed with one member from each group: labor and management, so that the members of each dyad had had the same prebargaining experience. In the bargaining between participants with opposing "group" interests that subsequently took place, Druckman found that strategy experience (unilateral prenegotiating experience) before bargaining led to a hardening of positions as indicated by measures of

agreement and amount of yielding. Bilateral pre-negotiating experience, however, resulted in faster agreement and more yielding: overall a more flexible bargaining position. Druckman concluded that these results were a function of pre-negotiating experience: the type of external situational stimuli prior to the small group influenced the small group behaviour. In short, there was a diffusion of specific attitudes from the environment into the small group (dyad). Druckman's study is important because it empirically demonstrates the diffusion process whereby a person carries a mood, attitude, idea or behaviour from one group situation to another, where it acts as a central determinant of his behaviour in the new situation. Druckman points out that this kind of diffusion is of great practical importance, having relevance for diplomats and professional bargainers in industry and government. The impact of attitude diffusion on decision makers has ramifications extending to the broader range of groups they represent: whether a country, an organization, a union, or a small group. A criticism that can be made of Druckman's study is that it only investigates simulated groups, making generalization to "real life" groups difficult. What is needed now is research into diffusion of attitudes, ideas, moods, and behaviours in a variety of ongoing primary and secondary groups having their own developmental history.

In the next chapter a model of the mood diffusion process and some hypotheses and areas for generating hypotheses are presented.

CHAPTER V
THE MOOD DIFFUSION MODEL

The object of this study is to investigate the extent of, and the factors affecting, mood diffusion between the small group and its environment. The small group selected for investigation (for reasons discussed in Chapter III) is the T-group. The rationale for studying emotion (as opposed to overt behaviour, ideas, goals or values) as a diffusable item is that:

1. Emotion is highly diffusable and has a significant impact on the person experiencing it.
2. Theoretically emotion diffuses throughout the life of the T-group. This is in contrast to the learning of T-group skills or internalization of laboratory norms which occur at a particular phase of group development. By focusing on a more frequently diffusing item common to all human groups, the theoretical gains are likely to be greater (i.e. more applicable to a variety of small groups).
3. Despite the presence of open system small group models emphasizing the possibilities of mood diffusion between group and environment, group-environment emotion research has been widely neglected.

The specific emotions selected for study are: anger, euphoria (positive emotions of love, happiness, contentment) and

depression.¹ The rationale for this choice is that these seem to be three of the four most common emotions. Fear was eliminated because it was felt it would not occur frequently enough to warrant its inclusion. The three emotions selected for empirical investigation (Euphoria, Anger, and Depression - also referred to as E, A, D) represent the major dimensions of emotions reviewed in Chapter IV. In the course of the study, however, these basic emotions are related to other significant emotions (e.g. anxiety)² and behaviours (e.g. learning of interpersonal skills).

A SMALL GROUP - ENVIRONMENT MODEL

The small group model employed in this study is a combination of the open system models of Mills (1969) and Dunphy (1972). Both models stress interaction with environment, and Mills' model, in particular, emphasizes emotional interaction. What these models do not show is the nature of articulation between small group and environment. In organizing this study a structural model of small group-environment - derived from social network theory - was used.

Bott (1957) defined the social network or external network as follows:

In an organized group, the component individuals make up a larger social whole with common aims, interdependent roles, and a distinctive sub-culture. In network formation, on the other

¹ More detailed definitions are given in Chapter VI.

² Sullivan (1954) has pointed out that anxiety quickly turns into behaviour that diminishes the anxiety e.g. anger.

hand, only some, not all, of the component individuals have social relationships with friends, neighbours, and relatives who may be designated as A, B, C, D, E, F....N. One will find that some but not all of these external persons know one another. They do not form an organized group in the sense defined above. B might know A and C but none of the others; D might know F without knowing A, B or E. Furthermore, all of these persons will have friends, neighbours and relatives of their own who are not known by family X. In a network the component external units do not make up a larger social whole; they are not surrounded by a common boundary.

(Bott, 1957, pp.58-59)

This definition is very similar to Morris' concept of the social tribe which defines a city as "what seems to be a great seething mass of bodies, but what is in reality an incredibly complicated series of interlocking and developing tribal groups." (Morris, 1967, p.186). Similarly, Caplow, Stryker, and Wallace (1964) define ambience as the unorganized network of persons who interact with a designated individual in a designated context. In discussing the neighbourhood ambience, the authors state:

All the neighbours with whom a given subject sustains interaction above a stated minimum level comprises a meaningful collectivity, whose members are not necessarily in interaction with each other. In some cases the members of these collectivities are completely disconnected and have no mutual relationships except through the subject. In other instances, each member may sustain interaction with many others.

(Caplow, Stryker, and Wallace, 1964
[quoted in Theodorson, 1969, p.10])

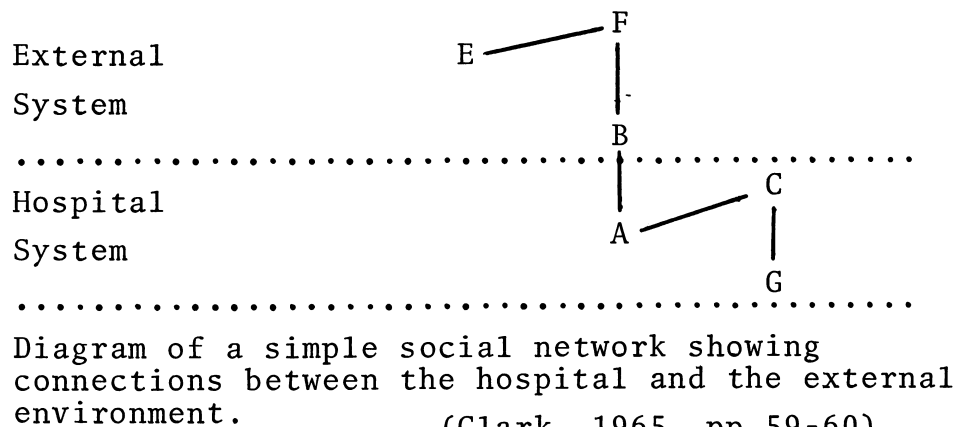
Clark (1965) has applied Bott's concept of social network to the hospital organization:

Looking at the hospital as an open system influenced by the external environment, that is, the wider community, it becomes necessary to take account of that part which directly

affects the patients. A convenient tool for this job is the concept of social network (Bott, 1955, 1957). The patient is in touch with people both inside and outside the Unit; these in turn have social contacts of their own. The attitudes and behaviour of the focal person are influenced directly by those with whom he has close social ties. He is also influenced indirectly by more peripheral people who are in touch with those who do influence him directly. Consequently, he is affected by his whole social network.

The figure below is a diagram of a simple social network in which A is the focal person. He has direct ties with B and C; and indirect contact with E and F through B and with G through C. The boundary of the hospital system is shown by broken lines to represent permeability; there is a two-way influence process between the parts of the network internal and external to the Unit. When it is appreciated that every member of the hospital community is embedded in his own social network it is apparent that behaviour within the hospital is affected by all these relationships. It becomes clear that the internal functions of the hospital are subject to the opinion and attitudes of the wider community, exerted through public authorities and through the social networks of both patients and staff. Thus the hospital must be regarded as an open system.

FIGURE 1



(Clark, 1965, pp.59-60)

Interestingly, Clark defines the external environment in social terms: it is the interpersonal networks of the patients and staff.

Social network, as used in this study, is defined as follows: An individual's *social network* is made up of all his group encounters (with other persons) as they occur serially through time (e.g. a day, a week, etc.). The social network is made up of the *primary group network* and the *secondary group network*. An individual's primary group network is made up of all his primary group (intimates and close friends) encounters as they occur serially through time. This primary group network is interspersed with a secondary group network made up of a) frequent, regular contacts with acquaintances and other non-intimates, and b) transient contacts with acquaintances and other non-intimates, as they occur serially through time. This social network is the communications system along which mood diffuses between groups.

The social network of a single small group is shown in Figure 2 below.

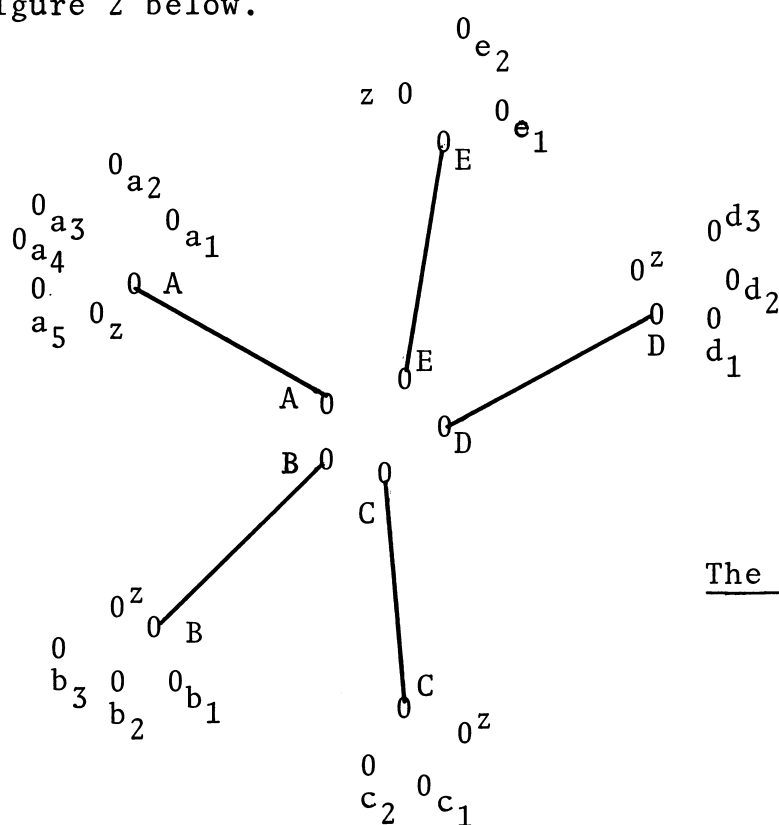


FIGURE 2
The Social Network of
a Small Group

The small group, shown in the centre, has members A-E. The specific primary and secondary group networks of each member lie out on the rim of the "spokes" shown, so that the overall picture is that of a wheel - with none or few of the "outlying" social networks in contact. The environment of the small group shown here, then, is its members' social networks. These networks are only connected with each other *indirectly*, through the small group.

Member A, for example, has the largest social network. The small a's indicate persons or groups in A's social network. They are not necessarily in contact with each other. The z shown in each of the five social networks represents factors in the non-social environment that can affect, or be affected by, the moods of the small group members, (e.g. a fire or other accident, illness, sudden change in weather may alter significantly an individual's mood; moods of anger and depression can greatly hinder an individual's capacity to perform cognitive tasks, that are easily completed when a mood of mild euphoria prevails). The social and the non-social environments together make up the small group's environment. The "spokes" shown in Figure 2 are better thought of as links across time: person D will be present with the small group (members A-E) at time₁; at time₂ he may leave the group and spend a period of time by himself having lunch (i.e. he may still be in the presence of others, but not directly interacting with them); at time₃ he may be at home interacting with his family designated as d₁; at time₄ he may be working on a mathematical problem associated with his job (i.e. a non-social factor);³ finally at time₅ D may be back with his small group

³•The term "non-social" is used here to mean a situation not involving direct interpersonal interaction. This does not mean that D's success in solving the problem, and his

(members A-E). Member D is the communicating link through time between all of these disparate social (and non-social) encounters. If he develops a strong mood in small group he may carry it (i.e. the mood diffuses) into another setting where his behaviour may be significantly altered by the mood.

THE MOOD DIFFUSION PROCESS

A more specific example of mood diffusion is shown in Figure 3 below:

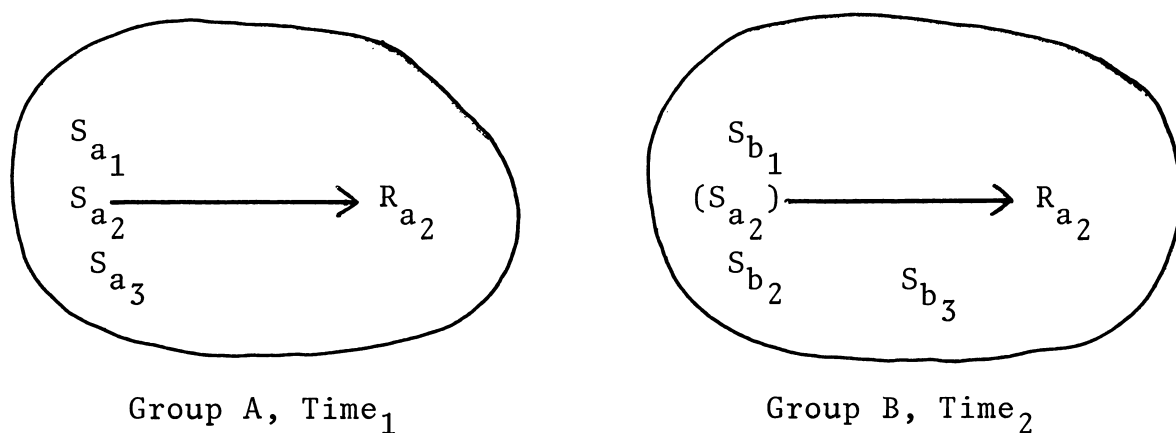


FIGURE 3 An Example of Anger Diffusion

In this diagram: S = stimuli from the group environment

S_{a1} = a specific stimulus in group A

S_{b1} = a specific stimulus in group B

S_{a2} = an "anger" stimulus in group A

R_{a2} = an "angry" response by a group member to an "anger" stimulus

In this example Mr. "x" becomes angry when confronted in

orientation to the task, do not have social significance or are not affected by social factors.

group A ($S_{a_2} \rightarrow R_{a_2}$). When "x" goes to group B he still feels angry and upset and feels so *during the duration* of group B although there are no objective stimuli originating in group B to trigger these angry feelings i.e. "x" is still *thinking* about S_{a_2} ; his memory of S_{a_2} and the emotional importance of it makes possible the continued R_{a_2} in group B.

An example of euphoria diffusion for two persons is shown in Figure 4. The figure shows two rectangular planes intersecting at $time_3$. Each plane represents a boundary within which interpersonal encounters occur for persons A and Y respectively. Whenever A, for example, has an encounter with someone, this is indicated by placing symbols for those persons on the plane surface. The base of each rectangle shows the time dimension. All persons shown on the rectangle on a vertical line above a particular time are in the same interpersonal encounter (e.g. at $time_1$ A and B are in a single encounter; so are x and y; at $time_3$ A and Y are present in the same encounter - therefore there is an intersection between the plane surfaces for these two persons. The vertical axis on each rectangle shows intensity of mood ranging from negative moods at the base to positive moods at the top. At $time_1$ A and B are together, but have different moods in the encounter; at $time_2$ A and B exhibit the same negative mood. During the same time periods X and Y display an identical mood pattern. Jumping ahead to $time_4$ we see that the A-B and the X-Y dyads both exhibit positive moods. The explanation for this increase in positive mood for A and Y in their relationships with B and X (respectively) lies in the positive mood encounter between A and Y at $time_3$. In this example, a positive mood has diffused

from the A-Y encounter at time₃ to the A-B and X-Y encounters at time₄. This diagram represents a simplification of the mood diffusion process which is extremely difficult to chart over time for even a small group.

These examples of diffusion illustrate the central idea of this study: in order to understand an individual's or a group's behaviour fully; in order to explain why a specific type of behaviour is occurring, you must discover the amount of diffusion influencing the situation.

The formula by which Lewin explained behaviour was $B=f(P.E)$ where B is behaviour, P is the personality of the actor), and E is the environment. Mills expanded this formula to read $E_g = f(P.G.C)$ which is translated as: a given group event is a function of the interplay among elements in personalities, the group, and the group's context.

A formula that takes account of diffusion is the following:

$$B = f(P.G.C.PDS)$$

where B is behaviour, P is personality, G is the group, C is that aspect of the environment in direct contact with the group during the group encounter (e.g. the "environment" of the room in which the group meets, an intrusion by an outsider), PDS is the effect of the *prior diffusing situation*, that is, the diffused mood, idea, or behaviour that is "carried" into the group by any member. PDS is one aspect of the environment: it may be that diffusion is the only way for those aspects of the environment not immediately present to manifest themselves (i.e. diffusion is the process by which the effects of external environment on specific members

manifest themselves).

PDS may be further defined as:

$$P_{t_1} \cdot G_{t_1} \cdot E_{t_1} \rightarrow PDS_{t_1 \dots n}$$

This formula indicates that the diffused mood (or other "item") PDS is a product of personality-group-environment⁴ at time₁, but lasts beyond time₁ to time₂, time₃ and so forth. It should be remembered that many (if not most) of the "effects" of the environment that impinge on a specific small group, may themselves have originated in other small group situations.

The PDS - the diffused "item" - is sometimes defined as being part of P, the personality. The rationale for this is that the diffused item is "carried" by the person. This researcher feels that PDS should be separated out as a *separate factor* in the equation because of the influence of $P_{t_1} \cdot G_{t_1} \cdot E_{t_1}$ (i.e. *situational* influence at time₁ - the specific constellation of group, personalities, and environment); because there appear to be other factors than personality that determine whether a mood will be diffused.

HYPOTHESES

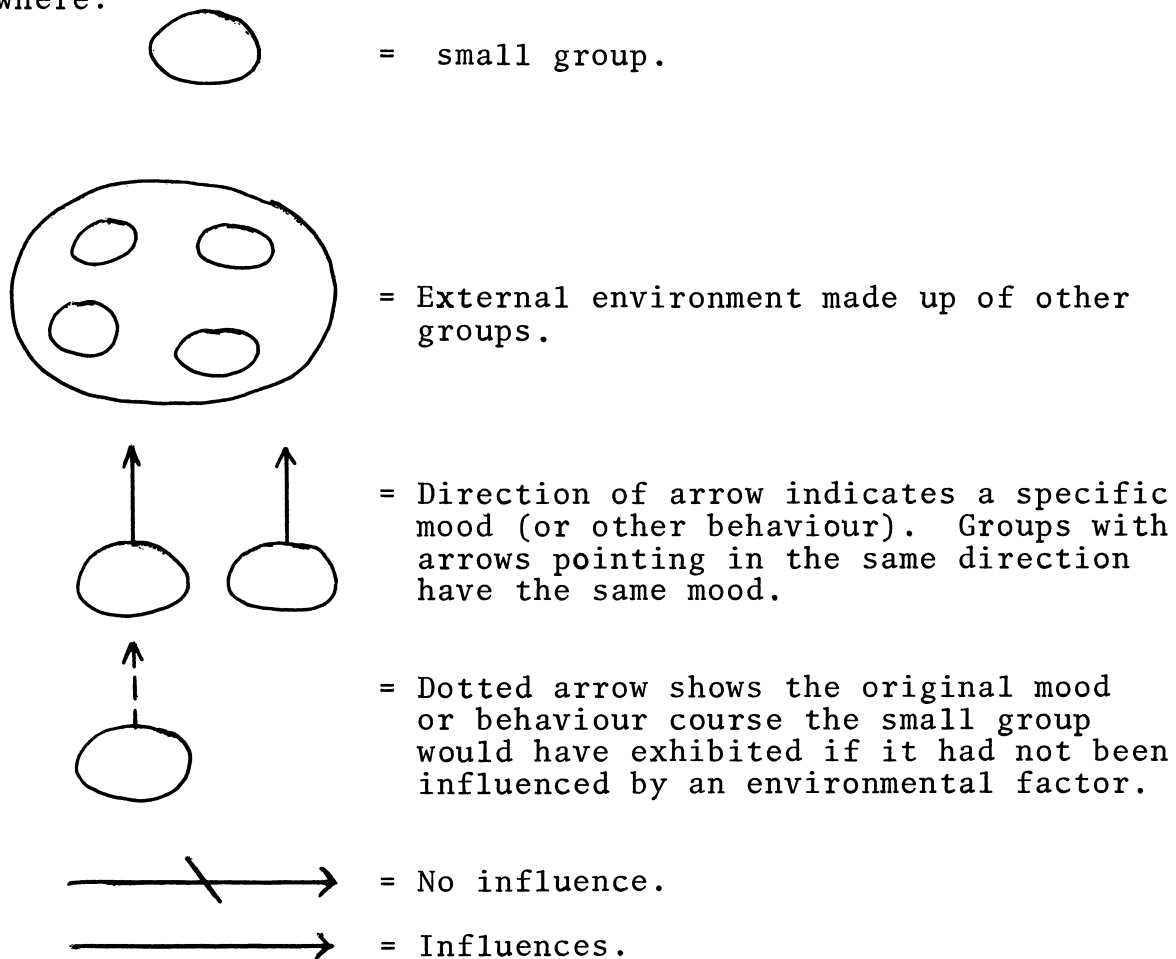
In this section several hypotheses, and areas for investigation for the generation of hypotheses, about mood diffusion are presented. These hypotheses and hypotheses-generating areas fall into four categories: hypotheses about the general relationship

⁴The environment ("E") here includes both direct and indirect effects of the environment.

between group and environment, mood hypotheses, group phases hypotheses, and hypotheses about personality and other "individual" characteristics.

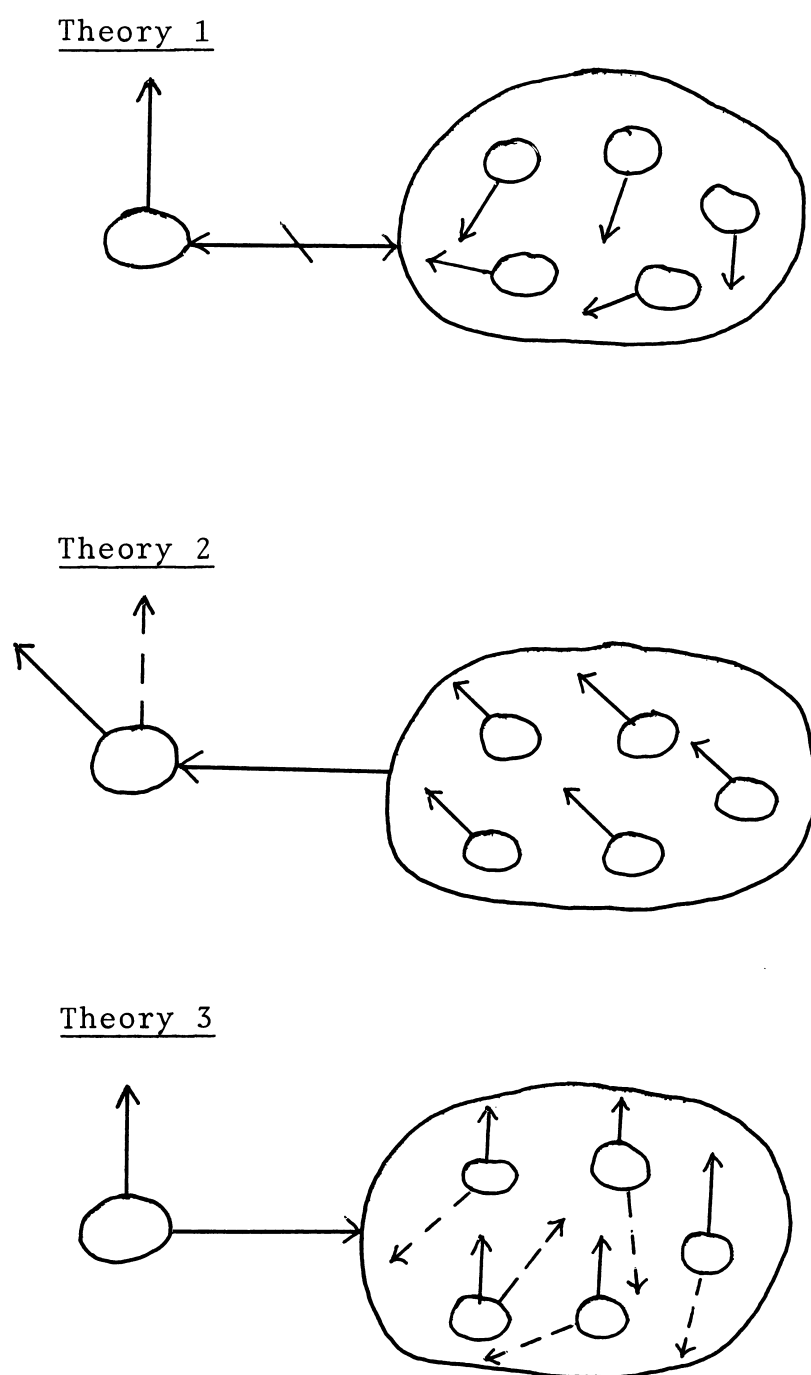
I THE GENERAL RELATIONSHIP BETWEEN SMALL GROUP AND ENVIRONMENT

There are four basic theories about the relationship between a small group and its environment. These are shown in Figure 5 where:



Theory 1 shows the small group developing in a certain direction uninfluenced by (and not influencing) the external environment.

Theory 2 shows the small group "pushed" off its indigenous course of development by the impact of the external environment. Theory



Theory 4 The mutual interaction theory.

FIGURE 5 Theories about the general relationship between small group and environment

3 shows the small group having an impact on its environment so that the environment mirrors the small group. Theory 4 (not diagrammed) postulates mutual interaction between small group and environment: a combination of theories 2 and 3. It should be noted that there is probably some interaction between small group and environment: what theories 2 and 3 emphasize, however, is a marked influence in a certain direction.

From these four theories we can derive two simpler theories about the mood "connection" between small group and environment: the closed system theory and the open system theory. These are illustrated in Figure 6.

The Closed System Theory

External group:	xkmnrt	xkmnrt	xkmnrt
Internal group:	aaaaab	abbbbb	cccccd
	t ₁	t ₂	t ₃

The Open System Theory

External group:	abaaaa	aabbbb	cccccd
Internal group:	aaaaaa	aabbbb	cccccd
	t ₁	t ₂	t ₃

FIGURE 6 The Closed and the Open System Theories

The term *external group*⁵ refers to the small group (e.g. T-group) members while they are not together in the small group (e.g. if the T-group meets on Wednesday from 2-4 p.m., then the external group refers to members during the rest of the week in

⁵The external group is not a "group" in the strict sense of the word. The term, however, is convenient for identifying the members of a specific group while they are not together in that group.

their other social and non-social situations). The term *internal group* refers to the small group members while they are together in their group encounter (e.g. the T-group on Wednesday between 2-4 p.m.). The small letters designate different moods for each of six group members. Persons with the same letter have the same mood. In the closed system theory there is no correspondence between the moods of members when they are in the small group (internal group) and the moods of members when they are away from the group in their separate social networks. In the open system theory as we progress from time₁ to time₃ there is a correspondence between internal and external moods of group members.

Hypothesis 1 is that the open system theory is correct: there will be a correspondence between internal and external moods for T-group members.

This hypothesis is derived generally from the open system small group models of Mills and Dunphy, described in Chapter II. These models indicate that there is a general connection between small group and environment. The hypothesis is derived specifically from Mills' work on emotion connections between small group and environment (Mills, 1964). Implicit in the hypothesis is the notion that where correlation between internal and external moods occurs, the mood correspondence will be due to mood diffusion-mood originating in one situation and being carried into another thereby causing an equalization of mood between the two situations. If, for example, high correlations between internal and external moods for an individual were demonstrated, but no evidence for the actual transportation of a mood from one situation into another found, it would be difficult to accept the hypothesis

as confirmed. Hypothesis 1 is therefore testing the extent of diffusion between small group and environment. With respect to testing extent of diffusion, the hypothesis is derived from Druckman's empirical work which demonstrated similarity of attitude (i.e. bargaining position) between environment and small group because of inward diffusion from the environmental situation, (Druckman, 1967). Related to this is Mills' study which suggests similarity of mood in T-group and environment due to inward diffusion from the environment. If diffusion between T-group and environment is high, regardless of the direction of diffusion, then mood scores for individuals should show high correlation between internal and external moods.

The next hypothesis tests for diffusion direction: the relative impact of small group on environment and vice versa. Theory 2 (diagrammed above) states that the environment has a dominant influence on the small group. Defined in terms of external and internal group, this theory is that member moods in the T-group originate prior to the T-group in their external environment. This is illustrated in Figure 7. This figure represents the T-group meetings as rectangles, and the non-meeting periods as a single line. Small letters represent individual moods in the internal and external group situations. The moods shown in the small group meetings at times_{2,4,6} are all preceded by identical moods among members in the external group situation. External group moods are brought into the internal group situation. This may be called the External Stimulus Theory because the mood responses in the small group are actually a function of external stimuli.

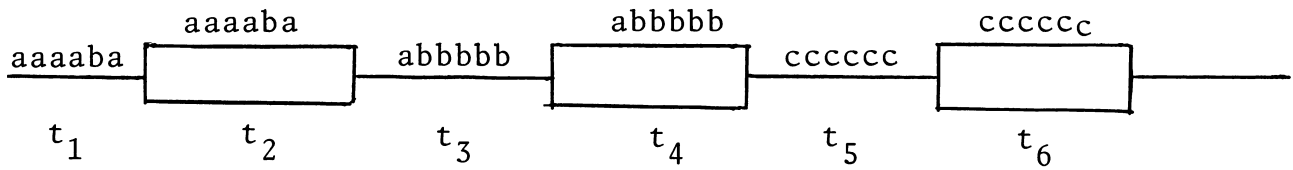


FIGURE 7 The External Stimulus (Inward Diffusion) Theory

Theory 3 (diagrammed above) states that the small group has a dominant influence on its environment. Defined in terms of external and internal group, this theory is that member moods in the external group situation originate in the T-group (the internal group situation). This is illustrated in Figure 8.

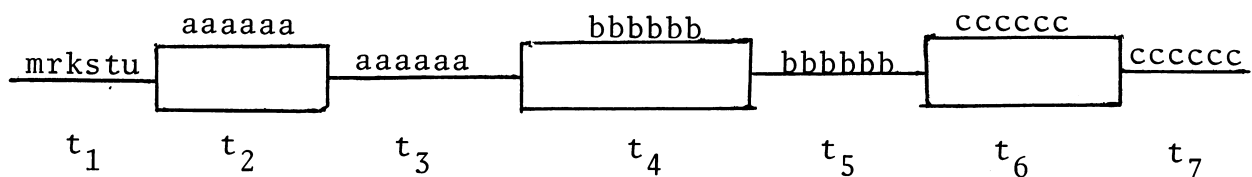


FIGURE 8 The Internal Stimulus (Outward Diffusion) Theory

The moods shown in the external group situations at times_{3,5} and 7 all have their origin in the T-group sessions at times_{2,4} and 6. There is no inward diffusion from the environment: diffusion is outward from the small group.

Hypothesis 2 is that outward diffusion of mood will be greater than inward diffusion of mood.

This hypothesis is derived from the review of the T-group literature (in Chapter III above) which suggests that the impact of the T-group on its environment is greater than the environmental impact on the T-group. This impression, derived from the literature, is partly due to the lack of research done on environmental impact: where no research is conducted on environment, no evidence accrues to support the notion of environmental impact. It is generally accepted, however, that T-groups have high emotional impact on the individual. Unlike other primary groups, the self-analytic group actively seeks the release and expression of emotions such as love and anger through its work norms of openness and honesty. Although the values of openness and honesty exist in other primary groups, these groups perform a more supportive, tension management role. In contrast to this the T-group, while at times being supportive and providing tension release, tends to provide a climate for greater interpersonal confrontation, greater pressure toward exposing feelings - no matter how negative - rather than "covering things up". The T-group provides the individual with an opportunity to release emotions he might have difficulty in expressing in his regular primary groups. Because the T-group provides opportunities for release of difficult-to-release emotions, there is a rationale for considering the T-group as a greater source of mood impact and diffusion than will be found in most social networks.

II MOOD HYPOTHESES

Hypothesis 3 is that negative moods of Anger and Depression will diffuse more frequently than will moods of Euphoria.

One rationale for this hypothesis is that negative moods are known to have a higher level of activation than positive moods, (Morgan and King, 1965). If the mean judged intensities for emotion synonyms provided by Plutchik in Table 3 are summed and averaged for the categories Destruction (Anger), Deprivation (Depression) and Reproduction (Euphoria) - which roughly coincide with the mood categories Anger, Depression, and Euphoria, used in this study - the overall mean scores are: Euphoria (Reproduction): 6.40; Anger (Destruction): 7.80; Depression (Deprivation): 6.40. There is no difference between the rated mean intensity of Euphoria and Depression, but Anger is rated considerably higher than either Euphoria or Depression. The mean intensity of Anger and Depression combined (Negative moods) is 7.10 which is higher than the rated intensity of 6.40 for positive moods (Euphoria).

The similar ratings for Reproduction and Deprivation in Plutchik's study are possibly confounded by the fact that - in terms of energy level - depression is less intense than euphoria (Duffy, 1941). Duffy has pointed out that very low energy levels, such as are characterized by depression, and very high energy levels, such as are characterized in anger, have great impact on the individual. Her research suggests that mild euphoria represents an optimal level of functioning, a moderately high energy level - departure from which, whether upward or downward, has a disorganizing, high impact response. The hypothesis that

anger and depression will diffuse more is derived from the evidence suggesting that they have greater impact than positive moods. This idea is illustrated by the following quote from Harris:

One has to tell a little child over and over again 'I love you', but one 'I hate you' is all that is needed for a life-long negation of any further loving parental advances.

(Harris, 1967, p.249)

Harris' quote brings us to the second rationale for this hypothesis. Negative moods are more difficult to extinguish or resolve because of social norms restricting expression. One is not supposed to show anger, one is not supposed to be depressed: in our culture we are encouraged from childhood to conceal negative feelings. Expressions of anger are especially inhibited by society. All human societies have rules to limit the kinds and direction of aggression that may be expressed, (Whittaker, 1966). In most circumstances direct physical expression of anger is prohibited. A study by McKellar investigated how people expressed the anger which they experienced. "Overwhelmingly", McKellar states, "the commonest reaction was to do and say nothing. Fantasy and imagery might occur, but the subject did not express his anger outwardly in any way. Overt expressions of anger, much rarer, usually took a verbal form" (McKellar, 1968, p.225). Some subjects exhibited a 'delayed expression' response: they sought out a friend or other sympathetic audience and told him of the situation thereby releasing the pent-up feelings in this "safer" environment. This suggests that when anger is provoked social taboos prohibiting direct expression of feelings cause mood to be carried somewhere else. This suggests that there will be a tendency for stress emotions: Anger and Depression, to diffuse

This hypothesis applies to inward diffusion, outward diffusion, and inward and outward diffusion combined (i.e. the hypothesis will be tested under three conditions.

III PHASE MOVEMENT HYPOTHESES

These hypotheses are concerned with the way the group makes a selective diffusion impact on members over time. The question being investigated is: Are particular phases associated with the diffusion of particular moods?

Hypothesis 4:

- 4(a) Weeks during which diffusion of depression is high will be characterized by low positive moods and high negative moods in the T-group.
- 4(b) Weeks during which diffusion of anger is high will be characterized by low positive moods and high negative moods in the T-group.
- 4(c) Weeks during which diffusion of euphoria is high will be characterized by high positive moods and low negative moods in the T-group.

This hypothesis tests for a 1 to 1 association between the type of mood developed by the group and the type of mood diffused: if negative moods are high in group, then negative moods will tend to diffuse, if positive moods are high in group, then positive moods will tend to diffuse.

The rationale for this hypothesis is derived from Mills (1964) who reports that strains and dissatisfactions from outside the group can be brought into the group and there cause similar moods. Since there is, however, no real empirical evidence to support this hypothesis, it is best regarded as an hypothesis

generating area.

Hypothesis 5 is that weeks of high outward diffusion will be characterized by the predominance of particular behaviours in the T-group.

Outward diffusion of mood represents an impact made by the T-group on its members: it is likely that these weeks of high impact have particular characteristics (e.g. a dominance of certain phase behaviours). An attempt will be made to generate hypotheses specifying the characteristics facilitating diffusion impact.

The rationale for this hypothesis is derived from T-group studies suggesting that the learning impact of the T-group comes during work oriented, internalization phases (Tuckman, 1965; Thelen and Dickerman, 1949; Bradford, 1964). The presupposition underlying this hypothesis is that the phase movement, the developmental stages in the group's life, influence impact.

IV PERSONALITY AND INDIVIDUAL HYPOTHESES

This hypothesis-area is concerned with discovering the particular characteristics of T-group members in the following diffuser categories:

1. High diffusers
2. Outward diffusers
3. Outward/Inward Euphorics
4. Outward/Inward Depressives
5. Outward/Inward Aggressives
6. Outward/Inward Negatives
7. Depressives

8. Euphorics

9. Aggressives.

The characteristics predicted as affecting diffusion are: personality, small group behaviour, degree of involvement, characteristics of social network, and small group centrality. The rationale for investigating the first three areas is derived from the review of the T-group literature in Chapter III which indicates their relevance for group impact. The rationale for investigating the T-group member's social network is derived from Bott (1957) whose research showed that type of marital relationship chosen in a family was related to certain characteristics of the social network of the family rather than to internal factors. Centrality is predicted to be a measure of noticeable involvement and participation in the T-group and therefore related to group impact and diffusion.

These five "characteristics" are best thought of as hypothesis-generating areas since no specific hypotheses are entertained about the exact personality (or other) characteristics of the different diffuser types.

In the next chapter the general research design and operational definitions of the variables mentioned above are discussed.

CHAPTER VI

RESEARCH DESIGN

THE GROUPS

The empirical investigation is concerned with two sections of a University of New South Wales Master of Business Administration (MBA) course "Interpersonal Skills" which met for fourteen weeks in the latter half of 1972. The course consisted of a T-group which met on Tuesdays from 1-4 p.m. during weeks 2-14, and a more formal lesson-task discussion group which met on Wednesdays from 5-6 p.m. during weeks 1-14. A detailed description of the course aims and format is given in Appendix A.

During the first week a T-group was not held: the students met as a single group and were divided randomly between the two instructors. The two instructors were Professor Dexter Dunphy, Head, Department of Behavioural Science, School of Business Studies, University of New South Wales, and Mr. Barry Larkin, management consultant. In the T-groups the instructors adopted the trainer role of refraining from formal teaching, instead pointing out to the group, where appropriate, significant group and individual issues that may have been overlooked. The instructors acted as resource persons aiding the group's investigation of individual behaviour and interpersonal processes within the group.

Carl's group was made up of twelve members (including the leader), only one of whom was female.¹ Four members were unmarried,

¹•In the remainder of the study all group members, including instructors, will be referred to using fictitious names to ensure confidentiality.

and the average age of members was 30. This group held their T-group meetings in a large lecture room which also was used for the Wednesday sessions. Mark's group had thirteen members (including the leader), all males. Two members were unmarried, and the average age of all members was 31. Comparing the two groups on age, in Carl's group eight members were under 30; in Mark's group five members were under 30. Mark's group met in a comfortable office two floors above the room in which Carl's group met.

Both instructors were about the same age (in the 30's). Carl was the more experienced trainer of the two. Mark was physically larger than Carl (and all the other members) and gave an impression of strength, power, dominance. Carl was of slighter build than most group members and displayed a quieter, less assertive personality than Mark.

The following sections discuss the measuring instruments used in the study and operationally define the key variables mentioned in the previous chapter.

I INSTRUMENTS USED TO TEST THE GROUP - ENVIRONMENT HYPOTHESES

In testing the group-environment hypotheses the polar word questionnaire shown in Appendices C, E and G was used to measure mood in the T-group and in the environment. Each questionnaire contains the same twelve seven-point bipolar adjectives designed to tap different aspects of Euphoria, Anger, and Depression. Table 4 shows the moods each adjective is related to.

<u>Euphoria</u>	<u>Anger</u>	<u>Depression</u>
Like	Dislike	Apathetic
Satisfaction	Angry	Sad
Loving	Rejecting	Pessimistic
Happy	Tense	Dissatisfaction
Accepting		
Relaxed		
Optimistic		

TABLE 4 Polar Word Adjectives Measuring Euphoria, Anger, and Depression

The questionnaire was scored as follows. A check placed in one of the three spaces closest to an adjective was scored 3 for the closest space, 2 for the second space, and 1 for the third space. Checks placed in the fourth space were scored as zero. Checks placed in the fifth, sixth, or seventh places were also scored as zero for the adjective we began with: since a check placed in these three spaces is in the "area" of the opposite polar word, for that adjective the score could be 1, 2, or 3 (3 being the score for the space closest to the polar word. For example, in the first Happy-Sad semantic differential shown below, the Happy score is 2; the Sad score is 0. In the second semantic

Happy	_____	_____✓_____	_____	_____	_____	_____	_____	Sad
Happy	_____	_____	_____	_____	_____	_____✓_____	_____	Sad

differential, the Happy score is 0; the Sad score is 2. The maximum possible score on any adjective is 3. After calculating a score for each adjective, these scores were summed and averaged

to obtain a mean Euphoria, Anger, and Depression score (the adjective scores being placed in the mood categories shown in Table 4). Finally, the Anger and Depression scores were subtracted from the Euphoria score to obtain an overall mood index score called Positive-Negative (Pos-Neg). Positive-Negative scores have a maximum of 3 and a minimum of -6. It was felt that a mood connection between T-group and environment could be more easily traced by using such a broad indicator of mood. It should be noted that environment here is defined as the T-group member's moods in his external group situation. On the original *Daily Mood Checklist* questionnaire a set of polar words was given so that each member could rate the mood of any significant other he was interacting with. This mood data on "other persons" was not used because of the difficulty in establishing the validity of the evaluation made by the T-group members.

The *Postmeeting Mood Checklist* (Appendix C) was filled out by each group member at the end of the Tuesday T-group session. The *Weekly Mood Checklist* was filled out by members at home at the end of each *odd* week. The *Daily Mood Checklist* was filled out at home at the end of each day (Monday-Sunday) during *even* weeks (e.g. weeks 2,4,6,8,10,12,14 of the study). This questionnaire was used to obtain more detailed information on daily moods experienced in significant events and to tap specific characteristics of the T-group member's social network.

The *Daily Mood Checklist* was used only in even weeks because it was felt that filling out the checklist every day during the entire study would add unnecessarily to the work burden of students already heavily involved in assignments from the Wednesday sessions

in the course and in outside work commitments.

During week 2 of the study each member completed both a *Daily Mood Checklist* and a *Weekly Mood Checklist* so that the two could be compared. A rank order correlation for the two checklists calculated for the members of each T-group yielded correlations of .60 (significant at .05 level, one-tailed test) and .76 (significant at .01 level, one-tailed test). A Wilcoxon Matched-Pairs Signed-Ranks test on both checklists showed no significant difference at the .05 level (two-tailed test) for either group. The two checklists appeared comparable in what they were measuring.

The measuring instrument used to test hypothesis 2 which pertains to inward/outward diffusion of mood will be described in the next section.

II INSTRUMENTS USED TO TEST MOOD HYPOTHESES

The *Environmental-T-group Mood Influence Questionnaire* (also called the Remembered Mood Diffusion Questionnaire) shown in Appendix K is used to measure specific instances of mood diffusion. The questionnaire was administered during the three weeks following the termination of the T-group and asks the members to recall specific instances of mood diffusion between T-group and environment that stand out in their memories. The classification of mood diffusion instances into inward diffusion vrs. outward diffusion categories was made by the respondent. After collection, the Remembered Mood Diffusion (RMD) examples were classified by the researcher into the three categories: Euphoria, Anger, and Depression. Which category an RMD example was placed in depended on the extent to which it reflected the relevant adjective

descriptions shown in Table 4 (above). An inter-rater reliability comparison (using a second rater) yielded 88% agreement on classification of 41 RMD instances. An intra-rater reliability comparison conducted after an interval of three months yielded an agreement of 95%. After lengthy discussion on the reasons for non-agreement on 5 of the 41 examples, both raters were able to agree on appropriate classification of the 5 cases. This assured full use of all examples. Four of the non-agreed upon cases were probably due to the second rater's unfamiliarity with the data. (This rater did not practise coding before the reliability check.) The remaining case was ambiguously worded by the T-group member, making two classifications seem possible: Euphoria or Depression. A check was made of this person's polar word score for the same incident in his *Daily Mood Checklist* which confirmed that the RMD instance was Euphoria.

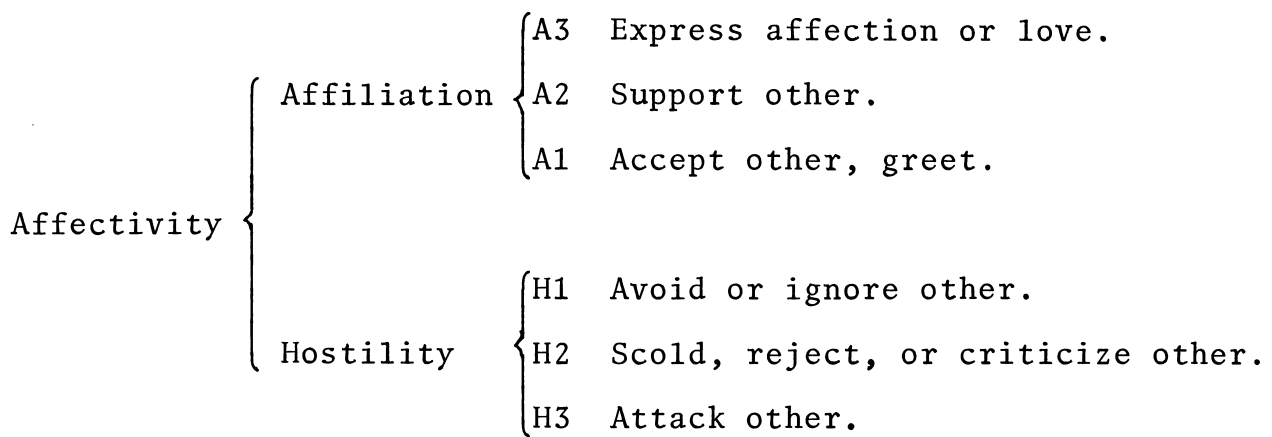
For each group RMD examples were summed for: inward, outward, total inward and outward, inward/outward E,A,D, and inward/outward positive-negative mood diffusion.

III INSTRUMENTS USED TO TEST PHASE MOVEMENT HYPOTHESES

At the end of each T-group, before leaving, each member filled out a *Postmeeting Report* shown in Appendix D. These reports were then content analyzed using a modified form of Dunphy's *Interpersonal Action Analysis* category scheme for coding interpersonal behaviour in small groups. (Dunphy, 1972). The categories are shown in Table 5.

TABLE 5 Categories for Interpersonal Action Analysis

Dominance	{	Domination	{	D3	Command, dominate, downgrade other, upgrade self, refuse to comply.
			{	D2	Advise, initiate, counsel, discount.
			{	D1	Permit, consent, allow, deny, defend self, attempt to maintain own status.
	{	Submission	{	S1	Submissive agreement, go along with, admit confusion, excuse self, seek permission or consent.
			{	S2	Comply, seek advice, or counsel.
			{	S3	Yield, submit, downgrade self, upgrade other.
Goal direction	{	Work	{	W3	Exhort to task, reinforce group goals, exult in task achievement.
			{	W2	Ask or give opinion or information related to group goals, busy oneself actively with the job.
			{	W1	Signal attentiveness, continue to work, ignore fantasy of other.
	{	Expression	{	E1	Engage in out-of-field activity, drift, giggle, talk to oneself or engage other in side conversation.
			{	E2	Cry, scream, laugh, joke, express tension, unhappiness, happiness, excitement.
			{	E3	Engage in active play, tell story or extended fantasy, act out at length.



(Dunphy, 1972, p.111)

Dunphy's scheme is based on the three central dimensions of human behaviour. Dominance, Goal direction, and Affectivity. Each dimension has a positive and a negative pole (e.g. Domination vrs Submission) and each pole is subdivided into three sections on an intensity continuum (e.g. D3 is highly dominating behaviour, D1 is slightly dominating behaviour, S1 is slightly submissive behaviour, S3 is highly submissive behaviour). The Dominance and Affectivity dimensions are straightforward. For the dimension Goal direction, Dunphy defines work as the active acceptance of task-oriented or goal-oriented behaviour disciplined by group goals and norms. Expressive behaviour is self-expressive behaviour, more related to the expression of inner feelings, fantasies, and tensions (Dunphy, 1972, pp.110-112).

The modified form of IAA (Interpersonal Action Analysis) used here divides the Expression category into different emotional dimensions relevant to this study. The added categories with brief adjectival descriptions of behaviour falling in the categories are shown below:

- Euphoria - expression of feelings of happiness,
joy, optimism, satisfaction, relaxation,
like
- Depression - expression of feelings of sadness,
depression, dissatisfaction, apathy,
boredom, disinterest, non-involvement,
pessimism
- Anxiety - expression of feelings of anxiety,
tension, embarrassment, acute emotional
"discomfort".

The IAA category system is primarily intended for coding ongoing interaction during the group or from a tape or transcript. Its use is modified here in that the recorded feelings of members are being coded. For instance, a person who was acting dominant is only coded under Domination if he says something like "I felt dominant". The content analysis scheme therefore taps only consciously held emotional reactions recorded by group members.

No separate category for Expression was used. The remaining categories were modified as follows: expressions of insight and personal growth were coded in the Work category; expressions of low participation were coded in the Submission category.

In summary, the modified IAA categories used were:

1. Domination (D)
2. Submission (S)
3. Work (W)
4. Euphoria (E)
5. Depression (Dp)

6. Anxiety (Ax)
7. Affiliation (A)
8. Hostility (H)

Categories 4, 7 and 3 reflect the Euphoria dimension and comprise what can be called the positive categories. Categories 5, and 8 are comparable to the major mood dimensions Depression and Anger. Together with Anxiety they comprise the negative categories. Domination and Submission do not seem to be clearly associated with moods of E, A, D - but are, nevertheless, important group dimensions for investigation. The category anxiety was included because of Hartman's work indicating the relevance of anxiety for phase processes (Hartman, 1969).

In coding member reports only references by the member to himself were coded.

In coding a single report, the member was classified in the relevant mood categories once only. For example, if a member refers to himself as being Euphoric once only or six times he is given *one* Euphoria coding. For each group session the proportion of members coded in each category (i.e. the number of members in a specific category divided by the number of members present in group for that session) was calculated. An inter-rater comparison for reliability of the eight categories yielded the following rank order correlations (Table 6) based on a random sample of reports for thirteen weeks.

The inter-rater comparison was made using a second rater. An intra-rater comparison of the researcher's content analysis results, made after an interval of three months, yielded the rank

TABLE 6 Spearman Rank Order Correlations for Inter-rater Comparison of Modified IAA Categories

<u>Category</u>	<u>r_s</u>	<u>Level of Significance (one-tailed test)</u>
D	.74	.01
S	.74	.01
W	.83	.01
E	.73	.01
Dp	.81	.01
Ax	.87	.01
A	.86	.01
H	.89	.01

order correlations shown in Table 7 (based on a random sample of thirteen weeks).

TABLE 7 Spearman Rank Order Correlations for Intra-rater Comparison of Modified IAA Categories

<u>Category</u>	<u>r_s</u>	<u>Level of Significance (one-tailed test)</u>
D	.69	.01
S	.73	.01
W	.85	.01
E	.87	.01
Dp	.71	.01
Ax	.86	.01
A	.91	.01
H	.85	.01

The inter-rater and intra-rater reliability correlations were considered satisfactory. The intra-rater scores are for the

researcher only as his scores were the ones used for data analysis.

IV INSTRUMENTS USED TO TEST PERSONALITY AND INDIVIDUAL HYPOTHESES

Personality - Personality characteristics were measured by form C of Cattell's 16 Personality Factor (16 P.F.) Test. The personality factors are shown in Appendix L.

The 16 P.F. test was used because its broad spectrum of different personality areas (including the useful second order factors: Anxiety and Extraversion) seemed more useful in the generation of a variety of hypotheses about personality and mood diffusion than a personality test with a narrower range of factors. The 16 P.F. was administered about two-thirds of the way through the course during a Wednesday session.

Small Group Behaviour - The behaviour of the members in the T-group was measured by Dunphy's *Role Image Checklist* shown as Appendix J. This checklist is derived from Dunphy's IAA category system which has been described above (Dunphy, 1972, p.205). The checklist is filled out by each T-group member who has a sheet for every person in his T-group. Each member rates every other member on a separate checklist sheet by placing a check in the appropriate space opposite each of the eighteen categories. These categories are directly related to Dunphy's IAA category scheme shown in Table 5. For example, the first three categories in the *Role Image Checklist* correspond to the Domination categories D1, D2, D3 in IAA (and so on). This measure shows the *perceived* behaviour of a group member as seen by the rest of his T-group.

The *Role Image Checklists* were scored as follows: For each person, the number of members placing that person in the "Frequently" or "Fairly Often" spaces for each of the eighteen categories made up the individual's score for a category. For example, if Allen was rated as "Frequently" or "Fairly Often" dominating others (D1) by 6 persons, his D1 score was 6. Because the same number of persons filled out checklists in each group ($n_1=n_2=10$) raw scores were used in inter-group comparisons made in the next chapter. The *Role Image Checklist* was filled out by group members about two-thirds of the way through the course during a Wednesday session.

Involvement - The involvement of each member in the T-group was calculated from the polar words Not Involved-Involved on the *Postmeeting Mood Checklist* (Appendix C). For each person an involvement score was obtained for each session by coding checks in the space nearest "Involved" as 7 and following a gradation down to 1 for the space nearest "Not Involved". A mean score for all the T-groups attended by each person was then obtained.

Social Network - Two measures of the member's social network were taken. The first is the *Personal Relationships Questionnaire* (shown as Appendix I), which was filled out by each member at the end of the course. Every significant, regular contact in the member's social network was rated on the dimensions: Closeness, Likeability, Frequency of Contact, Length of Contact, and Status. (In the analysis of this data, Status ratings were not used.) The ratings were done on a modified semantic differential scale.

Scores were then derived for the following dimensions of each person's social network:

- 1) No. of Names - the total number of names placed on the questionnaire. This gives an overall picture of the size of the social network.
- 2) No. of T-group Names - the total number of names of persons who are participating in the MBA T-group course. This gives an indication of whether other T-group members are part of a member's social network.
- 3) Close - the proportion of names that are rated as "very close" (1,2, or 3).
- 4) Like - the proportion of names that are rated as "like" (1,2, or 3).
- 5) \bar{x} Hours - the mean number of hours spent with another person per week. This score is obtained by multiplying each "length of Contact" by "Frequency of Contact" for the same person, changing minutes to hours, and averaging across all the persons listed.
- 6) \bar{x} Hours Like - this score is identical to the above except that it is only calculated for persons in the "like" category (see No.4 above).
- 7) Hours Like - is the total number of hours spent per week with persons in the "like" category.
- 8) Total Hours - is the total number of hours spent with other persons per week.

The rationale for using these specific variables relating to the social network is not derived from any previous research (although the general examination of the social network is derived

from Bott's work (mentioned above)). It seemed conceivable that whether or not a T-group member had many friends or few, long interpersonal encounters or short ones; many close friends who were MBA T-group members or no close friends who were MBA T-group members, might have some effect on certain diffusion characteristics. These variables are aimed at *generating* hypotheses about the effect of social network on mood diffusion.

The second measure used was a *Network Mood Analysis*. For each member a mean score for his mood with other persons was calculated from the *Daily Mood Checklists*. Positive-Negative scores for each day where interaction with a person or persons occurred for the "significant event" were summed and then averaged for the total number of *Daily Mood Checklists* contributed by each person. A primary network mood score was obtained by treating scores for "others" in the A-B categories of "Degree of Closeness" shown at the bottom of the checklist. An interpersonal score was also obtained across all closeness categories to give an index of each member's average actual mood response with other persons during the T-group course.

Centrality - is the total number of times a person's name is mentioned in other members' *Postmeeting Reports* over the entire T-group. It was felt that this would give a simple indication of the group's concern with any member and be related to that person's integration in group processes. The inter- and intra-rater reliabilities for coding centrality was 1.00.

In the next chapter the results are discussed.

CHAPTER VII

RESULTS

I GROUP-ENVIRONMENT HYPOTHESES

Hypothesis 1 is that there will be a correlation between an individual's T-group scores and his environment (external group) scores. This hypothesis was tested by calculating Spearman Rank Order correlations on three sets of data:

- a) individual scores over all weeks (Table 9);
- b) comparison of individual scores for each week (Table 10);
- c) comparison of means of individual scores over all weeks (Table 12).

The correlations, shown in the tables indicated in brackets, are derived from the basic data on individuals shown in Table 8. Only matched scores - where for each week *both* an environment and a T-group score were available - were used in computations.

Table 9 gives correlations between each person's environment and T-group scores. Other members' scores are not taken into consideration except in the calculation of the group mean correlation. All of the individual correlations are low and not significant (with one exception). For Carl's group, the mean correlation for members is .255 which is significant at the .02 level. Mark's group has a mean correlation score of .003 which is not significant. Mark's group also has a greater proportion of negative correlations (6:11) than does Carl's group (1:12). These

TABLE 8 Individual Polar Word Scores (Positive-Negative) for T-group (G) and Environment (E)

A) Carl's Group

Week	<u>Stuart</u>		<u>Allen</u>		<u>Trina</u>		<u>Edward</u>		<u>Alex</u>		<u>Ken</u>	
	E	G	E	G	E	G	E	G	E	G	E	G
1	-.30	.88	.41	1.27	1.51	1.28	-.08	.74	-	-	2.28	3.00
2	-.06	.83	1.71	1.42	-.68	.50	.31	1.33	-	-	.55	1.17
3	.41	-.33	1.14	1.33	2.00	-.83	-	-1.30	-	.84	1.00	.80
4	1.57	.60	.43	-.99	.10	1.25	.97	1.00	-	1.57	.61	.66
5	.61	2.28	-2.10	.67	.01	2.00	.51	.57	-	-	-1.32	.13
6	.82	.97	.76	1.37	.69	1.66	-1.51	-1.00	-	.50	.91	.71
7	-	.56	-1.53	-.72	1.71	-.02	-.50	-.16	-.33	-.20	1.00	-.26
8	1.64	.74	-.37	-.43	-1.77	1.20	-2.19	-.50	.64	.54	.63	-
9	1.08	.60	-3.20	.53	1.37	1.60	-3.20	-.50	2.00	1.46	-.66	1.66
10	-	3.00	.80	1.23	-.52	1.46	-.37	1.23	.11	1.37	.56	-1.73
11	-	-	.40	-.13	-.24	-3.00	2.86	.86	1.17	-	1.14	-
12	-1.04	.79	-.94	-.79	-	1.54	1.66	-2.20	-.07	1.54	1.41	.80
13	-	.70	-.50	.50	-	2.86	-	.23	-	-1.75	2.28	2.00
14	-	1.14	.33	1.08	-	2.57	-	-	-	.18	1.57	2.14

TABLE 8 CONT.

Week	<u>Sam</u>		<u>Steven</u>		<u>Charles</u>		<u>Joe</u>		<u>Henry</u>		<u>Carl</u>	
	E	G	E	G	E	G	E	G	E	G	E	G
1	1.40	2.17	-	-	-1.80	1.28	-.83	.45	-	1.28	-2.13	1.17
2	1.66	1.51	1.13	1.37	-.08	1.14	.62	1.08	.10	1.57	-	1.57
3	1.00	-1.92	-1.04	1.03	1.28	1.00	1.08	-	2.28	1.86	-	1.57
4	.97	1.57	.51	1.86	.16	-.17	.78	.58	1.46	1.10	-	1.86
5	-	-	-4.07	-1.85	-1.33	-	-	1.43	2.00	1.43	-2.16	.80
6	2.17	1.94	1.39	.70	.10	.86	-	-	.70	-	-1.26	1.86
7	1.28	1.57	-	1.00	1.00	.10	1.71	1.43	1.57	-	1.08	.57
8	1.41	-.52	1.10	1.14	-	1.00	-.32	.94	.19	-1.59	-1.07	2.28
9	.97	2.28	-1.12	.61	-	-	1.14	1.57	2.00	2.14	-	1.86
10	.85	-	.82	.84	-	-	.68	1.17	-2.38	3.00	-	2.86
11	.31	-2.99	1.04	2.14	1.14	-	1.00	1.17	1.14	.26	-	-
12	-	2.14	1.06	-2.05	.51	1.00	.93	.88	-	-.59	-	.34
13	1.71	-	-	-	-.80	.66	1.43	.13	-	.47	-	1.24
14	2.57	1.37	-	-3.00	1.57	.57	-	1.71	-	.04	-	2.14

TABLE 8 CONT.

B) Mark's Group

Weeks	<u>Harry</u>		<u>Al</u>		<u>Don</u>		<u>Peter</u>		<u>Tom</u>		<u>Larry</u>	
	E	G	E	G	E	G	E	G	E	G	E	G
1	-1.80	2.14	2.14	2.40	.66	2.14	.86	2.43	1.14	2.14	2.28	1.08
2	1.21	2.20	1.84	2.00	1.23	.40	.34	1.14	.79	.37	.79	.61
3	-	-	.47	-.89	-	1.43	1.71	.71	-	1.57	1.80	.60
4	1.20	2.28	1.83	-3.45	-	.94	.93	.86	1.47	.67	1.47	-
5	-1.13	2.00	-1.24	2.86	-	1.57	.86	1.43	.71	.67	1.40	2.43
6	.56	-	-.71	2.71	1.12	2.28	1.59	1.86	1.11	.57	1.11	2.00
7	1.71	.13	-.90	-	-.64	-	.94	1.08	1.43	1.03	-2.60	1.57
8	1.21	2.43	1.11	2.14	.60	-.30	.45	-	.99	1.57	.99	2.14
9	-	-	1.71	-	.83	1.60	1.71	.76	1.43	.94	2.57	1.86
10	-	1.80	.69	1.71	1.79	.17	-.12	1.28	1.46	1.08	1.80	2.28
11	-.57	-	1.10	-2.16	.51	-1.13	-.79	-.23	1.43	1.00	-	-
12	1.03	1.94	-	-	-	.23	1.26	-2.07	1.06	1.00	-	-
13	-	-.36	-	-1.86	.31	.60	-	-.59	-.60	-.99	-	1.71
14	1.71	2.14	-	-3.06	1.51	2.14	-1.13	2.00	-	1.14	-	1.28

TABLE 8 CONT.

Weeks	<u>James</u>		<u>Matthew</u>		<u>Ed</u>		<u>Arthur</u>		<u>Eric</u>		<u>Leonard</u>		<u>Mark</u>	
	E	G	E	G	E	G	E	G	E	G	E	G	E	G
1	1.00	1.14	1.76	2.50	.57	1.28	1.71	2.50	1.31	3.00	-	-	1.23	2.00
2	.12	-.35	1.58	1.08	-.41	-1.20	.85	.35	1.06	-	-.48	.67	1.95	-.32
3	-	1.17	1.57	1.80	-1.73	.46	-2.12	.80	1.00	.46	-	1.00	-4.17	.40
4	.03	.50	.84	.33	.46	1.28	.74	.11	.92	-.63	-	.50	-	2.43
5	-	-	1.86	.33	.80	.67	2.00	2.14	1.03	-	-	2.00	-	.94
6	-1.34	-	1.64	2.28	1.36	1.28	1.83	2.43	1.25	1.03	-	1.51	-	-
7	2.17	.13	1.23	1.43	1.43	2.43	2.00	1.37	.06	1.03	1.00	.51	-	1.37
8	.39	1.33	1.88	1.71	.42	1.28	1.10	3.00	.51	-1.27	.24	2.71	-	1.26
9	1.83	-.15	2.43	2.03	-1.19	1.37	-.90	2.86	1.31	-	.86	-	-	1.61
10	-	-.06	1.76	1.51	.82	.40	1.97	-.01	.62	-	-	1.00	-	-
11	1.86	-1.46	2.14	2.14	-1.05	-1.00	2.00	-.56	-1.87	-	-	-	-	-
12	-.06	1.14	2.28	2.00	-1.50	.64	.83	2.28	-1.69	1.60	-	.86	-	-
13	-	-.17	-	1.43	-	1.46	2.14	2.86	-	1.57	-	1.28	-	-
14	-2.53	1.00	-	2.00	-	.38	2.86	2.71	-	1.31	-	1.71	-	-

TABLE 9 Spearman Rank Order Correlations for Individual T-group and Environment Scores

A) <u>Carl's Group</u>			B) <u>Mark's Group</u>		
<u>Name</u>	<u>r_s</u>	<u>Level of Significance</u> <u>(one-tailed test)</u>	<u>Name</u>	<u>r_s</u>	<u>Level of Significance</u> <u>(one-tailed test)</u>
Stuart	.18	n.s. (9)	Harry	-.06	n.s. (8)
Allen	.59	.05 (14)	Al	-.32	n.s. (9)
Trina	-.35	n.s. (11)	Don	.26	n.s. (9)
Edward	.32	n.s. (10)	Peter	-.38	n.s. (12)
Alex	.30	n.s. (5)	Tom	.40	n.s. (12)
Ken	.52	n.s. (12)	Larry	-.02	n.s. (9)
Sam	.13	n.s. (10)	James	-.47	n.s. (9)
Steven	.24	n.s. (10)	Matthew	.20	n.s. (12)
Charles	.44	n.s. (9)	Ed	.29	n.s. (12)
Joe	.28	n.s. (10)	Arthur	-.06	n.s. (14)
Henry	.01	n.s. (8)	Eric	.16	n.s. (7)
Carl	.00	n.s. (5)	Leonard	ss	-
			Mark	ss	-
$\bar{x} r_s =$.255 ^a	.02	$\bar{x} r_s =$.003	n.s.

ss = small sample < 4 sample size shown in brackets.

n.s. = not significant.

^aMean correlations calculated using r to z transformations.

TABLE 10 Spearman Rank Order Correlations for Matched Group Scores
(Positive-Negative) for T-group and Environment by Week

<u>Week</u>	A) <u>Carl's Group</u>		B) <u>Mark's Group</u>	
	<u>r_s</u>	<u>Level of</u> <u>Significance</u> <u>(one-tailed</u> <u>test)</u>	<u>r_s</u>	<u>Level of</u> <u>Significance</u> <u>(one-tailed</u> <u>test)</u>
1	.61	.05 (9)	.17	n.s. (12)
2	.70	.05 (9)	.28	n.s. (12)
3	.26	n.s. (8)	.38	n.s. (8)
4	.59	.05 (10)	-.11	n.s. (9)
5	.60	.06 (8)	-.23	n.s. (8)
6	.33	n.s. (9)	.17	n.s. (9)
7	.63	.05 (9)	.24	n.s. (11)
8	-.21	n.s. (10)	.69	.05 (11)
9	.61	.05 (10)	-.05	n.s. (8)
10	-.74	(.05) (8)	-.28	n.s. (8)
11	.71	.05 (7)	.31	n.s. (8)
12	-.54	n.s. (7)	.05	n.s. (8)
13	ss	-	ss	-
14	ss	-	ss	-
\bar{x}	.42 ^a	.001	.15	n.s.

ss = small sample < 5 sample size shown in brackets

n.s. = not significant

^aMean correlations calculated using r to z transformations.

TABLE 11 Matched Comparison of Mean Individual Polar Word Scores
(Positive-Negative) for T-group (G) and Environment (E)

A) <u>Carl's Group</u>			B) <u>Mark's Group</u>		
Name	E	G	Name	E	G
Stuart	.53	.64	Harry	.64	1.91
Allen	-.19	.45	Al	.80	.81
Trina	.38	.74	Don	.95	.88
Edward	-.14	.13	Peter	.68	.94
Alex	.47	.94	Tom	1.04	.84
Ken	.85	.92	Larry	1.13	1.62
Sam	1.37	.70	James	.52	.36
Steven	.08	.58	Matthew	1.68	1.60
Charles	.22	.72	Ed	.00	.74
Joe	.71	.94	Arthur	1.22	1.63
Henry	.85	1.35	Eric	.48	.75
Carl	-1.11	1.34	Leonard	.25	1.30
			Mark	ss	ss

ss = small sample < 4

negative correlations suggest a definite lack of correspondence between T-group and environment. On this data, hypothesis 1 was confirmed for Carl's group, but not for Mark's group.

Table 10 shows correlations comparing ranked T-group scores with ranked environment scores within each week. A high correlation here means that persons who are high (or low) on T-group scores are correspondingly high (or low) on environment scores, compared to other members. The correlations for Carl's group are considerably higher than those for Mark's group. For Carl's group six out of twelve weeks are significant at the .05 level (positive correlations) and for seven weeks the correlations are .59 or greater. Mark's group has only one week significant at the .05 level and an overall mean correlation of .15 which is not significant. The mean correlation of .42 for Carl's group is significant at the .001 level. For this data, hypothesis 1 was again confirmed for Carl's group, but not for Mark's group.

Table 11 compares each individual's mean T-group and mean environment scores for all weeks combined. The correlations for these means for both groups singly, and combined, are shown in Table 12 below.

TABLE 12 Spearman Rank Order Correlations for Scores in Table 11

<u>Group</u>	<u>r_s</u>	<u>Level of Significance^b</u> <u>(one-tailed test)</u>
Carl's	.67	.05 (12)
Mark's	.53	.05 (12)
Both groups	.60	.01 (24) ^a

^aSample size shown in brackets

^bAll significance levels in this and in following tables should be read as $p <$ the significance level shown. For example, .01 means $p < .01$.

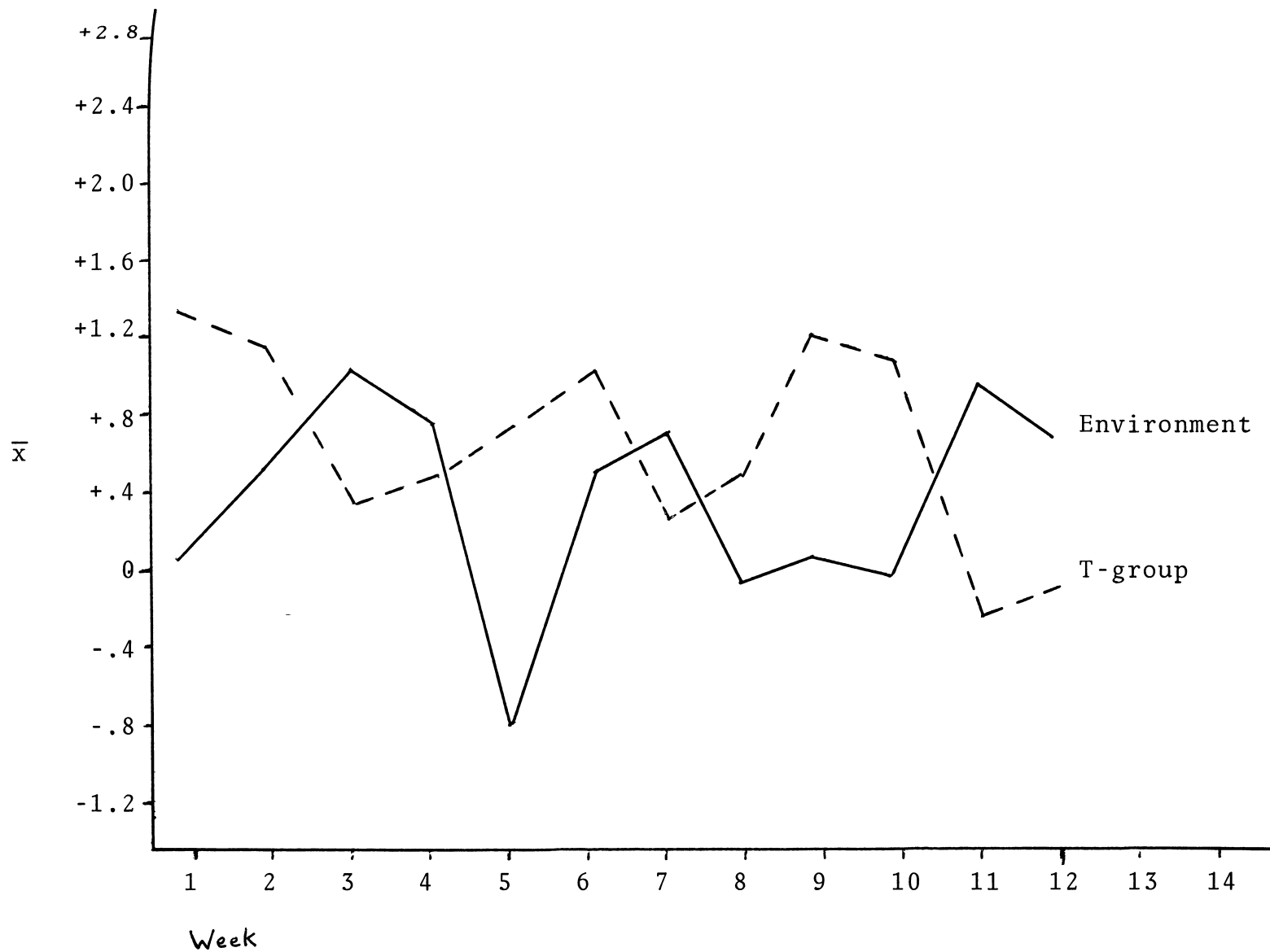


FIGURE 9 Graph of Matched Comparison of Group Polar Word Scores (Positive-Negative) for T-group and Environment for Carl's Group.

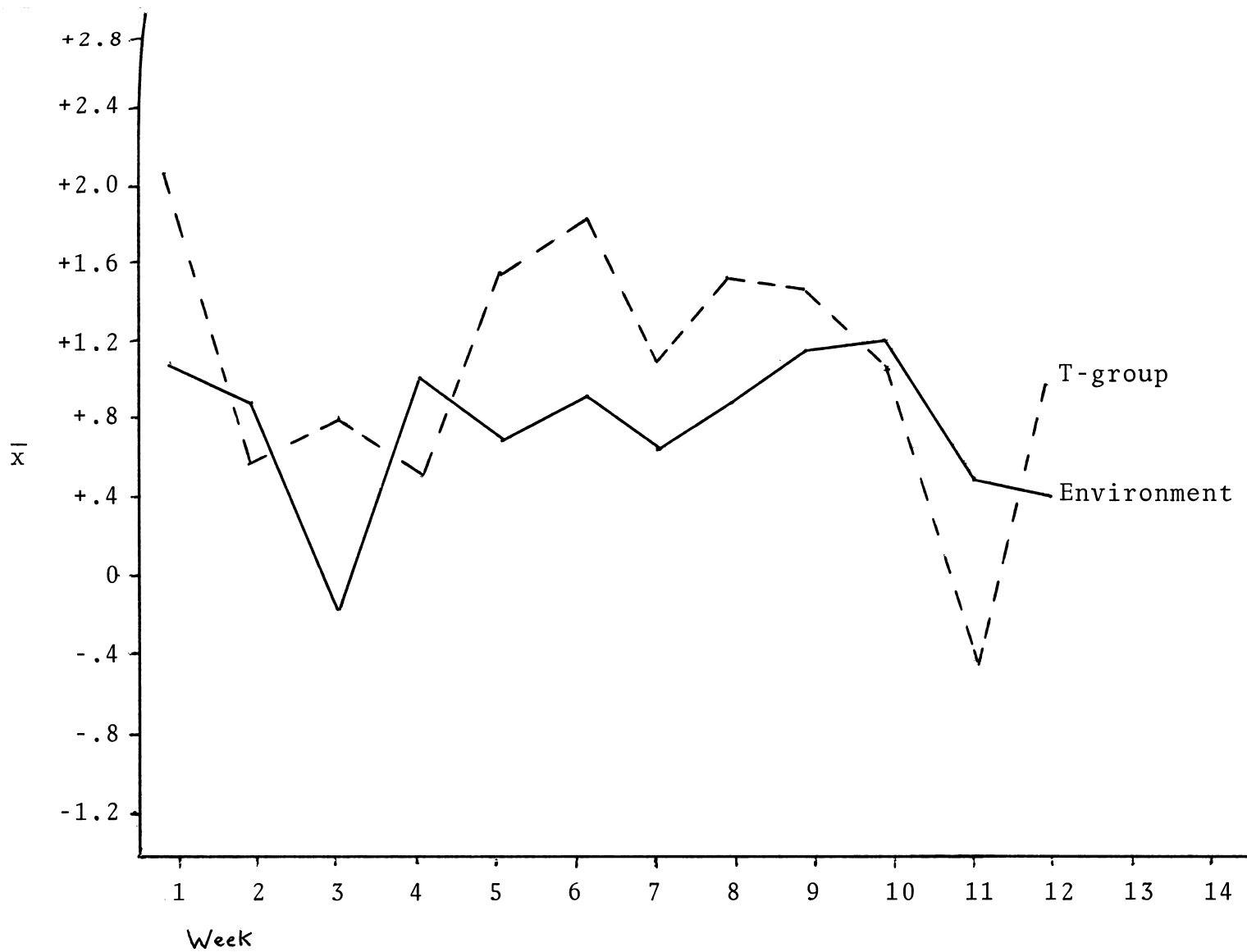


FIGURE 10 Graph of Matched Comparison of Group Polar Word Scores (Positive-Negative) for T-group and Environment for Mark's Group.

The correlations are moderate and significant for both groups singly, and combined, suggesting that there is an overall connection between mood scores in environment and mood scores in the T-group. However, since the means disguise both high and low correlations between environment and T-group across specific weeks for individuals, this testing of hypothesis 1 must be regarded as less stringent and less significant than the first two tests. Hypothesis 1 was confirmed for both groups on this data.

A Wilcoxon Matched-Pairs Signed-Ranks Test on the data in Table 11 was performed to see if there were significant differences between environment scores and T-group scores. The results, shown in Table 13, indicate that the T-group moods are significantly higher than the environment moods.

TABLE 13 Wilcoxon Matched-Pairs Signed-Ranks Test on Scores in
Table 11

<u>Group</u>	<u>T-Score</u>	<u>Level of Significance</u> <u>(two-tailed test)</u>	<u>Direction of</u> <u>Significance</u>
Carl's	11 (12)	.05	G > E ^b
Mark's	14 (12)	.05	G > E
Both groups	39 (24) ^a	.01	G > E

^aSample size shown in brackets.

^bG=T-group; E=Environment.

Four members in Mark's group and only one member in Carl's group, had environment scores that were higher than their T-group scores.

Finally, an examination was made of the group means for T-group and environment scores (Table 14). This data is graphed

TABLE 14 Matched Comparison of Group Polar Word Scores (Positive-Negative) for T-group (G) and Environment (E)

A) <u>Carl's Group</u>			B) <u>Mark's Group</u>	
<u>Week</u>	<u>E</u>	<u>G</u>	<u>E</u>	<u>G</u>
1	.05	1.36	1.06	2.07
2	.52	1.19	.89	.58
3	1.01	.37	-.19	.79
4	.76	.49	1.01	.49
5	-.81	.75	.69	1.55
6	.45	1.01	.93	1.80
7	.66	.26	.65	1.10
8	-.07	.48	.88	1.50
9	.04	1.20	1.14	1.43
10	-.04	1.07	1.20	1.02
11	.93	-.24	.47	-.43
12	.65	-.12	.40	.96
13	ss	ss	ss	ss
14	ss	ss	ss	ss

ss = small sample ≤ 5 .

in Figures 9 and 10. Spearman Rank Order correlations for the data yielded scores of $-.41$ for Carl's group, $.39$ for Mark's group, and $-.01$ for both groups combined. All of the correlations were not significant. These results suggest that the *group* moods in the T-group are not synchronized with the *group* moods for the environment. Since Hypothesis 1 pertains to individual group-environment scores, these results do not constitute a rejection of Hypothesis 1. They measure something different than the group-environment connection for individuals. If everyone had the same pattern of close, correlated group-environment scores every week, the *group* scores for T-group and environment would correlate highly. Since the correlation for *group* scores is low, this suggests that different members have connection or diffusion between T-group and environment at different times. They are out of synchronization with each other and this lack of synchronization has a cancelling-out effect that produces negative and non-significant results when the individual scores are pooled as *group* scores. The results, nevertheless, are interesting, as they suggest the group goes through mood phases with a relative degree of autonomy from the environment.

Overall, Hypothesis 1 was confirmed for Carl's group, but not for Mark's group. Hypothesis 2 predicts that outward diffusion will be greater than inward diffusion. To test this hypothesis, the numbers of inward and outward examples of Remembered Mood Diffusion (RMD) were calculated. These RMD examples are the most important measure used in the study. The examples are fully reproduced below for each group with a number beside each incident or description that could be classified. Examples that could not

be classified or were not used are identified by the letters "N.U." The person contributing each RMD example is named; the direction of diffusion is indicated by "O" for Outward and "I" for Inward diffusion; and the specific mood diffused is indicated by E (Euphoria), A (Anger), D (Depression).

EXAMPLES OF REMEMBERED MOOD DIFFUSION

A) Mark's Group

1. Larry - O(E): When the T-group, through Matthew became much more cohesive - felt a mood of sharing, etc. - particularly as the meeting was followed by a gathering of about six of us at the hotel. A more involved, interested approach to things and people generally.
2. Larry - O(E): Ed with whom I work became something of the focus of attention and we discussed our relationship. I had been remote and disinterested and experienced a feeling of guilt at my treating him this way. I transferred this feeling to my relationship with others and attempted to look for value in everybody. Hopefully became more understanding and less self-centred.
3. Eric - O(D): The session in which Mark asked for some non verbal communication had some fairly drastic effects. Most of the group members seemed embarrassed by this and it wasn't repeated.

The main effect was to inhibit non verbal communication as most of the group seemed to regard this form of communication as forced.

4. Eric - 0(E): Mark asked Ed if he would like to talk about himself. I had always regarded Ed as a very decent bloke and I thought this came out more in him as a result of what he said. I think Ed's straightforwardness and willingness to talk made others in the group more at ease because they may have felt he was holding back. I thought personally that he was always willing to participate more but was not given the chance to do so.

5. Eric - 0(E): Each member of the group was invited to physically orient the members of the group in relation to their commitment to or involvement in the group. I felt quite happy with the way I was positioned and the way others were positioned. There were no subsequent group settings as this occurred as I remember in the last session. It made me conscious of how others must see me in the work group.

Eric - 0(N.U.): I think I regarded many of the T-group sessions as elaborate behaviour to give the impression of participation without the substance. As a result I saw only Matthew, Ed and Don getting

any real value from the exercise.

Since the course started my commitments at work became heavier and my own personal involvement in a deceased estate more demanding. I was also involved in the running of a large country property. I think I regarded the time on the T-group session after about the fourth week as fairly poorly spent *and I tended to consider my own problems instead of getting involved in those of the group.*¹

I felt that I had commitments to people outside the group, family and long standing friends which I was not doing justice to and I felt I did not have the resources to contribute much to establishing additional relationships in the group.

6. Matthew-0(E): The mood was one of elation and well-being after I had spent the majority of the T-group session talking about myself. The elation came from the support I received from the group and the ego and identity build up involved. I feel this has enabled me to overcome a long term feeling which was aptly described as "unworthiness" in the Group. The development process is a continuing one and

¹ Italics are my emphasis.

my self image is getting better all the time.

7. Matthew-0(A): I was frustrated early in the sessions with the lack of progress (probably towards my own problems) and also with the non-participation of some group members. This carried over at the pub (where as you know we had extended T-group sessions) and in my personal life for some days.
8. Matthew-0(A): I was dissappointed in Mark's attempt to "show off" the group in the joint picture session we had one day. I was annoyed that he felt a need to lead the group so strongly. This carried over in discussions with other group members and in later group sessions. Mark summed up the situation well however as a leadership rejection problem and eventually the effect subsided.
9. Harry - 0(E): 1st example in period when Matthew opened up on personal problems and attitudes. My mood was of *confidence* in handling a new behaviour pattern in new situation i.e. *openness* in a work situation. The mood was (I feel) caused by the situation evoking memories of a similar situation several years ago, which had boosted my confidence. It enabled me to confer frankly

with my chief in owning my feelings over problems in that relationship. The response was warm and open to an unexpected degree, and was mutually beneficial.

10. Harry - 0(E): 2nd example is Ed revealing his sense of inability to assert and dominate. My mood was supportive and encouraging. Mood probably caused by my own experience of these feelings, and certain successes in overcoming them. This mood helped me to consciously adopt a dominating role in a particular work situation, where I would normally have been less aggressive. Results were satisfactory to both. Also helped a colleague to do the same in another situation.

11. Arthur - 0(E): Each week after the T-group a smaller number of us - Trina, Stuart, Matthew, Al, Larry - went to the pub where we discussed in more detail the transactions in the T-group and sometimes led to further openings. We generally felt very elated and close. I learned how to observe changes in my own behaviour under the "rational" drive with Mark to the more "emotional" (pissed?) later in the pub. I find myself using this kind of experience in my relationships with friends since the T-groups - and getting on with and

being accepted better by them.

12. Arthur - I(D): I had been living with Sarah till early November and became increasingly unhappy with her.
13. Arthur - I(E): When Sarah left I felt great relief and started several new friendships - male and female - which are very much more involving and far less threatening. I became more confident of expressing myself without fearing that I would expose my relationship with Sarah.
14. Ed - O(A): 2nd Last Week - On way home from T-group. Mood was dominance and aggression. Taxi-driver bumped into my car, and I thoroughly abused him. I'm sure this was due to the need I felt from the T-group to become more assertive. In the same week I noticed a much more aggressive mood towards my work colleagues. This has continued in a milder way every since.
15. Leonard -O(E): In the week in which the group analyzed my behaviour (5 or 6) towards the end. Happy, especially towards the end. Generally I believe it was due to feelings of friendship expressed by others in the group. Feeling of happiness, satisfaction and serenity persisted for the rest of day.

16. Leonard - O(E): In most subsequent weeks there was a feeling of quiet (you know, at peace with the world) satisfaction. It started mostly towards the middle of the group, after it had settled down to "work" and then persisted not only for the rest of that day but on some cases (5 or 6) also for subsequent days.

Leonard - I (N.U.): There was no effective group setting prior to the T-group. I cannot bring any group setting to mind on Tuesday during the final semester.

17. Tom - O(D): Week 7 - mood was sensitive and shattered. I was in hot seat in group. I was quieter, and more sensitive to other people.

Tom - I(N.U.): My mood going into T-group varies week by week. I have been tired, relaxed, tense, happy, non-participative etc., however the mood pre-group has two aspects.

- *a carry over from the past few days*²
- expectations of what will happen in the group.

Also my moods tend, in general, to be a fairly small swing away from a "neutral" stance and often change as soon as the T-group starts. I find I am now consciously playing a different

². Italics are my emphasis.

role in the T-group to the role I play outside and this also affects my pre- and post-group moods.

18. Don - O(E): My example is when I tried to introduce some of the openness of the T-group into the relationship between myself and my wife. This resulted from experience in the T-group where openness gave improved results. The experiment failed.

Don - I(N.U.): The example that I recall occurred when I discussed some of my problems with the group. My mood was one of discomfort because I had a bad headache.
Had I not had the headache I would have enjoyed the experience much more than I did.

Peter - O(N.U.): No particular moods but discovery of benefits of revealing my feelings more carried over.

B) Carl's Group

19. Charles - I(D) It is difficult to recall the actual weeks but most of the group sessions I attended *I do consider my behaviour was affected by my personal life.*³

Generally, mood changed between being relaxed -

³. Italics are my emphasis.

not involved or being tense when involved.

I suppose the main effect in the T-group was a desire not to be involved with people in any depth. If I tried to make relationships with people and they dont (sic) materialise I guess I get hurt, and I don't want this to happen. Longer exposure to the T-group would undoubtedly help overcome this problem.

Charles - 0(N.U.): I don't think I ever got sufficiently deeply involved with the group to develop a mood sufficiently strong to affect my behaviour/ feelings in other group feelings or personal life.

20. Henry - 0(A): (1) Week?
(2) Frustration
(3) Group avoiding emotions
(4) Carried over all week to next group.

21. Henry - 0(A): Tension: discussing problems with wife.

22. Ken - 0(D): Week 10: After this group I felt angry, dissatisfied and rejected. Trina and Stuart had expressed feelings for each other and I felt left out. I went to the pub afterwards with these very strong feelings which were later completely dissipated when I had spoken to Stuart about it.

23. Ken - 0(E): Week 5: I was rather pleased with the adjectives used to describe me. I felt quite elated and in subsequent contacts with friends, felt that I was radiating goodwill.
24. Ken - I(E): Prior to week 12, I received a very firm rejection when I expressed my very strong feeling towards Albert. Although very hurt, I found I could handle the situation surprisingly easily. Subsequently, in the Week 12 T-group, I found I could handle being "left out" of the Stuart/Trina relationship without too much inner turmoil. (All this was aided by the fact that I am currently forming a close relationship with another of Albert's rejects - Jim).
25. Steven - 0(A): I had felt on one occasion a good deal of frustration at the slowness of group's "progress" - I expressed this in the last few minutes of the group session. I was angry and it obviously showed later. I discussed my concerns with members of the other group and for a while my anger and frustration was still felt even though I was not with members of my own group.
26. Steven - 0(D): The most recent T-group left me with peculiar feelings - I guess of being rejected although it was only by implication. This stayed with me for that day and the next in relation to

Trina in particular - and in fact while my mood has varied since then, I shall probably experience an anxiety when we meet again.

27. Steven - o(D): On the occasion of having one of the group members express a desire to know me, I felt sad at my relative non-involvement, my inability to respond meaningfully in words. This mood of sadness coupled with a feeling that I had almost lost the ability to express (and perhaps experience? emotions stayed with me for several days.).

Steven - I(N.U.): I don't think I can recall any. I attended the T-group periods coming straight from my office which provided a fairly *consistent and uniform* "prior environment". I certainly did bring with me, and relate to the group, outside experiences and feelings but that tended to be "*historic*" events. Apart from this I always looked forward to the T-group as an experience in itself and therefore left behind whatever my concerns were.

28. Joe - o(D): A discussion in which Trina and I became very close (outside the group) but she withdrew, left me for about 3/4 days with a sense of loss and of fear as I felt - (which she confirmed later) she was near to breaking point.

29. Joe - 0(E): After another group, Wed. night, can remember Stuart, Matthew, myself going off and just drinking and surfing for three days - this was the general state of happiness that I was mainly left in after T-group sessions. Another general point was that I found myself looking forward to T-group sessions.
30. Joe - I(E): Only once, a friend was staying at our place while he was having some marital trouble I sat up and let him talk to me for two nights - in the T-group it made me realize that being "empathic" is a game too.
31. Sam - 0(D): Week 11: Sad, depressed mood. I had missed the previous session where an "in group" had developed and thus continued during week 11. I was clearly not part of this group and felt isolated and lonely because of it. I remained depressed and withdrawn in a following group setting (syndicate meeting).
32. Trina - 0(E): Group where Ken discussed his personal life. It made me happy to be able to accept this as I thought previously I would reject him because of it. In outside group settings it just generally set me in a happy but exhausted frame of mind - exhausted because I felt that I had been through a trying experience.

33. Trina - 0(E): Group where I sat in contact with Joe and Ken (towards end). I felt nervous, unsure but more acceptant and accepted. I felt that I had become closer to Joe because of it. After that he and I had quite a close relationship even if with other people - close in the sense of having an intuitive or emotional understanding of each other.
34. Trina - 0(D): Trial group where we did the group physical model. I was perceived and placed in what appeared to be the highest position - I wondered if I had been playing an elaborate game to win. I was also sad because the group was ending (as was the course) and felt isolated and alone with others afterwards but also close because it was a common shared experience.
35. Trina - 0(D): Most of these examples arose from my relationship with someone else. The one situation where I was not directly involved but affected was one towards the end where Carl tried to extend Joe and Steven sort of separately and then together. I was aware of a sense of futility from what appeared to be Steven's refusal to see what was before him and what Joe was offering. Afterwards I felt closer to the Joe, Stuart, Ken, Matthew group and distanced from Steven and other group members even if in an unrelated group of MBA's.

36. Trina - O(A): In several different groups I was also conscious of developing hostile aggressive feelings mainly towards Steven. I would begin to express these sorts of feelings in the group and they would carry over into my relationship with him outside the group. These feelings got more intense or more expressed as the weeks passed and the annoyance it generated would often last until the next group. I don't think it greatly affected me when with another group.
37. Trina - I(D): I cannot remember specific cases but often would arrive from work in a bored or frustrated mood which would say, keep me fairly quiet in the group until it began to develop then my mood would change and I would react to the group mood.
38. Trina - I(D): In some other cases I went to the group probably in an anxious or quizzical mood because family and friends had criticised T-groups when I tried to talk about them in an outside situation so I would be looking closely and critically at the group.
- Trina - I(N.U.): At the time the T-group would generally transcend outside influences so I think my mood (except in initial stages) would not have affected the group directly. It would have just kept me quieter and more hesitant.

39. Allen - 0(E): The group tended to make me more *decisive* or confirmed my already tentatively held opinions regarding my relationship with my fiancée. I became more aware of myself as an important being, needing to do what I want to do . . not what I think I should do.
40. Allen - I(D): Frequently throughout the T-group sessions I had felt depressed because of my difficult relationship with my fiancée. It is unusual for me to feel depressed like I have but *my whole life lately has been dominated by this unhappy state of affairs. I felt that it affected me in the T-group because I used to consider my own problems instead of listening and helping others.*⁴
41. Edward-I(D): Depressed: possibility of having to go into National Service. I retreated a little and I was probably more sensitive (Weeks 8-10).

* * *

James returned an RMD questionnaire, but did not recall any specific instances of RMD. The remaining members did not return the RMD questionnaire despite being phoned by the researcher and being sent a second RMD questionnaire.

The distribution of RMD scores for Inward (I) Diffusion and for Outward (O) Diffusion for E, A, D moods combined is shown in

⁴ Italics are my emphasis.

Table 15.

<u>Group</u>	<u>I</u>	<u>O</u>	<u>Binomial Test (one tailed probabilities)</u>
Carl's	7	16	.047
Mark's	3	15	.004
Both groups ^a	10	31	.0008

^aA 2 x 2 χ^2 test on both groups yielded a χ^2 of 1.23 which was not significant for 1 d.f. (two tailed test).

TABLE 15 Overall Inward and Outward Diffusion RMD Frequencies

In both groups outward diffusion is more frequent than inward diffusion: this is quite significant in Carl's group and is highly significant in Mark's group - and highly significant in both groups combined.

It should be noted that some of the RMD examples - although recalled as a single type of incident - are referred to as occurring more than once during the life of the group. For example, Arthur in example 11 indicates that the euphoria-producing pub groups occurred in more than a single week. It is difficult to weigh a multiple euphoria incident like this against a single incident like that of Harry in example 9. With respect to these multiple RMD examples, in Mark's group there is one inward (No.12) and one outward example. In Carl's group there are three inward (Nos.19, 37,40) and one outward (No.36) examples. The presence of these multiple RMD examples suggests - for Carl's group especially - that there may be more inward diffusion transaction between environment and T-group than is picked up by the RMD questionnaire.

It may be that in using the RMD questionnaire members tend to remember more specific moods generated in the T-group because it is such a focal point of contact for them. Keeping this "caveat" in mind, hypothesis 2 was accepted as confirmed by the data in Table 15.

A finer breakdown of the RMD data is shown in Table 16.

<u>Group</u>	<u>Mood</u>	<u>I</u>	<u>O</u>	<u>Σ</u>	<u>Binomial Test (one-tailed probabilities)</u>
A) Carl's	E	2	5	7	.227 (n.s.)
	A	0	4	4	.062
	D	5	7	12	.387 (n.s.)
	Σ	7	16	23	.047
B) Mark's	E	1	11	12	.003
	A	0	3	3	n.s.
	D	2	1	3	n.s.
	Σ	3	15	18	.004
C) Both groups ^a	E	3	16	19	.002 ($x^2 = n.s.$)
	A	0	7	7	.008 ($x^2 = n.s.$)
	D	7	8	15	n.s. ($x^2 = n.s.$)
	Σ	10	31	41	.0008 ($x^2 = n.s.$)

^aA 2 x 2 x^2 test on both groups for each mood yielded x^2 's which were not significant for 1 d.f. (two-tailed test).

TABLE 16 Inward and Outward Diffusion Frequencies of RMD Scores for E, A, D Moods

Using this data, hypothesis 2 was tested for each of the mood categories E, A, D. The one-tailed probabilities for the Binomial Test are shown in the table. For Carl's group, for Anger, $0 > I$ ($4 > 0$)

and approaches significance. For Euphoria, and for Depression, Outward Diffusion is greater than Inward Diffusion but not to a significant degree. In Mark's group, for Euphoria, Outward Diffusion is greater than Inward Diffusion ($t_{11} > 1$) to a significant degree. For Anger and Depression, however, the results are not significant and in the case of Depression, Inward Diffusion is greater than Outward Diffusion. Across both groups Outward Diffusion is greater than Inward Diffusion for all moods (except Depression in Mark's group), though not always to a significant degree. When the scores of both groups are combined, however, Outward Diffusion is greater than Inward Diffusion significantly for Euphoria and Anger, but not for Depression. Depression shows the greatest tendency for inward diffusion. Using the combined group data, hypothesis 2 is confirmed for moods of Euphoria and Anger.

II MOOD HYPOTHESES

Hypothesis 3 predicts that moods of Anger and Depression diffuse more frequently than moods of Euphoria under conditions of inward diffusion, outward diffusion, and inward and outward diffusion.

The results, derived from Table 16 above are compared with the predicted results in Table 17 below.

For both groups the prediction that Anger is greater than Euphoria was not confirmed: anger scores were consistently lower than euphoria scores. For Carl's group Depression is greater than Euphoria but not to a significant degree for

TABLE 17 Predicted and Obtained Results of Diffusion Extent for Moods of E, A, D

	<u>Prediction</u>	<u>A>E</u>	<u>p^a</u>	<u>D>E</u>	<u>p</u>	<u>N>P^b</u>	<u>p</u>
A) Carl's Group	I	0<2	n.s.	<u>5>2</u>	.227	<u>5>2</u>	.227
	0	4<5	n.s.	<u>7>5</u>	.387	<u>11>5</u>	.105
	I+0	4<7	n.s.	<u>12>7</u>	.180	<u>16>7</u>	.047
			(.274) ^c				
B) Mark's Group	I	0<1	n.s.	<u>2>1</u>	n.s.	<u>2>1</u>	n.s.
	0	3<11	n.s.	1<11	n.s.	4<11	n.s.
			(.039)		(.003)		(.059)
	I+0	3<12	n.s.	3<12	n.s.	6<12	n.s.
			(.018)		(.018)		(.119)

^ap = one-tailed probabilities for binomial test.

^bN>P = E>(A+D)

^cProbabilities in brackets are for scores not fitting the predicted pattern.

inward, outward, and inward and outward diffusion. For Mark's group the prediction that Depression is greater than Euphoria was not confirmed: the opposite pattern - Euphoria is greater than Depression - held for inward, and inward and outward diffusion to a significant degree. The prediction that negative is greater than positive was confirmed for Carl's group, but to a significant degree ($p=.047$) only for inward and outward diffusion combined. In Mark's group negative is greater than positive for inward diffusion (not significant, however) and negative is less than positive for outward and for inward and outward diffusion (approaching significance). The hypothesis was confirmed to a statistically significant extent only for inward and outward diffusion combined for negative is greater than positive for Carl's group. Although there was a tendency for the size of difference to be as predicted for Depression and for Negative scores for Carl's group, the differences were, overall, not significant. In Mark's group, contrary to prediction, outward diffusion of Euphoria predominated to a significant extent. On the whole, Hypothesis 3 was taken as being not confirmed.

III PHASE MOVEMENT HYPOTHESES

A weekly breakdown for each of the content analysis categories for "self scores" is shown in Table 18. This data is graphed, comparing both groups, in Figures 11-18. A brief summary of the most frequently mentioned *Most Significant Events* described in the *Postmeeting Reports* is given in Table 19.

Before testing the phase movement hypotheses it was necessary to select the weeks during which phase behaviours (as measured by the content analysis categories) were high. This selection was

TABLE 18 Content Analysis Self Scores for Postmeeting
Mood Reports

(Scores are proportions)

A) <u>Carl's Group</u>		<u>Week</u>													
Category	2	3	4	5	6	7	8	9	10	11	12	13	14	\bar{x}	
D	.09	.00	.00	.11	.00	.09	.09	.00	.00	.00	.00	.00	.00	.03	
S	.18	.17	.00	.11	.30	.09	.00	.09	.10	.00	.58	.00	.00	.13	
W	.36	.33	.33	.67	.60	.64	.64	.27	.40	.00	.33	.30	.09	.38	
E	.73	.42	.42	.67	.70	.18	.46	.27	.40	.43	.25	.70	.46	.47	
Dp	.00	.25	.33	.22	.20	.46	.36	.09	.40	.43	.17	.50	.55	.30	
Ax	.64	.42	.17	.22	.50	.18	.18	.27	.30	.28	.42	.60	.00	.32	
A	.00	.00	.00	.00	.40	.18	.09	.46	.50	.43	.42	.10	.46	.23	
H	.18	.08	.00	.22	.10	.27	.36	.00	.00	.28	.50	.20	.18	.18	
B) <u>Mark's Group</u>															
Category	2	3	4	5	6	7	8	9	10	11	12	13	14	\bar{x}	
D	.08	.08	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	
S	.08	.08	.00	.00	.10	.00	.00	.00	.00	.00	.10	.00	.00	.03	
W	.50	.58	.27	.46	.60	.69	.58	.55	.25	.13	.40	.46	.25	.44	
E	.33	.42	.55	.64	.90	.31	.67	.11	.33	.25	.70	.46	.75	.49	
Dp	.17	.17	.36	.27	.20	.38	.25	.22	.58	.25	.10	.18	.33	.27	
Ax	.33	.58	.18	.36	.40	.23	.08	.00	.25	.38	.20	.09	.08	.24	
A	.08	.17	.09	.18	.10	.46	.25	.89	.08	.25	.30	.09	.08	.23	
H	.50	.00	.00	.09	.10	.38	.08	.00	.00	.25	.20	.00	.00	.12	

TABLE 19 Most Significant Events Mentioned in Member ReportsWeek Carl's Group

- 1 Evaluation of different group reactions to 'managerial exercise'.
- 2 Confrontation with Steven by several group members; group beginning to discuss personal feelings and reactions to other members.
- 3 Group's realization of its concerted attempt to turn away from a confrontation with personal anxieties by a lengthy discussion/dispute over leadership; discussion on Trina's anxiety.
- 4^a Communications exercise in class; discussion of 'eye contact' and other factors involved in forming relationships.
- 5 Five adjectives exercise; discussion on Steven's paternalistic style and Charles' need for control in group.
- 6 Discussion about Steven's conflict with his wife; Stuart's anxieties and relationship with father figures.
- 7 Discussion about Edward's problems in his marital relationship: his difficulty in giving emotionally; discussion of 'costs' involved in interpersonal change.
- 8 The 'fight' between Henry and Carl; hostility and frustration expressed by several members; increased interpersonal confrontation.
- 9 Ken making himself vulnerable to the group by disclosing his difficulty in establishing satisfactory relationships; discussion of sex in relationships.
- 10 Discussion centered on Trina and the group's loving/sexual feelings towards her.
- 11 Self-portrait exercise; expression of emotional feelings between members.
- 12 Discussion centered on 'giving and taking' emotionally. Intense, deep emotion shown by Trina, Joe, Stuart. Stuart's display of friendship toward Joe.
- 13 Humorous, relaxed discussion; Allen's difficulty in showing feelings; about half of the group feeling tense/frustrated.
- 14 Honest open expressions from Sam and Joe; feedback from 'group sculpture' exercise; Steven anxious and angry.

Mark's Group

- 1 Evaluation of different group reactions to 'managerial exercise'.
- 2 Confrontation with Mark; confrontation with Tom over his proposed leadership role.
- 3 Confrontation between Mark and Larry; genuine display of self-feelings by Harry.
- 4 Discussion about whether the group had established any 'group norms'; Eric's entry into group discussion.
- 5 Five adjectives exercise; feedback given to Leonard on his 'insensitivity'.
- 6 Falling backwards and being caught by the person 'we felt least comfortable with'; reconciliation of differences between Mark and Larry; discussion of Arthur's 'unemotional' impact on others.

Mark's Group cont.

- 7 Tom revealing more of his 'self' in group; Peter asking for feedback.
- 8 Discussion of Leonard's attempt to control his emotions; Leonard actively seeking feedback; sensitive, supporting behaviour shown by James and Tom.
- 9 Matthew making himself vulnerable to the group by revealing an important personal problem.
- 10 Tension caused by non-verbal exercise; feelings of dissatisfaction associated with failure to achieve intimacy of previous week.
- 11 Discussion of group's 'poor performance' in group-on-group situation; discussion on what the group goals should be.
- 12 Ed's entry into active group participation.
- 13 Don revealing more of his 'self' in group.
- 14 'Group sculpture' exercise; members planning to meet again in T-group situation after end of course; high participation.

^aBetween weeks 3 and 4 there was a two week University holiday during which the groups did not meet.

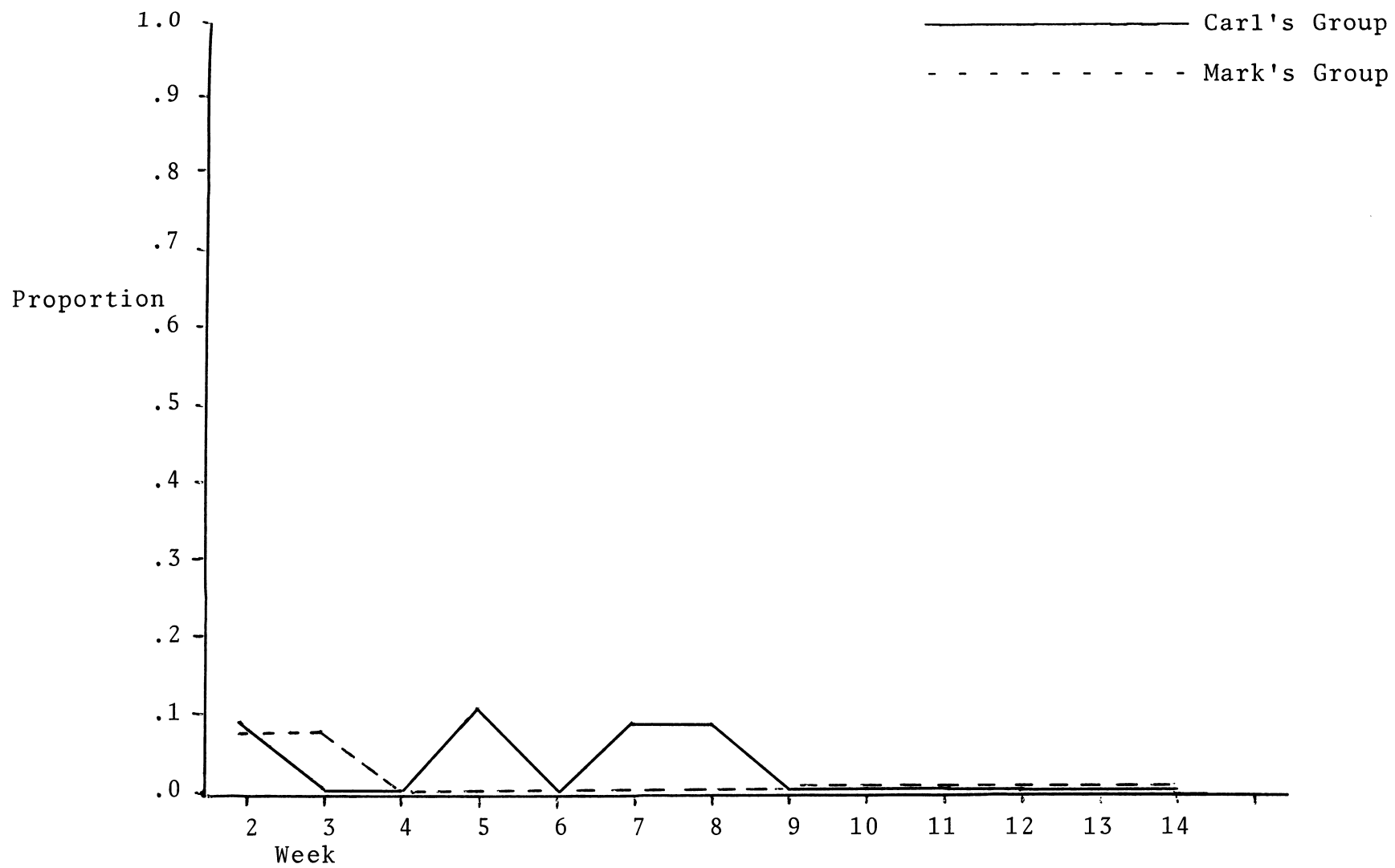


FIGURE 11 Content Analysis Self Scores for Domination

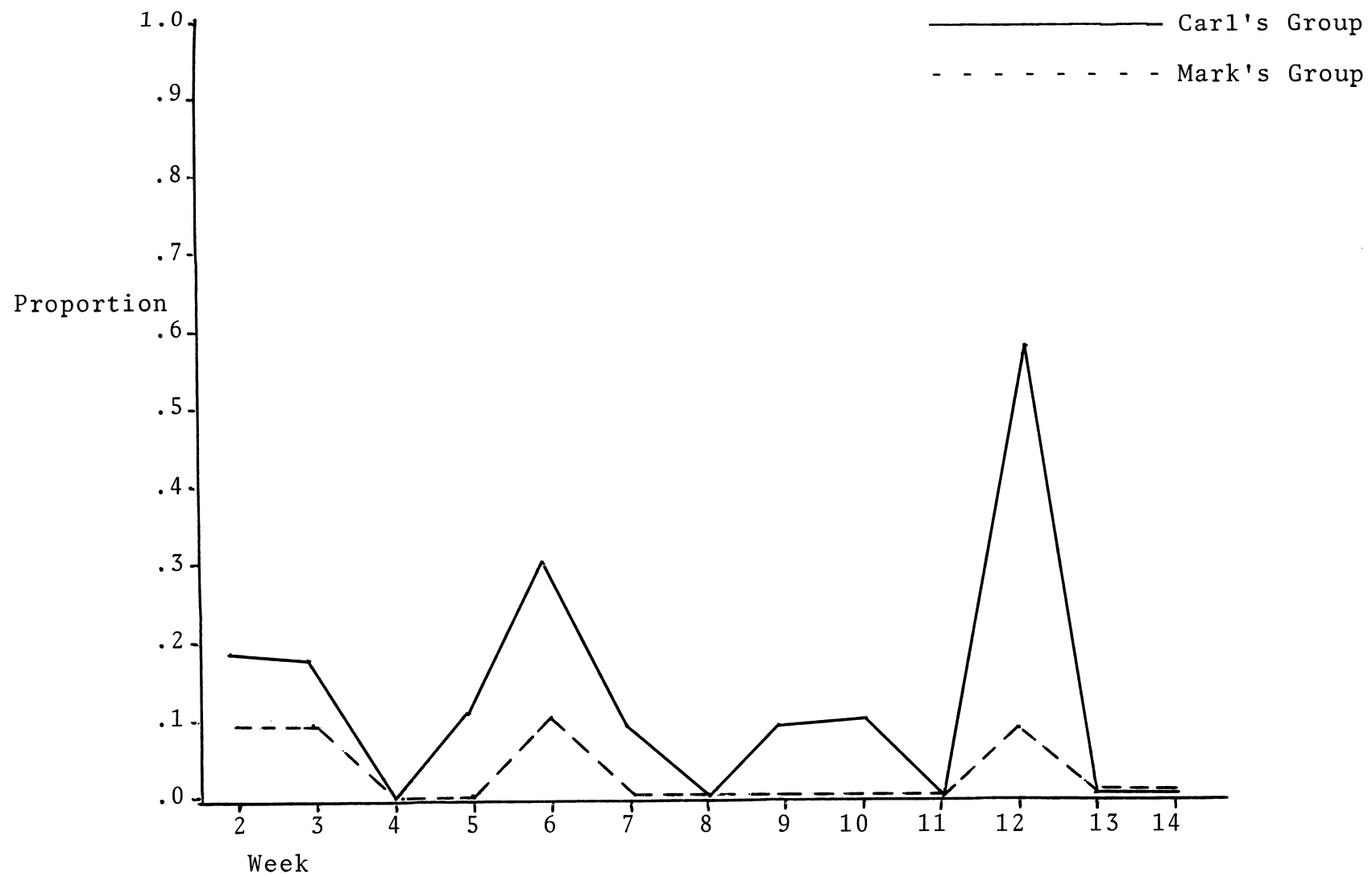


FIGURE 12 Content Analysis Self Scores for Submission

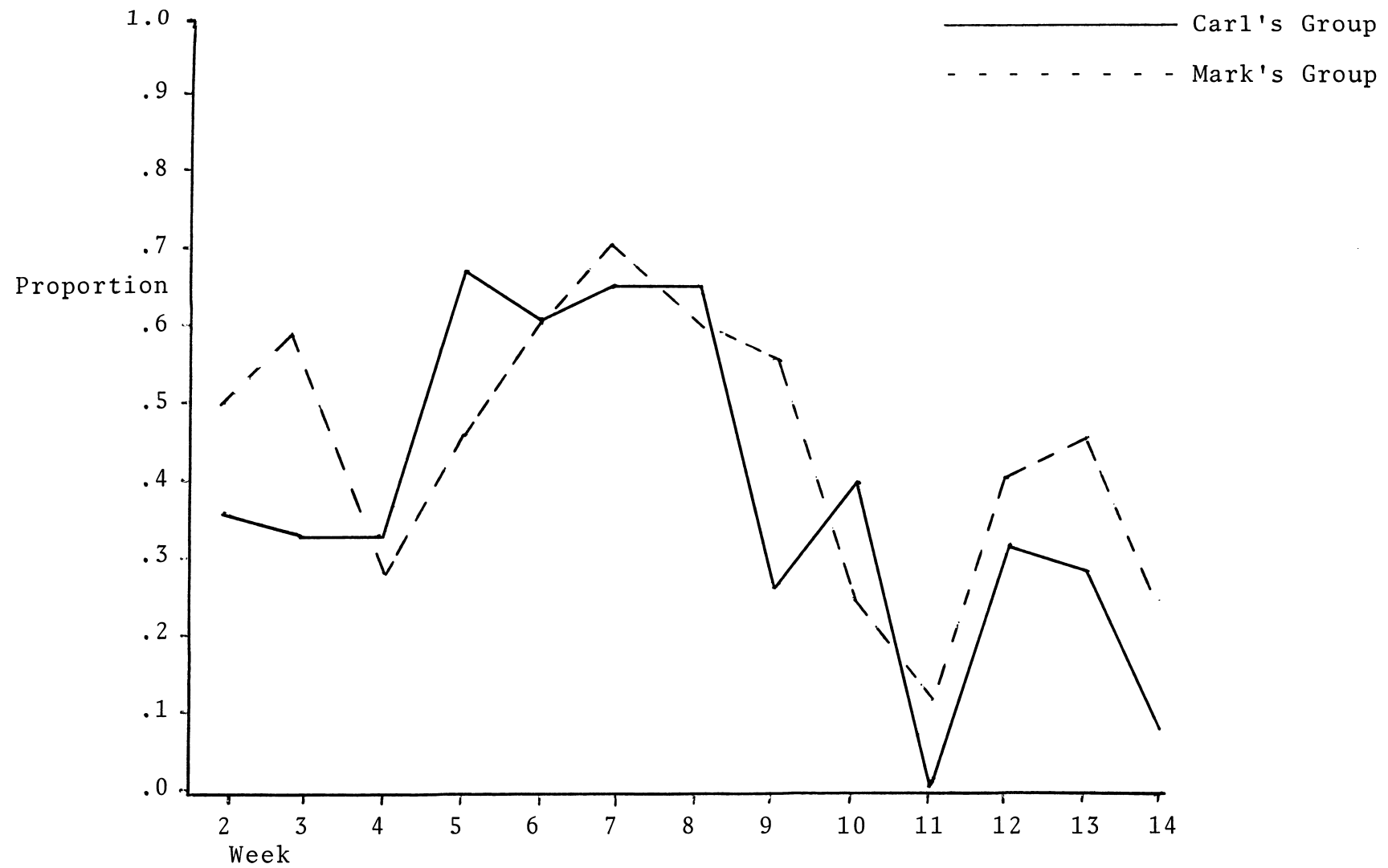


FIGURE 13 Content Analysis Self Scores for Work.

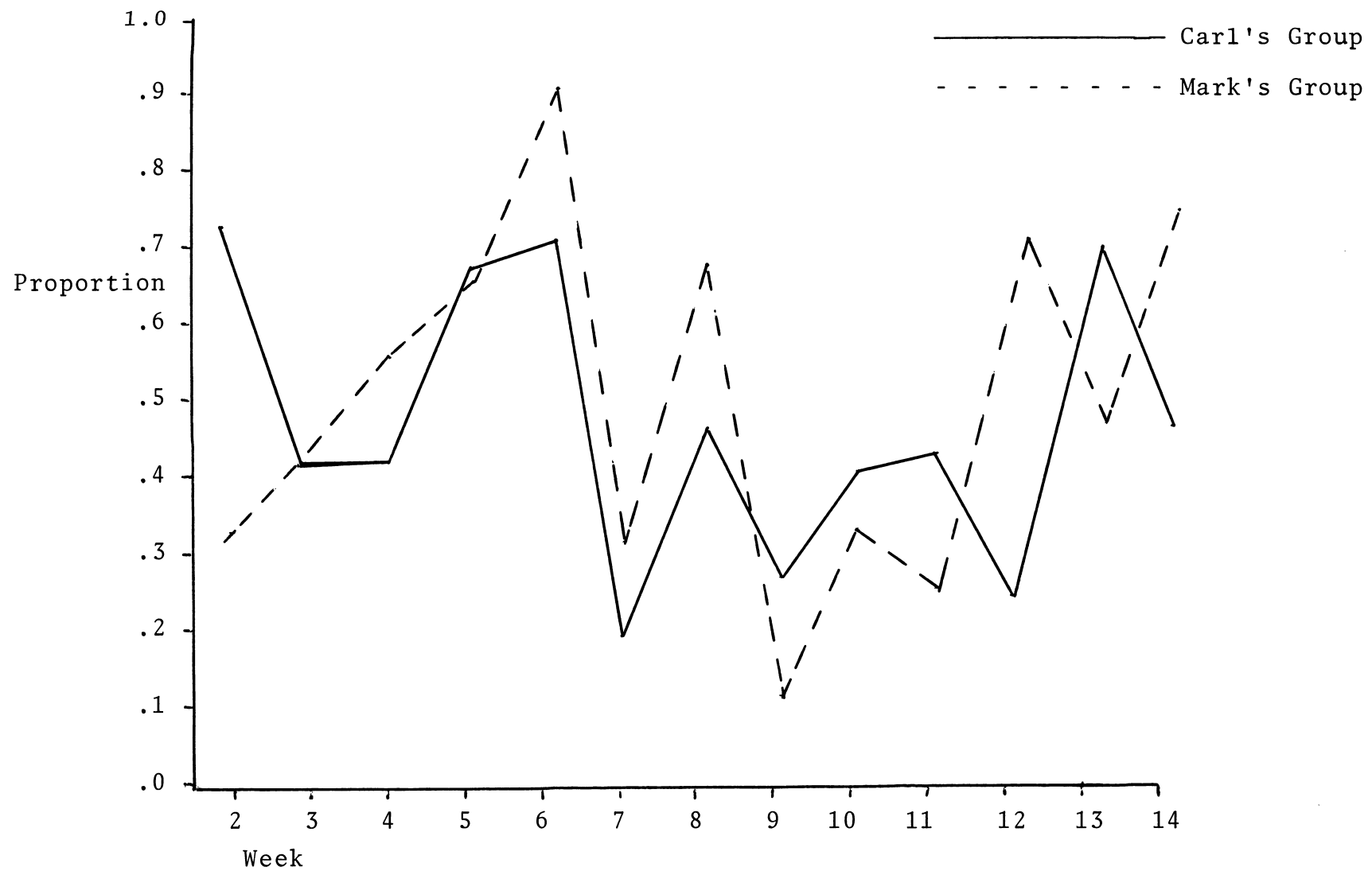


FIGURE 14 Content Analysis Self Scores for Euphoria.

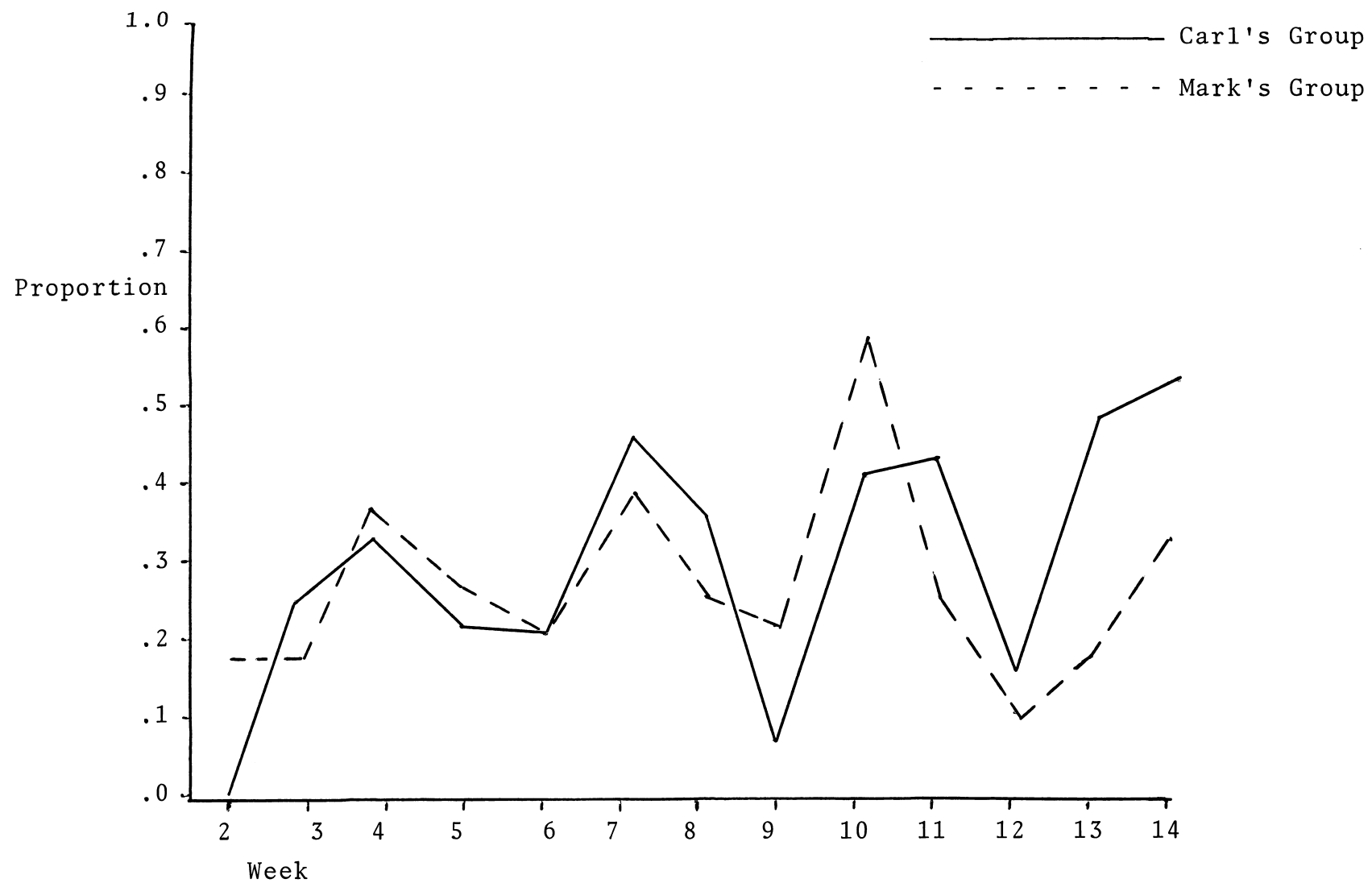


FIGURE 15 Content Analysis Self Scores for Depression.

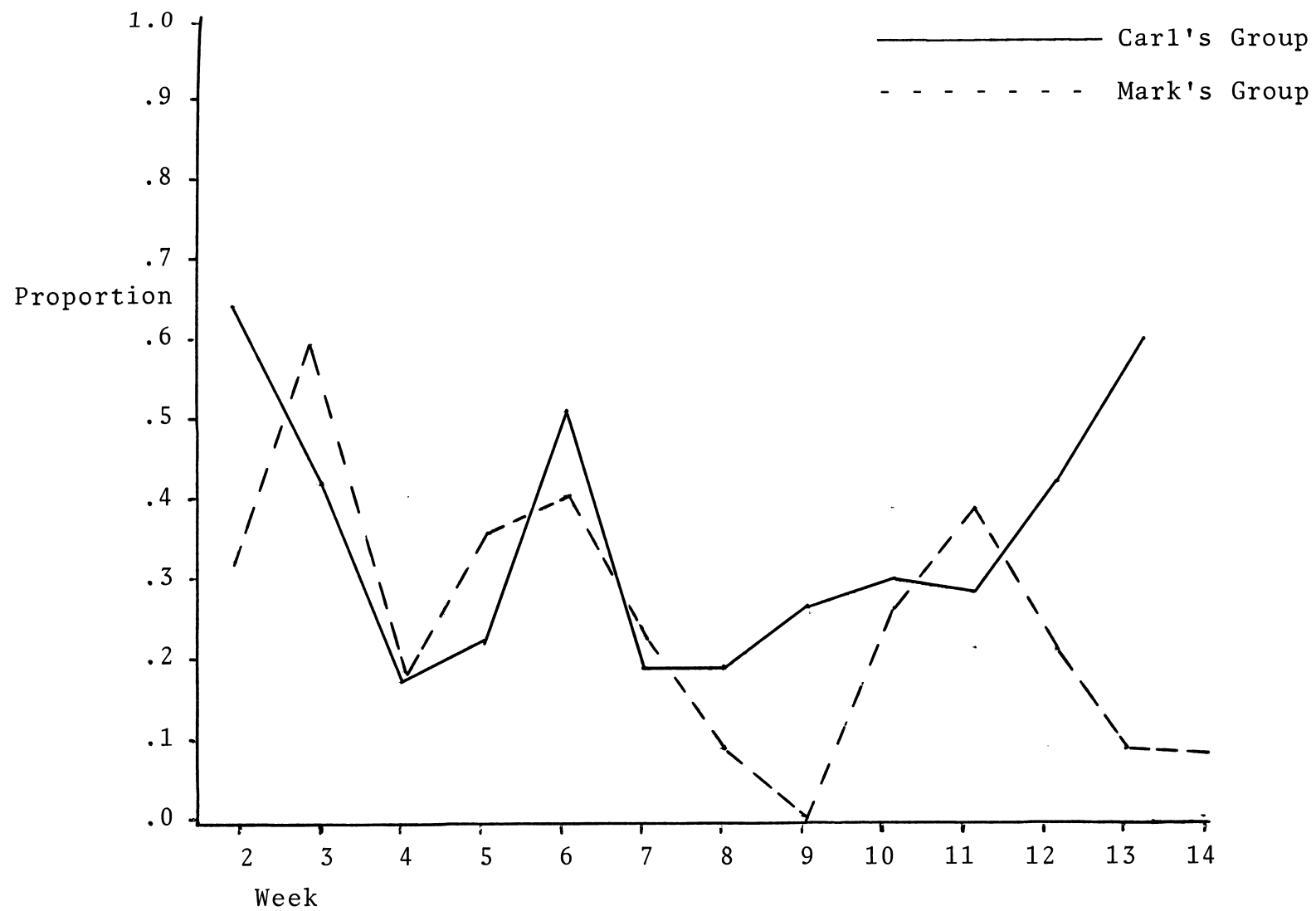


FIGURE 16 Content Analysis Self Scores for Anxiety.

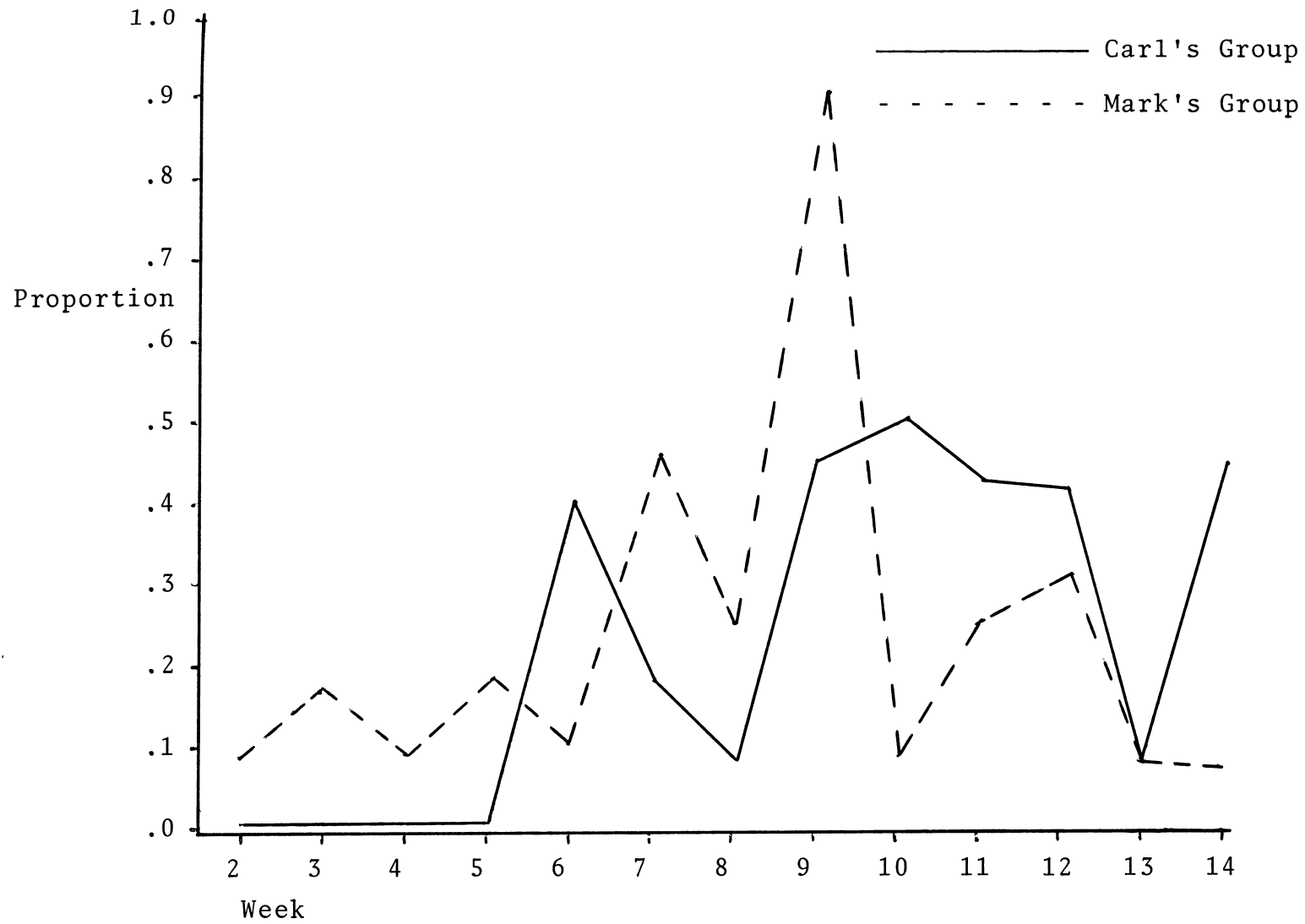


FIGURE 17 Content Analysis Self Scores for Affiliation.

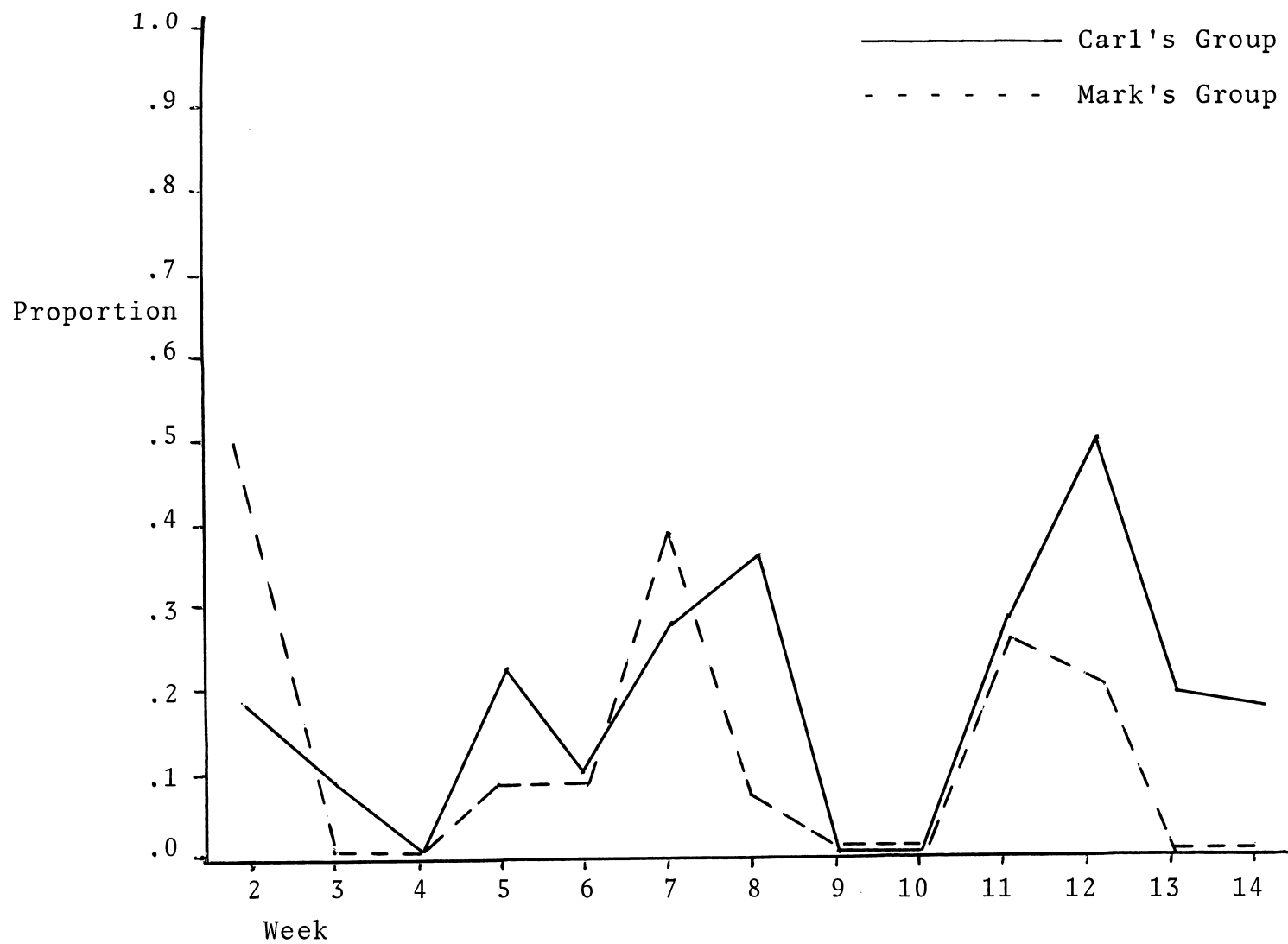


FIGURE 18 Content Analysis Self Scores for Hostility.

made by identifying the week in which each of the 41 RMD examples occurred, through an examination of *Postmeeting Reports* and *Daily Mood Checklists*. Most examples were easily identified for week; however, a few examples (e.g. No.36) that were vaguely worded and showed no identifying characteristics for the T-group session in which diffusion occurred, could not be classified for a specific week. These were not used. Table 20 shows the weekly incidence of RMD for both groups.

TABLE 20 Weekly Frequencies of RMD Examples

Week	<u>A) Carl's Group</u>				<u>B) Mark's Group</u>				<u>C) Carl's Group</u>
	D(0)	A(0)	E(0)	$\Sigma(0)$	D(0)	A(0)	E(0)	$\Sigma(0)$	D(I)
2	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	1
5	0	1	1	2	0	0	1	1	0
6	0	0	0	0	0	0	0	0	0
7	0	0	0	0	1	0	0	1	0
8	0	1	0	1	0	0	0	0	2
9	1	0	1	2	0	0	3	3	1
10	2	0	1	3	1	0	0	1	1
11	3	0	0	3	0	1	0	1	0
12	1	0	1	2	0	0	0	0	1
13	0	0	0	0	0	1	3	4	0
14	2	0	0	2	0	0	1	1	0

An additional column for Carl's group for Inward Depression has been added to the table. Inward diffusion of other moods did

not occur frequently enough to warrant their inclusion. Weeks with zero scores were treated as Low diffusion weeks which were compared with the remaining weeks (High diffusion weeks) in each category using the Mann-Whitney U-Test. The results are shown in Table 21A.

TABLE 21A Results of Mann-Whitney U-Tests on Data Relevant to
Hypothesis 4
(all tests are two-tailed)

Category	Depression-0			Anger-0			Euphoria-0			Depression-I
	C	M	C+M	C	M	C+M	C	M	C+M	
D	ns	ns	ns	.10 H>L	ns	ns	ns	ns	ns	ns
S	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
W	.046 H<L	ns	ns	.10 H>L	ns	ns	ns	ns	ns	ns
E	ns	ns	.05 H<L	ns	ns	ns	ns	ns	ns	.10 H<L
Dp	ns	.05 H>L	ns	ns	ns	ns	ns	ns	ns	ns
Ax	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
A	.002 H>L	ns	.10 H>L	ns	ns	ns	ns	ns	ns	ns
H	ns	ns	ns	ns	ns	ns	ns	ns	.12 H<L	ns
Sample n_1	5	2	7	2	2	4	4	4	8	5
Size n_2	8	11	19	11	11	22	9	9	18	8

C = Carl's group M = Mark's group C+M = Both groups

Where significance has been attained, the direction of the significance is shown underneath the probability. For example, for the category Work (Outward Depression) H<L (.046): this reads High diffusion weeks are less than Low diffusion weeks on Work

or, Weeks of High diffusion are characterized by low Work scores.

Hypothesis 4(a) is that depression diffusion weeks will be characterized on content analysis categories by low positive moods and high negative moods. "Positive" was defined operationally by the categories W, E, and A. Work (W) was included in the positive category because it was felt to be associated with moods of well-being and euphoria. "Negative" was defined operationally by the categories Dp, Ax and H. This clustering needs no explanation. The content analysis categories D and S were not clustered with the other categories because their association with moods of euphoria anger, and depression in the testing of this hypothesis was unclear.

For Carl's group, Hypothesis 4(a) is confirmed for Work only. For Affiliation a result opposite to that predicted was obtained: High Affiliation was associated with High Outward Depression. In Mark's group, the hypothesis was confirmed for Depression (Dp) only. When the data from both groups was combined, the hypothesis was confirmed for Euphoria (E), but not for Affiliation (A).

Hypothesis 4(b) is that weeks of high anger diffusion will be characterized on content analysis categories by low positive and high negative moods. This hypothesis was confirmed for Hostility for both groups combined. For Carl's group, Work and Domination were slightly associated with high outward diffusion. Testing was complicated here by the small sample size for outward anger weeks.

Hypothesis 4(c) is that weeks of high euphoria will be characterized on content analysis categories by high positive and low negative scores. Significant results were not obtained for either group, or both groups together.

Returning to Hypothesis 4(a) as applied to the Inward

Depression scores for Carl's group, the hypothesis was confirmed for Euphoria (E) only.

On the whole, the results were equivocal. Hypothesis 4 which - stated generally - was that there would be a 1 to 1 association between the type of mood developed by the group and the type of mood diffused was not confirmed. In some cases the opposite results were obtained: in Carl's group high Affiliation was associated with outward depression, and high Work was associated with high outward anger.

SUMMARY:

For both groups combined, Outward Depression weeks are associated with Low Euphoria and High Affiliation. Outward Euphoria weeks are associated with Low Hostility. In Carl's group, Outward Euphoria weeks are associated with Low Work and High Affiliation; Outward Anger Weeks are associated with High Domination and High Work; Inward Depression weeks are associated with Low Euphoria. In Mark's group, Outward Depression is associated with High Depression.

* * *

Hypothesis 5 is that weeks of high outward diffusion will be characterized by the predominance of particular content analysis categories. To test this hypothesis weeks of high outward diffusion were selected for both groups from Table 20. The results of Mann-Whitney U-Tests on the data in Table 18 are shown below:

TABLE 21B Results of Mann-Whitney U-Tests on Scores Relevant to Hypothesis 5

(all tests are two-tailed)			
<u>Category</u>	<u>Carl's Group</u>	<u>Mark's Group</u>	<u>Both Groups</u>
D	n.s.	n.s.	n.s.
S	n.s.	.10 L>H	.05 L>H
W	n.s.	n.s.	.10 L>H
E	n.s.	.10 L>H	.02 L>H
Dp	n.s.	n.s.	n.s.
Ax	.046 L>H	n.s.	.02 L>H
A	n.s.	n.s.	n.s.
H	n.s.	n.s.	n.s.
Sample n_1	5	6	11
Size n_2	8	7	15

For both groups combined, Low Diffusion weeks are associated with High Submission, High Euphoria, High Anxiety, and a slight tendency to High Work (not significant at .05 level). The T-group's mood diffusion impact is negligible during weeks in which these behaviours are high. These results *suggest* that if the T-group is to make a significant emotional impact on its members, then anxiety and euphoria must be reduced, and submission and other passive, non-participative reactions must be replaced by more "active" behaviour. The data demonstrates a connection between dominance of phase behaviours and diffusion impact. Hypothesis 5 was therefore accepted.

IV PERSONALITY AND INDIVIDUAL HYPOTHESES

Before investigating these hypotheses-generating areas each T-group member was classified into the different diffuser categories listed in Chapter V. Table 22 shows the Inward and Outward RMD moods each person is high on.

TABLE 22 Frequencies of Mood Diffusion for T-group Members

Name	D(0)	A(0)	E(0)	D(I)	A(I)	E(I)	ΣD	N(0)	$\Sigma M(I+0)$	$\Sigma M(I)$	$\Sigma M(0)$
A)											
Joe	1	0	1	0	0	1	1	0	3	1	2
Sam	1	0	0	0	0	0	1	1	1	0	1
Charles	0	0	0	1	0	0	1	0	1	1	0
Allen	0	0	1	1	0	0	1	0	2	1	1
Ken	1	0	1	0	0	1	1	1	3	1	2
Henry	0	2	0	0	0	0	0	2	2	0	2
Steven	2	1	0	0	0	0	2	3	3	0	3
Edward	0	0	0	1	0	0	1	0	1	1	0
Trina	2	1	2	2	0	0	4	3	7	2	5
B)											
Ed	0	1	0	0	0	0	0	1	1	0	1
James	0	0	0	0	0	0	0	0	0	0	0
Arthur	0	0	1	1	0	1	1	0	3	2	1
Tom	1	0	0	0	0	0	1	1	1	0	1
Don	0	0	1	0	0	0	0	0	1	0	1
Harry	0	0	2	0	0	0	0	0	2	0	2
Matthew	0	2	1	0	0	0	0	2	3	0	3
Larry	0	0	2	0	0	0	0	0	2	0	2
Eric	1	0	2	0	0	0	1	1	3	0	3
Peter	0	0	0	0	0	0	0	0	0	0	0
Leonard	0	0	2	0	0	0	0	0	2	0	2

Legend:
for Table 22

D: No. of RMD Depression examples
A: No. of RMD Anger examples
E: No. of RMD Euphoria examples
0: Outward Diffusion examples
I: Inward Diffusion examples
 ΣD : Sum of Inward and Outward Diffusion examples
N(0): Outward Negative (A+D) examples
 $\Sigma M(I+0)$: Sum of Inward and Outward E,A,D examples.

The eleven diffuser categories, related to each category in the table, are (reading from left to right):

1. Outward Depressives (1).
2. Outward Aggressives (1).
3. Outward Euphorics (1).
4. Inward Depressives (1).
5. Inward Aggressives (not used).
6. Inward Euphorics (not used).
7. Depressives (1).
8. Outward Negatives (1).
9. High Diffusers (2).
10. Inward Diffusers (1).
11. Outward Diffusers (2).

Because of the small frequencies in categories 5 and 6, these categories were not used. The numbers in brackets after each category show the minimum number of RMD examples an individual must have to be included in the "high" end of the category. For example, all persons with one or more instance of outward diffusion of Depression is in the High Outward Depressive category. Persons with outward diffusion scores of zero for Depression are in the Low Outward Depressive category. We are concerned here with whether or not there are significant personality and other differences between persons on the high as opposed to the low end of each category.

"Highs" were compared with "lows" for each diffuser category on the following measures.

1. The 16 P.F. Test (Table 23).
2. Role Image Checklist (Table 24).

TABLE 23 16 P.F. (Form C) Scores (Sten Scores)A) Carl's Group

Category	Ken	Trina	Steven	Henry	Allen	Joe	Alex	Sam	Charles
A	6	4	5	6	4	7	6	6	5
B	8	8	10	8	7	8	8	7	7
C	6	6	3	4	5	3	3	6	7
E	8	6	9	10	5	5	10	5	5
F	4	3	1	10	6	6	10	9	5
G	1	1	7	1	1	1	2	3	1
H	6	3	4	10	6	5	7	5	6
I	10	5	7	3	7	5	1	5	9
L	5	7	7	5	5	10	8	2	2
M	10	10	8	2	4	7	8	4	3
N	6	6	6	10	8	8	8	5	6
O	5	3	9	5	3	3	8	2	7
Q ₁	8	9	4	8	8	8	8	8	6
Q ₂	3	3	8	8	3	3	9	5	8
Q ₃	2	1	2	7	3	4	5	6	7
Q ₄	7	8	8	5	7	7	3	3	8
Ax ^a	6.3	6.6	8.3	5.2	5.9	6.7	6.5	3.6	5.4
Int ^b	5.9	7.4	7.8	3.0	5.1	5.0	4.6	4.4	5.6

B) Mark's Group

Category	Leonard	Harry	Arthur	Tom	Ed.	Peter	James	Don
A	3	4	6	8	4	9	6	8
B	6	6	9	8	7	9	7	8
C	4	7	4	6	5	4	4	5
E	8	6	5	9	8	4	5	1
F	3	4	6	8	4	6	2	6
G	4	6	1	3	1	1	3	8
H	3	6	8	6	7	7	5	5
I	3	10	10	3	3	7	4	6
L	5	5	2	5	4	6	6	2
M	8	9	8	8	6	7	10	4
N	9	9	8	8	8	8	8	8
O	5	3	3	5	3	3	7	1

TABLE 23 CONT.

Category	Leonard	Harry	Arthur	Tom	Ed.	Peter	James	Don
Q ₁	9	8	10	9	8	8	8	9
Q ₂	9	6	5	5	6	5	8	10
Q ₃	7	4	5	3	3	4	5	7
Q ₄	6	6	2	3	3	5	3	7
Ax	5.5	5.2	4.2	5.2	4.9	5.6	5.8	4.2
Int.	8.1	6.6	4.9	4.4	6.0	4.3	7.3	5.3

^aAx. = Anxiety

^bInt. = Introversion

TABLE 24 Role Image Checklist ScoresA) Carl's Group

Category	Carl	Steven	Trina	Allen	Joe	Charles	Henry	Ken	Edward	Stuart	Alex	Sam	\bar{x}
D1 Commands	5	6	1	6	3	0	6	1	2	1	1	0	2.70
D2 Gives advice	8	7	4	4	7	1	2	4	0	3	3	0	3.60
D3 Participates	6	8	5	4	8	1	3	7	4	4	7	0	4.90
ΣD Domination	19	21	10	14	18	2	11	12	6	8	11	0	11.20
S3 Goes along	3	1	5	1	2	4	0	2	2	2	4	4	2.50
S2 Compliant	0	2	5	0	0	1	0	4	1	1	3	0	1.42
S1 Submits	0	1	4	1	1	3	0	2	1	2	1	6	1.83
ΣS Submission	3	4	14	2	3	8	0	8	4	5	8	10	5.75
W1 Persuades to Work	7	4	4	3	8	0	3	5	3	6	3	0	3.84
W2 Pursues task	8	7	7	5	8	2	4	6	5	7	7	0	5.50
W3 Works reliably	9	6	7	6	8	7	4	7	7	9	7	2	6.60
ΣW Work	24	17	18	14	24	9	11	18	15	22	17	2	15.94
E3 Inattentive	1	2	0	1	1	1	4	0	2	1	2	2	1.42
E2 Expresses Feelings	6	3	2	1	6	0	2	3	0	5	1	0	2.42
E1 Tells stories	3	2	1	3	0	3	1	1	1	1	2	0	1.50
ΣE Expression	10	7	3	5	7	4	7	4	3	7	5	2	5.34
A1 Expresses affection	4	1	5	1	4	0	1	6	0	7	1	0	2.50
A2 Supports others	8	5	7	2	4	0	0	6	2	7	5	0	3.84
A3 Accepts others	8	4	7	2	5	4	2	6	3	8	5	0	4.50
ΣA Affiliation	20	10	19	5	13	4	3	18	5	22	11	0	10.84
H3 Ignores others	0	0	1	1	0	3	0	0	2	1	2	4	1.17
H2 Criticizes others	2	2	0	6	4	0	5	2	1	3	3	0	2.34
H1 Attacks others	0	0	0	5	2	0	6	0	1	1	1	0	1.33
ΣH Hostility	2	2	1	12	6	3	11	2	4	5	6	4	4.84

TABLE 24 Role Image Checklist Scores

B) Mark's Group

Category		Mark	Matthew	Harry	Tom	Larry	Leonard	Eric	Al.	Arthur	Don	Peter	Ed	James	\bar{x}
D1	Commands	9	0	1	5	4	5	0	1	2	0	0	0	5	2.76
D2	Gives advice	8	5	6	7	6	4	0	2	4	2	1	1	5	3.92
D3	Participates	7	3	8	6	8	2	0	2	6	2	1	1	8	4.15
ΣD	Domination	24	8	15	18	18	11	0	5	12	4	2	2	18	10.53
S3	Goes along	3	7	6	3	3	3	6	5	2	7	4	5	2	4.30
S2	Compliant	0	6	7	1	0	4	1	2	0	4	2	0	0	2.08
S1	Submits	1	5	6	1	2	2	6	3	1	6	4	4	0	3.15
ΣS	Submission	4	18	19	5	5	9	13	10	3	17	10	9	2	9.53
W1	Persuades to work	9	6	7	6	5	5	0	0	5	2	1	0	3	3.76
W2	Pursues Task	9	9	9	8	6	5	0	2	8	4	3	2	5	5.40
W3	Works reliably	9	9	9	8	8	6	3	4	8	6	5	3	6	6.46
ΣW	Work	27	24	25	22	19	16	3	6	21	12	9	5	14	15.62
E3	Inattentive	0	1	0	1	0	0	1	1	0	0	0	0	0	.29
E2	Expresses feelings	7	6	4	5	4	3	0	1	1	2	0	0	0	2.54
E1	Tells stories	2	1	1	1	0	0	0	1	0	0	0	0	0	.46
ΣE	Expression	9	8	5	7	4	3	1	3	1	2	0	0	0	3.29
A1	Expresses affection	9	7	6	0	4	1	0	0	1	3	1	0	3	2.46
A2	Supports others	8	9	9	2	7	2	0	2	2	7	3	2	8	4.70
A3	Accepts others	7	9	9	1	6	3	2	3	2	7	4	4	5	4.76
ΣA	Affiliation	24	25	24	3	17	6	2	5	5	17	8	6	16	11.92
H3	Ignores others	1	0	0	1	0	0	1	2	0	0	0	1	2	.61
H2	Criticizes others	0	0	0	3	1	2	0	1	2	0	0	0	1	.76
H1	Attacks others	0	0	0	3	1	3	0	1	1	0	0	0	1	.76
ΣH	Hostility	1	0	0	7	2	5	1	4	3	0	0	1	4	2.13

TABLE 25 Personal Relationships Indices Scores

Names	1. No. of Names	2. No. of T-group Names	3. Close	4. Like	5. Mean ΣHours	6. Mean Hours Like	7. Hours Like	8. ΣHours
James	13	1	.23	.69	1.50	1.25	16.25	19.00
Tom	12	2	1.00	1.00	3.60	3.60	43.25	43.25
Larry	27	6	.78	.89	3.40	2.88	77.50	92.00
Allen	11	2	.46	.73	.80	.75	8.25	8.75
Peter	20	4	.25	.60	3.02	2.88	57.25	60.50
Charles	11	0	.18	.82	5.65	5.20	57.00	62.50
Sam	35	9	.26	.69	.28	.23	8.05	9.70
Matthew	21	6	.81	1.00	4.70	4.70	85.50	85.50
Ed	23	1	.57	.65	2.18	1.94	44.50	50.25
Arthur	17	4	.71	1.00	3.30	3.26	55.50	55.75
Joe	23	3	.48	.70	2.65	1.76	40.75	61.00
Edward	12	3	.59	.92	4.06	3.20	38.75	48.75
Eric	30	0	.40	.80	1.07	.89	26.50	32.05
Ken	16	7	.87	1.00	2.30	2.30	37.50	37.50
Steven	11	1	.46	.64	7.30	3.64	40.00	80.00

TABLE 26 Centrality Scores

Name	Total No. of Times Name Mentioned
A) <u>Carl's Group</u>	
Carl	14
Ken	24
Stuart	19
Steven	38
Allen	15
Trina	29
Alex	6
Edward	9
Charles	15
Henry	21
Sam	4
Joe	22
B) <u>Mark's Group</u>	
Mark	51
Leonard	35
Matthew	24
Peter	8
Tom	38
Arthur	7
Al	7
Larry	17
Eric	11
Ed	17
Harry	12
Don	16
James	27

TABLE 27 Interpersonal Network Mood Scores^a

Name	1. Mood in Primary Network (\bar{x})	2. Mood in Total Interpersonal Network (\bar{x})
A) <u>Carl's Group</u>		
Sam	1.78	1.48
Allen	.93	.37
Joe	1.21	.68
Ken	.89	1.24
Edward	.51	-.71
Alex	1.70	1.42
Charles	.15	.47
Steven	1.12	1.12
Stuart	1.88	1.18
Henry	1.20	.89
Trina	-.34	-.34
B) <u>Mark's Group</u>		
Al	1.64	1.16
Eric	2.86	1.84
Ed.	.40	.27
Arthur	1.36	1.41
Peter	1.40	.67
Tom	1.59	1.43
Matthew	1.80	1.67
Larry	2.03	1.43
Harry	2.33	1.37
Don	2.08	1.04
James	-.67	-.16

^aScores for persons with very small samples not included.

TABLE 28 Involvement Scores

Name		Mean Involvement
A)	<u>Carl's Group</u>	
	Carl	6.0
	Ken	6.1
	Stuart	4.9
	Steven	6.1
	Allen	6.3
	Trina	5.9
	Alex	5.5
	Edward	5.3
	Charles	4.9
	Henry	4.9
	Sam	5.6
	Joe	5.4
B)	<u>Mark's Group</u>	
	Mark	6.6
	Leonard	5.6
	Matthew	6.3
	Peter	5.3
	Tom	5.1
	Arthur	6.1
	Al	5.2
	Larry	5.9
	Eric	6.0
	Ed	5.6
	Harry	6.2
	Don	5.3
	James	4.9

TABLE 29 Results of Mann-Whitney U-Tests on Diffuser Categories

Significance Levels (two-tailed) shown in brackets.

Individual Dimensions						
Diffuser Category	1. 16 P.F.	2. Role Image	3. Personal Relationships	4. Centrality	5. Network Mood	6. Involvement
1. High Diffusers		Σ Work(.10) Σ Expres- sion(.05) Gives ad- vice(.10) Partici- pates(.11) Persuades to Work (.05) Persues Task(.05) Expresses Feelings (.02) Expresses Affection (.05) Ignores Others (Low)(.05)				Involvement (.02)

TABLE 29 CONT.

Diffuser Category	1. 16 P.F.	2. Role Image	3. Personal Relationships	4. Centrality	5. Network Mood	6. Involvement
2. Outward Diffusers	Assertive (.12) Suspicious (.05) Anxiety (.06)	Σ Expression (.05) Persuades to Work (.10) Expresses Feelings (.05) Expresses Affection (.05) Ignore Others (Low) (.05)	Σ Hours (.10)		Total Network Mood (.10)	
3. Inward Diffusers	Lack of Rigid Internal Standards (casual, undependable) (.02) Group Dependent (.03)				Primary Network Mood (Low) (.05) Total Network Mood (Low) (.05)	

TABLE 29 CONT.

Diffuser Category	1. 16 P.F.	2. Role Image	3. Personal Relationships	4. Centrality	5. Network Mood	6. Involvement
4. Outward Euphorics	Tender- minded (.05) Placid (.05) Humble (.18) Group Dependent (.18)	Σ Affiliation (.05) Σ Work(.10) Inattentive (Low)(.05) Expresses Affection (.02) Ignores Others (Low)(.05) Persuades to Work (.10) Expresses Feelings (.10) Supports Others (.10) Accepts Others (.10)	No. of T-group Names (.05) Like (.16)		Primary Net- work Mood (.05)	Involvement (.02)

TABLE 29 CONT.

Diffuser Category	1. 16 P.F.	2. Role Image	3. Personal Relationships	4. Centrality	5. Network Mood	6. Involvement
5. Outward Depressives	Group Dependent (.13) Forthright (.10) Lack of Rigid Internal Standards (casual, undependable) (.10)	Gives advice (.10)			Total Network Mood (Low) (.10)	
6. Outward Aggressives	Assertive (.05)			Central (.10)		
7. Outward Negatives	Assertive (.08) Controlled (.02)					
8. Inward Depressives		Tells Stories (.10)	No. of Names (Low) (.10)		Primary Network Mood (Low) (.05) Total Network Mood (Low) (.05)	

TABLE 29 CONT.

Diffuser Category	1. 16 P.F.	2. Role Image	3. Personal Relationships	4. Centrality	5. Network Mood	6. Involvement
9. Depressives	Forthright (.02) Group Dependent (.05)	Tells Stories (.10) Inatten- tive (.05) Ignores Others (.10)	Hours Like (Low) (.05)			

3. Personal Relationships Indices (Table 25).
4. Centrality (Table 26).
5. Interpersonal Network Mood (Table 27).
6. Involvement (Table 28).

Scores for individuals on each of these measures are shown in the tables indicated in brackets. The results of Mann-Whitney U-Tests (two-tailed) comparing the "high" with the "low" end of each diffuser category for each category and subcategory level of the six dimensions investigated are shown in Table 29. The individual dimension *subcategories* shown in the columns under the major Individual Dimensions are subcategories on which persons in the "high" end of the diffuser category shown have high scores. For example, high diffusers are persons who have high Σ Work scores. Where a diffuser category is distinguished by being Low on a subcategory, the word low is inserted in brackets. For example, high diffusers are low on the Role Image category "ignores others" i.e. high diffusers are persons who do not ignore others. Significance levels as low as .18 have been included in the table to show score tendencies.

This next section gives a brief summary of the diffusion categories:

- 1) High Diffusers are involved, task-oriented and highly expressive of feelings and affection. They try to persuade others to work; they do not ignore others. They tend to be participant and give advice.
- 2) Outward Diffusers are suspicious and anxious, with a tendency to be assertive. They are expressive of

feelings and affection, do not ignore others, and tend to persuade others to work. They also tend to have more hours spent in interpersonal contacts in their social networks and to experience positive moods in those contacts (overall).

- 3) Inward Diffusers are group dependent and lack rigid internal standards. They experience negative moods frequently in their primary and total interpersonal networks. Presumably this is the source of the mood they "bring" into the group: most of the inward diffusers are also inward depressives.
- 4) Outward Euphorics are tenderminded, placid and tend also to be humble and group dependent (.18 level). They are very affiliative, express affection readily, are attentive to others. They tend also to accept and support others, express feelings readily and persuade others to work. They are highly involved in the T-group, experience positive moods in their primary network, have several T-group members as friends and tend to associate with persons they like.
- 5) Outward Depressives show a tendency (not significant) to be group dependent, forthright, and to lack rigid internal standards. They also tend to give advice to others and to experience negative moods in their social networks.

- 6) Outward Aggressives are assertive and tend to be central persons in the group--possibly because their assertiveness makes them more noticeable. The persons falling into this category are very few: Henry, Steven, Trina, Matthew and Ed. As Henry and Steven seemed quite different from Trina, Matthew and Ed, these two "groups" were compared on the 16 P.F. and Role Image indices to see if any consistent differences showed up. Because the samples were too small to treat statistically, only categories where all the members of one group were lower (or higher) than all the members of the other group were noted. On the 16 P.F. Henry and Steven were: outgoing, emotional, assertive, apprehensive, self-sufficient; the others were reserved, calm, placid, group dependent. On the Role Image indices Henry and Steven were dominant, not submissive, inattentive, critical of others, and hostile. The others were not dominant, were submissive, attentive, compliant, not hostile, not critical of others. The data suggests that Henry and Steven are overt aggressives - they let aggression out; whereas Trina, Matthew, and Ed are covert aggressives - they hold aggression back and have difficulty releasing and expressing it. Both groups appear to diffuse aggression outward because they cannot handle

it (resolve it satisfactorily) in group. Because the characteristics of Overt and Covert Aggressives are so opposite, they cancel each other out in the major category Outward Aggressives.

- 7) Outward Negatives (i.e. Aggressives and Depressives) are controlled and tend to be assertive. The absence of subcategories significantly associated with this diffuser category is possibly due to a cancelling-out effect of differing characteristics of Depressive diffusers and Anger diffusers.
- 8) Inward Depressives experience negative moods in their primary and total social networks. This suggests that the depression that diffuses inward to the T-group has its origin in the member's external interpersonal environment. Inward Depressives also tend to tell stories (Expression category) and to have smaller social networks than other members.
- 9) Depressives are forthright, group dependent, and inattentive. They tend to tell stories and ignore others. They spend a greater proportion of time in contact with people they don't like than do other members. The cluster of inattentiveness, telling stories, and ignoring others suggests the classic portrait of the depressive "absorbed in his depression".

Despite the small sample size for some of the diffuser categories (e.g. Outward Aggressives), the characteristics

associated with each category seem to cluster meaningfully giving a clear portrait of each type of diffuser.

This chapter has been concerned with presenting the results as they bore on the hypotheses and hypotheses-generating areas formulated in Chapter V. In the next, and final chapter, the implications of these findings are discussed.

CHAPTER VIII

SUMMARY OF CONCLUSIONS: IMPLICATIONS FOR FUTURE RESEARCH

I THE EFFECT OF THE LEADER ON GROUP IMPACT

Hypothesis 1 which predicted a correlation between T-group and environment scores for individuals was confirmed for Carl's group but not for Mark's group. The data was searched for significant differences between the groups that might account for this discrepancy. Carl's group had more RMD diffusion examples than Mark's group (23>18) but the differences were not significant for the χ^2 test. The only RMD mood dimension on which the groups differed significantly was Σ Depression. Mark's group was significantly lower than Carl's group on this mood (3<12, $\chi^2 = 5.44$, significant at the .02 level). There was also a tendency, not significant, for Mark's group to be greater than Carl's group on Inward Euphoria (11>5) and Σ Euphoria (12>7). The results suggested that high Depression and low Euphoria have something to do with high diffusion and significant group impact - a point we will return to later. On the *16 P.F. Test* Carl's group was more anxious (.05),¹ more forthright (.05), more conservative (.05) and more tense (.10). On the *Role Image Checklist* Mark's group was more submissive (.10), and goes along with decisions more (.05). Carl's group was more expressive (.10), expresses feelings and affection more (.02), and was more hostile (.05). Mark's group had a significantly higher overall

¹.Two-tailed significance levels shown in brackets.

mean T-group score for Positive-Negative (polar word) scores: $1.05 > .71$, t-test significant at .05 level (two-tailed, 13 df); and an almost significantly higher overall mean environment score for Positive-Negative scores: $.76 > .35$, t-test significant at .10 level (two-tailed, 11 df). Comparing both groups on the Content Analysis Self scores, Carl's group is more submissive than Mark's group, but not to a significant extent (.10 level, two-tailed Mann-Whitney U-Test). A comparison of the two groups on the total frequencies of MSE themes over the life of the groups is shown in Table 30.

TABLE 30 Overall Frequencies of Most Significant Event Themes

<u>Category</u>	<u>Carl's Group</u>	<u>Mark's Group</u>	<u>Σ</u>
D	14	25	39
S	2	2	4
W	105	143	248
E	3	0	3
Dp	1	20	21
Ax	26	10	36
A	73	72	145
H	21	29	50
Σn	137	143	

Each *Most Significant Event* (or events) noted by members in their *Postmeeting Reports* was classified into one of the modified IAA content analysis categories and the totals for each week were summed to give an overall picture of the dominant events within each group (inter-rater reliability $r_s = .95$); intra-rater

reliability $r_s = .98$). The total number of persons "potentially" contributing to the scores are shown in the table (the sample sizes are close enough to be considered similar). It should be noted that a group member could name several MSE's in his report and that two (or more - though this was infrequent) of the MSE's named by one person could both fall into the same category while describing different events. Mark's group is higher on Domination, Work, Depression, Hostility and lower on Anxiety. The high Work score is probably due to frequent references by group members to group exercises initiated by Mark (and which were coded as Work themes). The high Domination and Hostility appear related to the numerous confrontations between the group and the leader which occurred more openly and over a longer period than in Carl's group. The high Depression is related to frequent references to dissatisfaction with the group's lack of progress or movement. The high Anxiety scores in Carl's group are probably related to both the personalities of the group members (high on 16 P.F. Test Anxiety) and the impact of the group leader who penetrated the defenses of members with greater success than Mark was able to effect in his own group. On the measures Centrality, Involvement, Network Mood, and Personal Relationships indices, there were no significant differences between groups.

Comparing the two leaders on Centrality scores, Mark's name was mentioned by group members a total of 51 times, whereas Carl's name was mentioned only 14 times by the members of his group. This difference is great considering that the total number of reports in which names could be mentioned were virtually the same

for both groups ($n_1 = 137$ $n_2 = 143$). Mark is *the* most central person in his group, the nearest score to his being 38 for Tom. Carl however ranks 9th from the top score in comparison with other members in his group i.e. eight other members are more central than Carl. Table 31 shows the distribution of these Centrality scores over the T-group's life.

TABLE 31 Centrality Scores for Mark and Carl

		Week:												
		2	3	4	5	6	7	8	9	10	11	12	13	14
Carl		1	2	0	0	0	0	1	1	1	2	6	0	0
Mark		2	4	0	0	7	5	12	3	3	4	4	1	6

The data indicates that Mark was highly central throughout the life of the T-group, whereas Carl becomes "noticeable" only at certain points (e.g. week 12 when he played an active helping role in penetrating member defenses and aiding insight into personal problems of several conflicted members). An examination of leader scores on the *Role Image Checklist* showed that Mark was higher on "Commands or dominates others" ($9 > 5$) and on "Expresses affection for others" ($9 > 4$) though these differences were not significant on the χ^2 test. However, Mark received the highest "Commands or dominates others" rating (9) in his group: the nearest score to his was 5. Carl, on the other hand had the fourth highest score: three people had dominance scores higher than his.

An examination of the *Postmeeting Reports* for both groups indicates different responses by the groups to their leader. In

Carl's group the second meeting (week 2) was taken up largely with a discussion on leadership in which Henry was attacked for trying to "act" the leader and Ken and Stuart asserted that they weren't going to let anybody lead (i.e. in their terms "manipulate") them. The attack on Henry was probably a deflection of anger at Carl (the "leader who would not lead") onto a less threatening scapegoat. Carl responded to this by pointing out the significant theme underlying the discussion: Is the leader expecting us to change in certain directions? Will he manipulate us? The following discussion then took place:

Carl: Everybody's arguing about who's leader.

Allen: The leader has superior information.

Steven: He must be *seen* as such.

[Members seem to feel its impossible to have a leader in this group].

Ken: Is leadership in the eye of the beholder?

Steven: How would people recognize a leader of this group?

Joe [prompted by Carl]: We're afraid to break new ground.

It's getting damn boring.

Carl: When some emotional issue is introduced we go off into the wild blue yonder . . . the group spent twenty minutes avoiding an issue . . . there are different kinds of leadership.²

After exposing the fears of manipulation among members, Carl points out that there are different kinds of leadership and

²Portions of conversation recorded verbatim by the researcher (who sat in on each group alternating from week to week).

suggests that these different leadership qualities can be applied to probing emotional issues. Concern with leadership became less focal after this session. During the same session, immediately after the conversation quoted, the group began to focus on the issue of anxiety and did so until the session ended.

In Mark's group, the first session was characterized by a confrontation between Mark and several members ostensibly over the issue of tape recording sessions. Tom attempted to "act the leader" and was attacked by the group. Some members made the following comments in their *Postmeeting Reports* when describing the most significant events in the group.

Arthur: Confrontation over issue of tape recording the session.

Leonard: Group questioning of leadership; group questioning of authority

Ed: Tom's attempt to take over the leadership of the group . . . Tom supported [the use of the taperecorder] - seen as support for the leader.

James: A confrontation with the leader; a confrontation with Tom; overall group mood was one of rebellion.

Tom: Questioning of leadership.

Larry: Challenge of Mark and general rejection of Tom.

[These events were led up to by] Nothing obvious - perhaps Mark's attitude and approach.

Several members saw the confrontations as a direct challenging of Mark. The issue was not resolved during the meeting. Afterwards, Mark played the tape of the session to Carl and sought his advice on "what went wrong". In the following week Mark requested that

the researcher not attend the group session until his problems with the group had been sorted out (the researcher was to attend Carl's group during even weeks and Mark's group during odd weeks). During this week 3 session there was open conflict between Mark and Larry over the trainer's role in the group. Some comments in reports were:

Ed: Larry appeared to be testing Mark's leadership several times during the session.

Matthew: A confrontation between two group members [Mark and Larry] about the trainer's role . . . [this led] ultimately to a breaking down to some extent in the group "closeness" which was developing.

James: A confrontation between the leader and a member of the group . . . because of the attitude of the leader . . . there is some feeling of splitting him away from the official line, and proving to him that really he is one of the boys.

Leonard: A hostile reaction developed between [Mark and Larry]. I felt some embarrassment at this encounter and was about to interfere with it when authoritarian leadership style settled the issue. The group itself also felt somewhat anxious by this happening which in turn destroyed the supportive relationships that previously existed. The group withdrew from events.

Mark: Larry and Mark's confrontation - [was caused by] Larry's request to Mark to say "what are we here to do". I read Larry's reaction to my answer as another challenge - told him so - Larry denied this and

accused me of being defensive. Group's reaction was mixed - impatience at waste of time, anxiety, disappointment at my reaction.

Again the leadership issue with Mark remained unresolved. In subsequent weeks the issue appeared put aside and the group began to work. The scapegoating of Tom (which some members referred to as the "go for Tom" pattern) continued until week 8. A hostility felt by James towards Mark was consistently expressed in his reports until the end of the course. In week 11 the first hour for both T-groups was spent in the lecture room where each group took turns observing the other group perform as a T-group. During their turn to "perform" Mark's group displayed aggressive and attacking behaviours which Mark later interpreted as the leadership confrontation theme manifesting itself again. After the combined group session, Mark's group went upstairs and had a discussion on the group's objectives: the group appeared confused about "where" they were going. Some comments in reports were:

Tom: General discussion at second start of group about where group was going and some definition of objectives . . . caused by our "in class" T-group performance or lack of it. General mood was impatience and perhaps a feeling that "we've gone as far as we can go, let's play a different game."

Peter: Discussion of what was happening and whether it was any use and where we were going . . . [caused by] frustration of previous meeting and "get the leader" play in combined meeting.

James: The overall group mood was one of rebellion.

Arthur: [I experienced] bewilderment at our group's performance in Rm. 119 beforehand. This kind of action - attacking - had not occurred since our first meetings.

Again, in week 13, there was an attack made on Mark, this time by Don. (Ed: "Don examined his own feelings of hostility and reacted in quite an aggressive way to Mark"). Occasional comments made in reports throughout the life of the group, indicate resentment of some members towards Mark's "continually talking":

Arthur (week 11): In the past some major intervention or identification with someone else in the group has led Mark into talking about himself.

James (week 11): [the most significant event was] Mark continually talking.

James (week 12): . . . it annoyed me that Mark has to continually talk.

Similar critical references to Carl were virtually non-existent for the members of Carl's group.

Carl and Mark seemed to adopt different leadership styles with their groups. Carl's interaction with his group seemed (to the researcher) to be that of a "fly wheel" helping the group to "turn" at different points but on the whole not making himself an issue. Mark gave the impression of trying to "dynamite" the group into action whenever it got into a "log jam".

Carl appeared more direct in clarifying underlying issues in the group - he would frequently make statements like "the

underlying theme here is . . ." - and was more direct (and successful) in penetrating member defenses. Early in week 3's session Carl introduced anxiety as a relevant issue for discussion ("Is the effect of unstructured T-groups to create anxiety"). Trina mentioned several times that she felt anxious but neither she nor the group seemed prepared to investigate further. At this point Carl said: "Why don't you tell us what you're so damned anxious about"³ and Trina revealed a bit more about an issue significant to her. Stuart made the following observations about the incident in his report:

The group was predominantly supportive in Trina's attempts at introspection, but were very hesitant and anxious about pursuing a topic which they actually expressed as being, as they perceived it, regarded as a "no-no" by Trina. Supportive humour was generated and attempts made by group members to provide to her an opportunity of detraction. Carl, however, pursued the interest and the groups anxiety, as I perceived it, increased considerably.

When conflicted members hesitantly indicated an "approach-avoidance" willingness to discuss personal problems, Carl would penetrate their defenses and help get the issue out in the open. In similar situations, Mark tended to "invite" the conflicted member to comment. Frequently, this technique did not work. In week 10 when Tom said that he had experienced more significant changes in his relationships with people outside the group, Mark asked him if he wanted to talk about it. Tom's reply was "probably not" followed by silence. Near the end of the group

³. Verbatim statement from observer transcript.

Mark asked Tom to pick five adjectives to describe himself (i.e. Tom). Tom described himself as "tense, anxious, confused, threatened by close relationships that develop too quick." This response could probably have been elicited earlier if Mark had been more direct and confronting. Saying "what do you feel?" seems to produce better results than saying "Would you like to tell us what you feel?" These, and other examples, seem to reflect Mark's inexperience in acting as a trainer. During week 11 when Mark's group was observed by Carl's group, Al drew a picture of himself (as part of a "self-portrait" exercise) as a Superman, but when pressured by the group drew a small boy with a dunce's cap. As Al drew this, several members of both groups became aware that Al was feeling small and alone - like his drawing - and wanted to reach out and support him:

Ed: Some of the group (especially Mark) tried to find out why Al felt "small and alone" - I felt frustrated. I wanted to support Al but didn't know how to.

Don: The group tried to be supportive to Al, but the tension that was evident in past discussions was still present despite the efforts of the group. My mood was one of disappointment due to the group's failure to change its method of inducing members to open up.

Afterwards Carl, in a private conversation with the researcher, said that he had a strong impulse to reach out and be supportive to Al. The fact that Mark did not do this - but instead pursued an investigatory role - probably reflects his lack of experience.

On the whole there was considerably more probing of emotional issues and expression of feelings and expression in Carl's group.

The differences between the two groups were most noticeable for weeks 9 and 10. During week 9 a "triad" exercise was held before the T-group sessions in which all members were divided into groups of three. The object of the exercise was for one person to talk about a problem significant to himself while the second person acted as a facilitator and the third as an observer. As a direct carry-over from this exercise, one person in each T-group - Matthew in Mark's group and Ken in Carl's group - revealed personal problems of major concern. There was a general consensus in both groups, that these events were the most significant "opening-up" revelations to have occurred. In the following week Carl's group experienced considerable growth; Mark's did not. Carl summarized the development in his group as follows:

WORK for the first time - consistent, hard, psychological work. Where do I start? - The insights came tumbling in. Began with Trina and Edward but spread out through the group . . . For the first time real honesty of expression of feeling between members, and definitions of what people want from each other and willingness to give up some of the glitter for the substance of real relationships. I think everyone present learned something about himself.

Matthew's comments indicate a general unwillingness of members to work and give in Mark's group:

The group session was something of an anti-climax after last week.

1. Tom spoke a little but was unwilling to fully disclose.
2. James said he had no serious problems and was not going to disclose himself . . .
3. Don became more involved but did not continue.

4. Peter expressed his confidence and desire not to solve problems in the group but to gain feedback.

Several members wrote that they felt they couldn't open up as much as Matthew did during the previous week. Don wrote: "There was strong pressure from some members of the group towards the low participators to make them participate." The message here seems to be: "You participate: I'm too scared to." Mark summed up the situation by saying: "The water looks good, but it might be bloody cold." Finally, to try and break the ice, Mark conducted a ten minute non-verbal exercise in which he went around to each member and expressed his feelings to that member non-verbally e.g. he removed Eric's shoes (message = "I'd like you to loosen up") and play-wrestled with James (message = "I feel conflict with you, too"). Significantly, Mark loosened ties and removed shoes for four members, probably indicating his own wish for everyone to "loosen up". The exercise was found threatening and disturbing by most members - after Mark sat down there was a three minute silence: no one wanted to follow suit. The researcher, who was present during this session, had the impression that Mark was pushing too hard, trying to force the group to open. The more he pushed the more the group remained closed. During an earlier post-meeting session (during the first weeks of the course) at which the researcher and the two leaders were discussing the performance of Mark's group, Carl stated that Mark's problem was that when he got into difficulty with his group he tended to push ahead and try to force things to "come right" instead of letting things be.⁴ Mark appears to have repeated this pattern in week 10.

⁴ This description is as the researcher remembers it.

There seemed to be a certain annoyance on the part of members that Mark should have to use exercises ("gimmicks") so frequently to get the group moving:

Harry (week 10): This session [non-verbal exercise] was
 initiated by Mark in my view as something
 of a contingent plan . . .

Arthur (week 14): The group trainer [Mark] stated that we
 would play this game and he stated the
 rules - as in all previous games.

Several members seemed to feel "manipulated" by the exercises. The use of exercises probably enhanced the dominant image that Mark projected. When Mark left his group early on one occasion, Arthur wrote: "After Mark left at 3.20, the work orientation of the group disappeared. *He is a major initiator.*" After the group sculpture exercise in week 14 (where each member placed other members in a "statue" pose), Harry wrote: "The other most significant event was the repetition of Mark's perceived role as dominant (i.e. in group sculptures)."

SUMMARY - Of all the group differences discussed, leader differences seem to have the most bearing on the relative diffusion impact of the two groups. Mark's lack of experience in intervention techniques and his dominant personality appear to have hindered his group's ability to come to grips with, and resolve, the authority-dependency issue. The course of growth (or lack of) parallels closely the example from Mann (1966) quoted in Chapter III:

By confronting and appraising the authority
 position of the leader vis-a-vis their

dependency, group 1 resolved these issues and moved forward to a phase of internalization [like Carl's group]. Group 2 expressed hostility without appraisal during the confrontation phase, became distressed at the outburst of aggression, and failed to resolve the authority-dependency issue in a satisfactory manner. Consequently, group 2 failed to enter the internalization phase to a significant degree. Unresolved issues were still being felt [as in Mark's group].

The evidence presented above suggests that the lack of impact of Mark's group on its members was partly due to a trainer effect. An index of this lack of impact is the low correlations obtained between group and environment on the polar word scores (Hypothesis 1 data) and the comments made by the members themselves in their *Postmeeting Reports*. The fact that the only significant difference between groups on RMD scores was for depression (Carl's group > Mark's group, $12 > 3$) suggests that diffusion of depression is associated with group impact. The greater number of Euphoria RMD examples for Mark's group, suggest that these represent a positive gain and yet a relatively superficial change in personal growth. This point will be discussed at length in the next section.

There are probably other factors interacting with leader effects to produce the differences in group impact noted. Carl's group had the only female - which must have had some effect on group mood and release of feelings. It was Trina who in week 3 became the focal point for discussion on anxiety. Her presence probably fostered affiliative feelings among members - if only towards herself: in week 10 most of the members revealed their feelings of attraction to her. Carl's group was also significantly more forthright than Mark's group and this personality characteristic was found to be associated with Depressive (I and 0)

diffusers. The higher RMD Depression scores in Carl's group could be explained by this factor alone. It is possible that had the leaders taken each other's group, different results would have obtained. It is difficult to filter out exactly how much each variable: trainer effect and personality of group members, has on group impact. It is entirely probable that some of Mark's dominating behaviour in the group was a reaction to certain members who felt hostile to him before even entering the group. The tentative conclusion offered here is that trainer personality, style and experience in combination with the personalities of group members are the major factors affecting extent and type of mood diffusion. A T-group does not have high impact simply because it is a "T-group".

Finally, it should be noted that the above criticisms of Mark are not meant to be personal: his trainer performance was probably equal to, if not better than, that of trainers with similar experience.

II DEPRESSION AND GROUP IMPACT

The discrepancy between the two groups in RMD scores: Carl's group having more Depression diffusion and Mark's group having more Euphoria diffusion, gives the impression that more positive change - a better result - obtained in Mark's group. A closer examination of the examples, however, suggests the opposite: that Carl's group effected a deeper more significant impact on members. The Euphoria examples for Mark's group *do* represent a positive gain for those members, although the incidents seem to be comparatively superficial ones - of the "I saw another person

reveal his problem and this helped me with my problem" type. In Carl's group the most significant impacts on members occurred when members opened up, had their defenses penetrated, and faced the core of personal problems - and other members watching this became intensely involved through their own "resonance" with similar or related problems which brought them face to face with their own defenses and anxieties. In week 12 Carl's group had a very emotional session with Joe and Trina facing up to their inadequacies with respect to giving and taking in relationships. Carl described the session as: "It's like walking through a minefield; kind of exhilarating but scary. Conscious of half the group not participating fully, but when you're walking through a minefield you can't worry too much about the guys who are scared out of their minds and freeze." Some of the non-participants made the following comments:

Alex: I felt enormous pressure - I felt warmth and wanted to show it. *BUT I DIDN'T*. I was all uptight and am still shaking as I write this. Happy for them [Joe, Trina, Stuart] - they were now freer - frustrated for myself.

Henry: I did not say anything, but felt that at times I wanted to reach out and touch one, but could not. I was a bit apprehensive as I did not want to disclose my feelings. [Half the group] uninvolved verbally, but involved emotionally.

Charles: Felt involved, but not able to offer very much help. I felt quite serious and emotionally involved though not actually taking part.

Steven: My mood was slightly scared, involved, loving,
but scared of not being loved back.

These members seemed to be confronted with their own inadequacies in giving and taking. The emotional reactions of Joe, Stuart and Trina were quite intense. Allen writes:

Joe displayed the most emotion I have seen from him: he leaned back in his chair, covered his face from view by looking down and either avoided looking at people in the eye or looked very defiantly at them. Trina showed some embarrassment by blushing. Stuart showed the most obvious emotion in displaying his feelings of friendship towards Joe.

Stuart and Joe were close to tears at different points in the session. Trina on two occasions said: "I feel like running away now" and "I just want to go home."⁵ Carl struggled with Joe and Trina and helped them to achieve insight into their problems. The insights came, however, with a great deal of pain, anxiety, and emotion for all group members - some of whom were very threatened by this opening up by others:

Allen: My mood was one of ambivalence. I did not think people were being real . . . a lot of bullshit.

Edward: [My mood was] Dissatisfied, rejecting, dislike. These two seemed to find their anxiety and inadequacies too great to face.

The upshot of the foregoing comments is that when a significant penetration is made into a member's defenses and he faces his inadequacy in some area, euphoria is not the immediate result. People are not changed from inadequate to adequate

⁵Written down by the researcher who observed the meeting.

overnight. The process involves anguish, anxiety and depression at the realization that one is inadequate - and this is followed by a resolution to do something about it. It's as if the conflicted member becomes aware that he is "not - OK" and the acceptance that this is true brings depression. The depression is the key to the start of significant personal growth because the desire to become adequate must be preceded by awareness of inadequacy. And this realization that "I am inadequate" causes depression (because "I don't measure up; I'm not what I want to be"). The depression seems to be resolved when the member admits his inadequacy to others, receives support, and begins to analyze "why" and "how" he became inadequate (i.e. he begins to work on his problem). Before working on the problem, the problem must first be realized and accepted as real. In the session described above, several members saw similar problems to those in Joe and Trina, reflected in themselves (Alex and Steven in particular) but couldn't bring themselves to a full confrontation with their problem during the session: they couldn't open up and show that they too felt small and afraid.

The main evidence for this theory that depression is an index of group impact (from which significant personal change comes) is the significant association of the content analysis category Affiliation with Outward Depression in Carl's group. Weeks 9-12 which were the weeks of greatest emotional involvement in Carl's group, were characterized by high Affiliation, open expression of affection between members particularly as support for those revealing their problems. The depression diffused outward seems to be caused by members seeing another reveal, wanting to do so

themselves (being more aware that they, too, have a problem), but being unable to open up to the group. The depression of inadequacy realization is added to the depression from failure to give and is carried out of the group, unreleased. A comparative analysis of some of the content analysis emotion categories diagrammed in Figures 19 and 20 is illustrative. In Mark's group in week 9 Matthew's significant revelation of his feelings of "unworthiness" produces strong empathic support from members shown in the high Affiliation score. In the following week high depression in the group occurs: a few tentative gestures at openness are made by Tom and Don but "closedness" prevails. The members write:

Don: Today there was a general lack of commitment - maybe Matthew's frankness last week was too hard to follow?

Ed: After Matthew's experience in opening up to the group last week, no-one felt that they could reveal themselves to the group in the same way.

Leonard: Climax of supportive behaviour during previous week was felt by group to set a standard that could scarcely be repeated.

Their depression here is that of disappointment and apathy that the group "can't get off the ground". This is possibly related to their lack of trust towards Mark - the feelings that they would be manipulated by the leader. In Mark's group Affiliation scores peak above .40 only during two weeks; in Carl's group Affiliation scores are above or equal to .40 for six

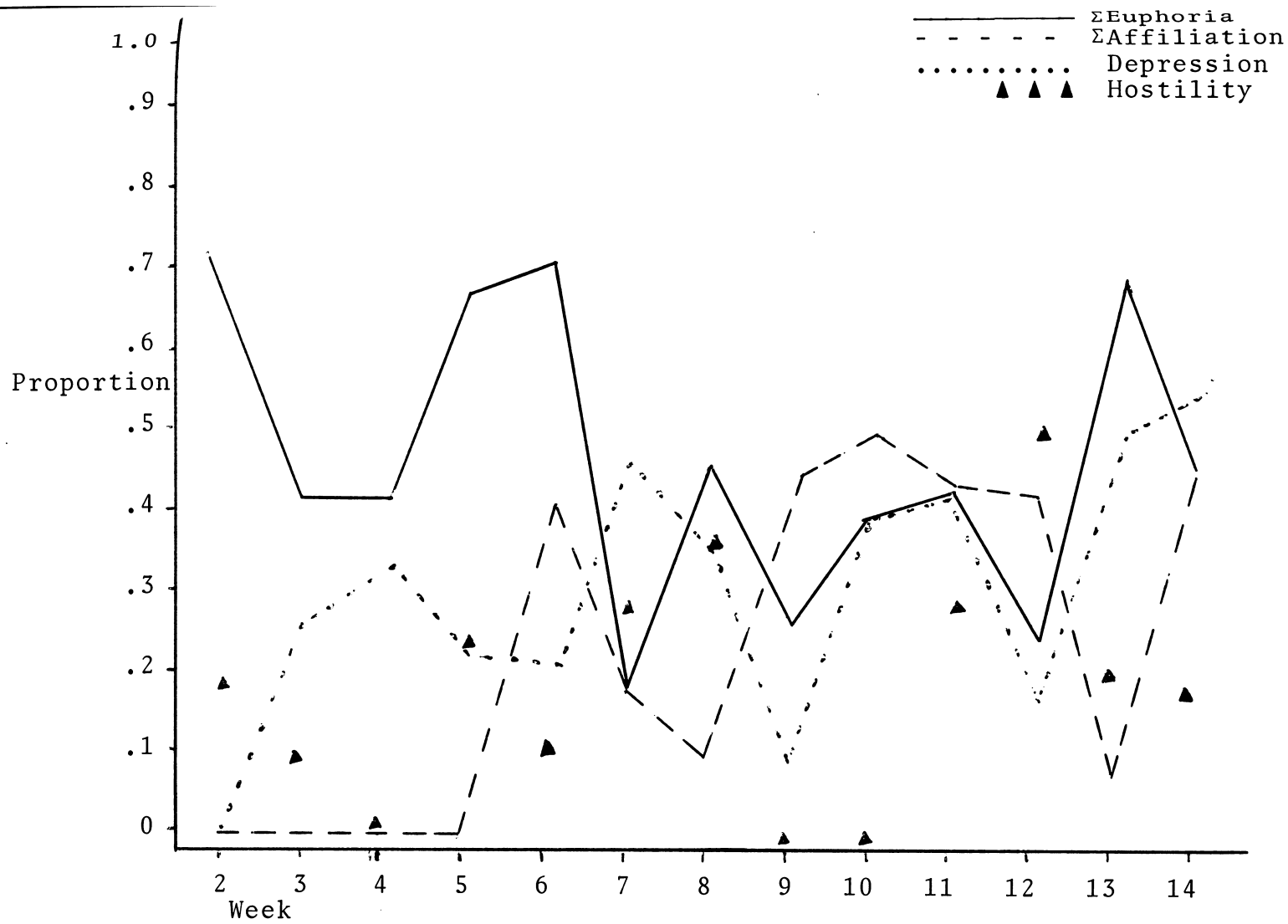


FIGURE 19 Comparison of Euphoria, Affiliation, Depression, and Hostility Content Analysis Self Scores for Carl's Group.

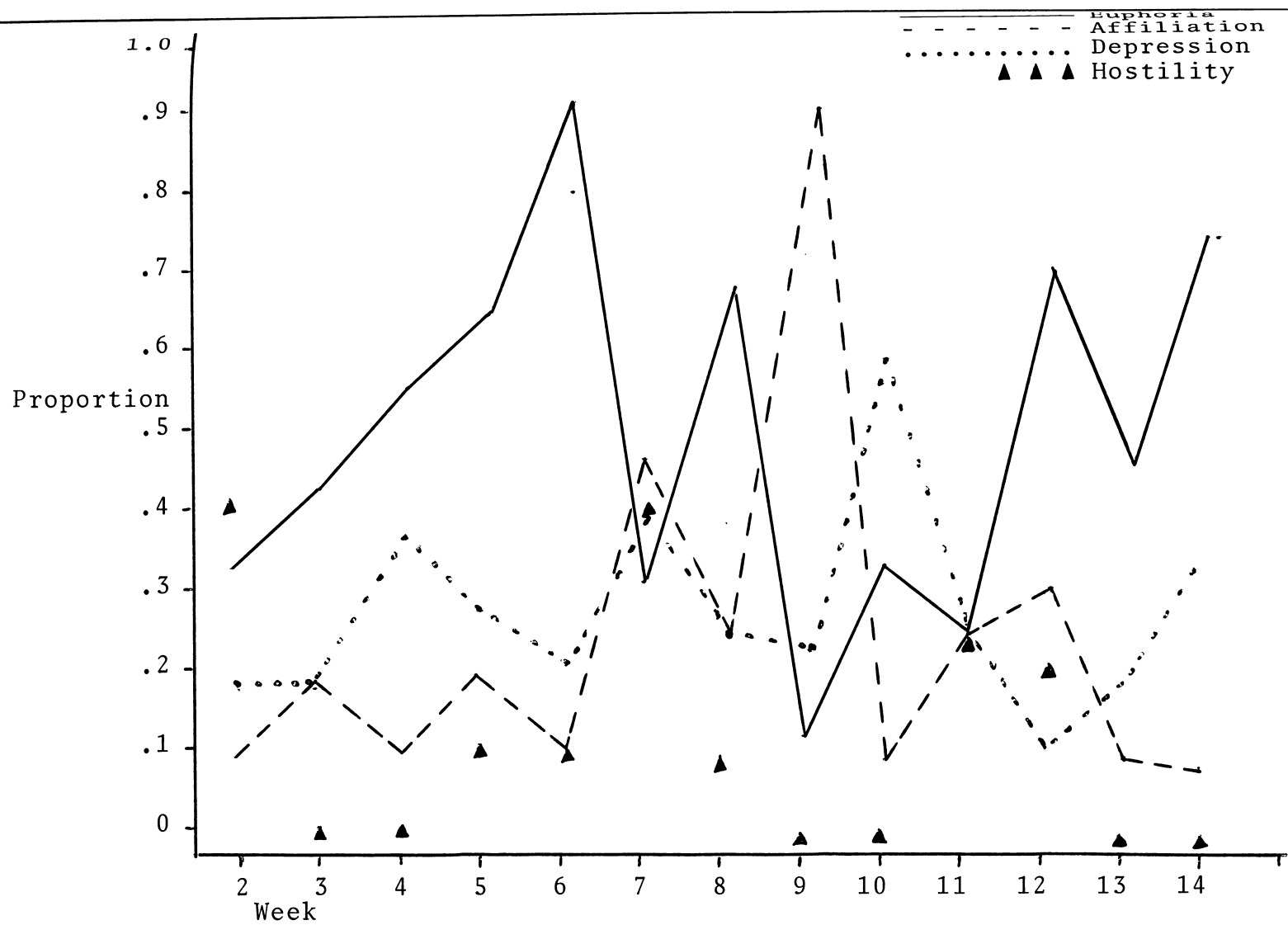


FIGURE 20 Comparison of Euphoria, Affiliation, Depression, and Hostility Content Analysis Self Scores for Mark's Group

weeks - four of the weeks in sequence (weeks 9-12). The relative absence of Affiliation peaks in Mark's group reflects the absence of openness and probably accounts for the absence of depression diffusion. It was noted in Table 29 that Mark's group had a ratio of 20:1 Depression MSE's in comparison with Carl's group. This in-group depression seems to be depression related to frustration, apathy, disappointment, and perhaps unresolved anger towards the leader - a result of the group's failure to open up. The depression within sessions in Carl's group seems more akin to the depression diffused outward from Carl's group: i.e. depression related to feelings of "I'm not OK; there's something wrong with me," which result during the high Affiliation sessions when someone opens up. It was noted in the previous chapter that there was a slight tendency for outward diffusing of depression in Mark's group to be related to high in-group Depression, unlike Carl's group where outward depression was related to high in-group Affiliation. Interestingly, for both groups high outward diffusion is related to Low in-group Euphoria - suggesting that Euphoria is a block to group impact.

Figures 19 and 20 show the basic phase shifts for Depression, Euphoria, Hostility, and Affiliation. The phase movement patterns (including categories of Domination, Submission, Work, and Anxiety - not diagrammed here) generally seem to follow these sequences:

- 1) Confrontation with the Leader - a phase high on hostility
(Carl's group - week 2 and 3; Mark's group - week 2 and 3).⁶

⁶ The confrontation in Mark's group between Mark and Larry in week 3 has been recounted above.

- 2) Depression-related to feelings of anxiety and defensiveness as the members begin to probe defenses and do some work.
(Carl's group - week 4; Mark's group - week 4).
- 3) Premature Euphoria - this phase represents a denial of depression and a wish for painless change. The members feel pleased with themselves: "Look at how good we are - aren't we doing well - we are becoming more interpersonally competent."⁷ Because no-one has significantly opened up, the members are not yet confronted with their own feelings of inadequacy.
(Carl's group - weeks 5 and 6; Mark's group - week 6).
- 4) Resistance to Opening Up - during this phase the members resist the leader's implicit encouragement to be open and revealing: they balk like a horse before a jump. As they become more aware of their inadequacies, their defense systems come more into play.
(Carl's group - weeks 7 and 8; Mark's group - week 7).
- 5) An affiliation session - during which one member bares his soul to the group making himself vulnerable. The others respond by showing affection and support. The members experience a desire to open up themselves.
(Carl's group - week 9; Mark's group - week 9).

⁷ I am indebted to Professor Dunphy for this observation.

- 6) An Intimacy-Depression phase during which the leader's norms of openness and work are internalized. As more members open up, depression signifies awareness of self-inadequacies, acceptance that the inadequacy is in fact there, and results in the members working on their problems. It is during this phase that the group makes its maximum impact - Figure 21 shows that the maximum sustained occurrence of outward diffusion for both groups is during the weeks immediately following the Affiliation session (in week 9 for both groups).

In both groups a depression peak occurs in week 10 following the Affiliation session: the preceeding session has heightened their awareness of their inadequacies and they find it difficult to "take their turn" in revealing, even though the ice has been broken.

(Carl's group - weeks 10-13; Mark's group - weeks 10-12).

- 7) A separation phase in which the members experience sadness (depression) at parting and "mature" euphoria - a happiness based on the actual successes and growth made by the group.

These phase sequences correspond to those described by Mann, Dunphy, Hartman, and Bennis and Shepard, reviewed in Chapter III (above). The major difference is the emphasis, here, on a Depression phase allied with an Intimacy phase. The Depression is both a cause and a result of the intimacy and indicates a significant impact by the group on the individual. It is during

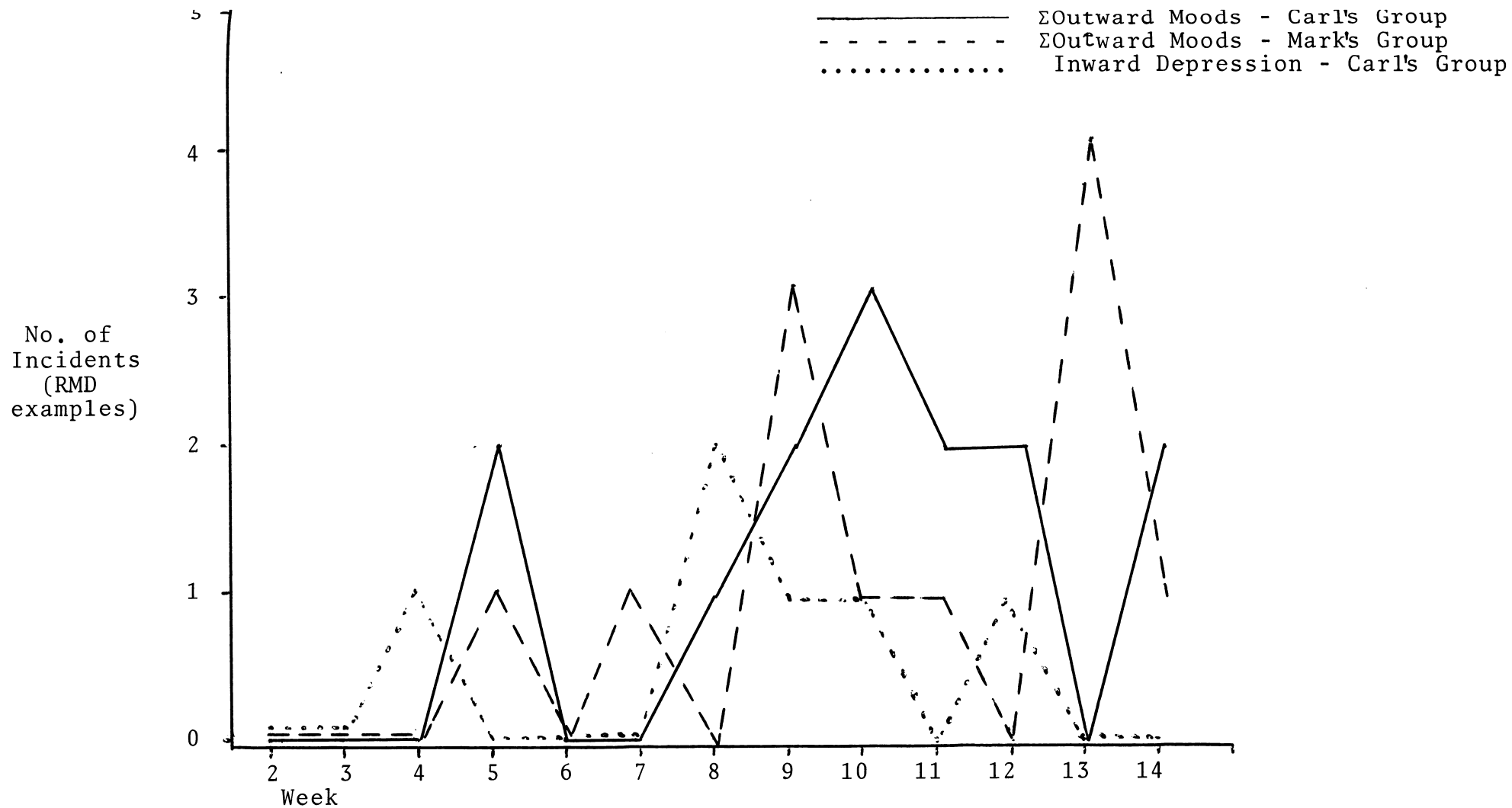


FIGURE 21 Comparison of Frequencies of Moods Diffused for Carl's Group and for Mark's Group.

this phase that outward mood diffusion is greatest. For groups having high impact, depression diffuses outward as with Carl's group. For group's having low impact, more superficial euphoria diffusion occurs as with Mark's group. Although the evidence presented here supports this prediction, this conclusion must be regarded as tentative until confirmed by further research - particularly on a variety of groups with leaders of varying experience.

These findings support the conclusion by Harrison and Lubin (1965) that the appropriate criteria for evaluating the learning impact of a T-group experience "*may not* be the experience by staff and participants of feelings of completion, cohesion, and emotional satisfaction" (Harrison and Lubin, 1965, p.169).

III MOOD DIFFUSION AS AN INTERACTIVE PROCESS

There seems to be two types of mood diffusion with respect to direction of flow between the group and the environment: one-way and two-way (or interactional). One-way mood diffusion is where a mood is carried from group to environment or from environment to group only. An example of this is Edward's inward diffusion of depression to the T-group, because of his worries over being called up for National Service. He brought this mood into the T-group, but the mood was not significantly altered there. A second example is Ken's outward diffusion of depression over his feeling left-out of the relationship between Stuart and Trina in the T-group. He carried this mood to the pub where it was finally extinguished after he talked with Stuart about the incident.

Interactional or two-way diffusion differs in that it involves an interaction over time between group and environment. The mood originates in, say, the T-group, is carried to the environment where the mood - and the thoughts related to it - is amplified or modified and then is brought back to the Tgroup again. This cycle may persist for some time. An example of interactional diffusion is the incident in which Steven was confronted with his "paternalistic" behaviour in week 5 in Carl's group and developed an angry mood. In the *Remembered Mood Diffusion Questionnaire* Steven recalls his angry mood as due to "frustration at slow progress of group." An examination of his actual week 5 report shows a different source for the anger:

For myself there was again some evaluation of my paternalistic manner and some discussion (unconcluded) of what this means, what starts it off, etc. Perhaps because it was unfinished I am angry about it - and want a chance to pursue it further to find out how people see this and react to it. My mood was generally happy, but not in the last half hour . . . I am not aware of any strong feelings among other group members. Mood generally fairly satisfied and happy (unlike mine at this moment).

His anger seems to stem from anxiety about the self-descriptions given to him by other members in the 5-adjective exercise (where each member wrote down five adjectives describing every other member) that took place at the start of the T-group and the verbal descriptions/interpretations of his behaviour given during the T-group. Four other members list as the most significant event Steven's reaction to feedback on his paternalistic behaviour.

In a personal conversation with Carl immediately prior to the week 6 T-group session, the researcher was told that Carl had

learned (from Steven) that when Steven showed his wife the 5-adjective descriptions of himself describing him as paternalistic, she had agreed that that was him all right. This reportedly had shocked him. During his conversation with Carl, Steven had brought along graphs he had made of the results of the 5-adjective scorings for himself. During the rest of week 5, Steven had obviously been concerned to some degree about the meaning of the evaluation given to him (and confirmed by his wife) by the T-group.

In week 6, several members list as the MSE in Carl's group, an anecdote by Steven about his wife's confirmation of the T-group's 5-adjective descriptions of him:

Sam: [Steven] discussed why others viewed him as paternalistic and why certain people attacked this behaviour. This member was obviously very concerned about how others view him in this light.

Ken: Steven rejecting the idea that he had strong feelings of anxiety.

Carl: We made real progress with Steven who introduced anecdote about conflict with wife. I feel Steven began to get some insights although it will take him some time to accept them and understand them in depth.

There is a thematic concern with anxiety over a self-image imputed to him, for Steven, for weeks 5 and 6. Although the mood he took out of the group may have been anger, its motivating force was probably anxiety. This anxiety was reinforced in Steven's

primary environment and brought back into the T-group in week 6 as something he wanted to work on. This is an example of interactional mood diffusion. Although there is insufficient evidence on the environment to confirm it, most of the instances of learning - depression diffusion (particularly in Carl's group) are probably of this type: a member becomes aware of his inadequacy in a group session, diffuses depression out to the environment, becomes more aware of his inadequacy in outside relationships heightening his desire to "do something about it", and bring the issue with him back to the next group session where he has some opportunity to work towards resolving it.

The significance of interactional mood diffusion is that it puts disparate groups in a relationship with each other over time. The connecting link may be small but it is certainly significant.

IV THE EXTENT OF MOOD DIFFUSION

It is difficult to ascertain the exact degree of mood diffusion that occurred during the study. Some people recalled only a single instance of mood diffusion - James recalled having no significant instances of mood diffusion. Others recalled several instances - Trina, for example, recalled six instances and several of these were multiple instances. For the persons who returned RMD questionnaire (n=21) there was an average of 2.05 incidents of mood diffusion recalled for each person. This means that out of a T-group course lasting 14 weeks, 2 weeks were characterized by significant mood diffusion for each member, on average. The true number of diffusion incidents is probably higher than the average quoted for the following reasons:

- 1) There may have been a tendency for members to forget mood diffusion instances occurring during the early part of the course. Considering the strong feelings of hostility and anxiety generated during the first three weeks in both groups, one would have expected some diffusion examples from this time period. The absence of examples suggests a "recency effect" biasing the RMD questionnaire so that it tends to reflect more recent events.
- 2) It is probable that some members may have suppressed important diffusion instances when filling out their RMD questionnaire - either because they felt the events were too personal, or shameful, or because they didn't trust the researcher. At one stage Carl told the researcher that he believed Trina and Stuart were conducting an emotionally involved relationship outside the group and that this was related to Trina's marital problems. (During week 13 she moved out away from her husband for a period of time). On one occasion after a group session, Carl reported seeing Trina and Stuart walking hand-in-hand. If there were any diffusion instances for Trina and Stuart involving each other, they were not shown in the RMD reports. Indeed, Stuart did not return a report despite repeated phone calls from the researcher and being mailed a second RMD questionnaire. Trina did not return her report until she had been sent a third RMD report and contacted twice: once in person, and once by phone.

A certain amount of suppression probably occurred for most members.

- 3) Several members may have repressed, or not been fully conscious of, significant instances in which they were diffusing. Steven, for example, was sent a second RMD questionnaire by mistake. When he completed and returned it, he had left out a major event, recalled on the earlier RMD questionnaire, in which he had felt isolated in the T-group. This tendency to "forget" painful, or anxiety-provoking situations may have affected other members. In week 8 Joe recorded the following events in his *Daily Mood Checklist*:

- Monday: I finally carried through my previous decision to finish the relationship with this girl. [i.e. he breaks up with his girlfriend].
- Tuesday: A realization that most of the class, in another subject, had negative feelings towards me - this had little more than an annoyance value for me.
- Wednesday The group [MBA syndicate discussion group] had been getting nowhere in discussion of a problem. When I pointed out the underlying group problems - disaster!
- Thursday: A great and irrational feeling of guilt and inferiority from within me.
- Friday: I crashed my car - a write off, plus fractured a couple of ribs.

After leaving his girlfriend, Joe is subjected to hostile feelings from others on two subsequent days, experiences great psychological upheaval on the next day, and finally crashes his car - i.e. is not involved in a crash, but runs his car into something. The events seem to be interconnected and might represent a diffusion

of guilt caused by leaving his girlfriend (he left her, not she him). Despite this great psychological turmoil during week 8, Joe recalls no diffusion relevant to this incident affecting him in T-group in week 8 or 9. It is possible that there was no diffusion to the T-group - but it is also possible that there was diffusion but that Joe was not aware of it. It is impossible to say how many incidents of this sort may have occurred.

Because of the effects of recency, suppression, and repression, then, the actual number of mood diffusion incidents that occurred is probably higher.

Using the polar word scores as an index of diffusion it was found that an average correlation of .25 was obtained for individuals in Carl's group and an average correlation of virtually .00 was obtained for Mark's group. Although some individuals obtained correlations as high as .59, others obtained scores of -.47 a sign of no connection between group and environment. This supports the finding that mood diffusion tends to occur only during a certain portion of the group's life, rather than at the same intensity, continually.

When the week by week correlations between environment and group are examined, the average correlations of .42 for Carl's group and .15 for Mark's group suggest a greater connection between group and environment than do the individual scores by themselves. In Carl's group, for instance, about 59% of the weeks have moderately high group-environment correlations.

One reason for the low individual correlations could be that most everyday diffusion instances are short-term: they last only a few hours, or a day at the most - after which their significant

impact ends. Such short-term diffusion would not show up in the weekly means derived from the *Daily Mood Checklists*. It may be that in group situations there is always some diffusion: however, our tentative conclusion here is that the diffusion instances that have really significant, more-than-a-day impact, seem to occur about 15-30 per cent of the time. This estimate includes an upwards estimate from the 14 per cent of RMD cases (i.e. 2 weeks out of 14) based on multiple incidents in RMD reports, and incidents suppressed, repressed, or otherwise forgotten.

V THE IMPACT OF ENVIRONMENT

There were significantly more outward diffusion examples (31) than inward diffusion examples (10), which confirmed the hypothesis that the T-group would have greater impact on its environment than vice versa. There is some evidence, however, that the environment did make some impact on the T-group. First of all there are the ten examples of inward diffusion of moods which affected individual performance in the T-group. It was found for Carl's group that the weeks during which inward diffusion of depression was high tended to be associated with low in-group euphoria (content analysis category). This suggests that the persons bringing these moods of depression into the group may have had a "contagious" effect on other members. On another occasion, Carl reported⁸ the possibility of his having brought a mood of depression and dissatisfaction into his T-group during week 8. The scores for Hostility and Depression (content analysis

⁸ Reported to the researcher in a private conversation with Carl.

categories) were both very high for the group during this session and may have been related to the leader's mood. On the polar word index Carl's in-group mood was 2.28 made up of 2.28 for Euphoria and .00 for Depression and Anger. His polar word scores on the *Daily Mood Checklist*, however, are: Monday -3.93, Wednesday -3.00, Thursday -3.40, Friday -1.93 - which suggest a strong negative mood theme underlying the week. On the polar word index, however, Carl's T-group mood does not appear to have been influenced by these events. This was the session in which Carl had a "mock" physical fight (wrestling) with Henry to help relieve tension in Henry and the group. It may be that Carl's positive polar word scores reflect the successful result of the tension release. When the researcher asked Carl if he could recall any incident where he diffused a mood inward, this was the situation he remembered as possibly having some effect.

A more general environmental situation that may have affected the T-groups is the meeting that was held in the lecture room on Tuesdays with both T-groups present before the start of each T-group session. These meetings were sometimes very short, lasting only a few minutes, but other times lasted an hour or longer while members carried out interpersonal exercises. One such exercise, the "triad" exercise described above, occurred in week 9 - the week that significant opening-up was made by a member in each T-group - and seemed to result in a diffusion of "openness" into the T-groups that followed the exercise. Some of the comments made by members writing about what led up to Matthew (in Mark's group) opening up were:

Peter: Triad meeting earlier in session paved the way.

Matthew: What led up to the revealing was the counselling role play that had preceded the session.

Although no references to the triad exercise were made in Carl's group, the fact that such an exercise took place probably had some influence on Ken's decision to make himself vulnerable at that particular time.

These pre-T-group meetings were probably the most persuasive environmental influence affecting the T-groups. Unfortunately, research measures were not used to tap moods diffusing from these meetings - it was felt that an additional report and polar word questionnaire would "overload" the members. The synchronization in content analysis scores for both groups that occurred for several weeks - Hostility (weeks 1, 5, 11, 12); Affiliation (week 9); Depression (weeks 4, 7, 9, 10, 12); Euphoria (weeks 5, 6, 7, 8, 9, 10) (see Figures 19 and 20) - may have been associated with the synchronizing effect of both T-groups having similar experiences in pre-T-group meetings, the Wednesday meetings, or in the MBA course generally. What the exact effects of these other environmental situations was is a matter of conjecture, however.

The two-week holiday that occurred between weeks 3 and 4 does not appear to have affected scores (see Figures 19 and 20). The results are probably complicated by the fact that during week 4 a short $\frac{1}{2}$ hour T-group was held, whereas during week 3 a regular 2 hour T-group was held. A longer session might have seen a different pattern in the Euphoria and Depression scores particularly. It is therefore difficult to make any conclusions about the effect of the holiday on the T-groups.

An additional source of environmental impact is the examples of interactional mood diffusion discussed above. These examples pertain mainly to persons diffusing a mood outward from the T-group to the environment where the mood is reinforced or modified and then brought to the T-group (e.g. Steven's interaction with his wife, discussed above).

Although some of the examples given of environmental impact suggest only the possibility of diffusion from the environment, others indicate a more definite interconnection. On the whole, however, the impact of the T-group on the environment seems significantly greater than the impact of the environment on the T-group.

VI DIFFUSION OF SPECIFIC MOODS

Figure 22 shows specific moods: Euphoria, Anger, and Depression diagrammed for intensity and diffusion direction for Carl's group and for Mark's group. Degree of diffusion is indicated by size of arrow. The sign \rightarrow indicates no diffusion. For all moods, outward diffusion is greater than inward diffusion. This reflects the greater impact of the group on the environment than vice versa. Inward diffusion comes closest to equalling outward diffusion for depression in Carl's group. Depression seems to be the mood that diffuses inward easiest - suggesting that it has greater intensity than euphoria or anger. In both groups there is no inward diffusion of anger: since anger is known to be an intense mood, the absence of inward diffusion is possibly attributed to a tendency for anger to be object-specific - caused by, or directed at, a specific-object or

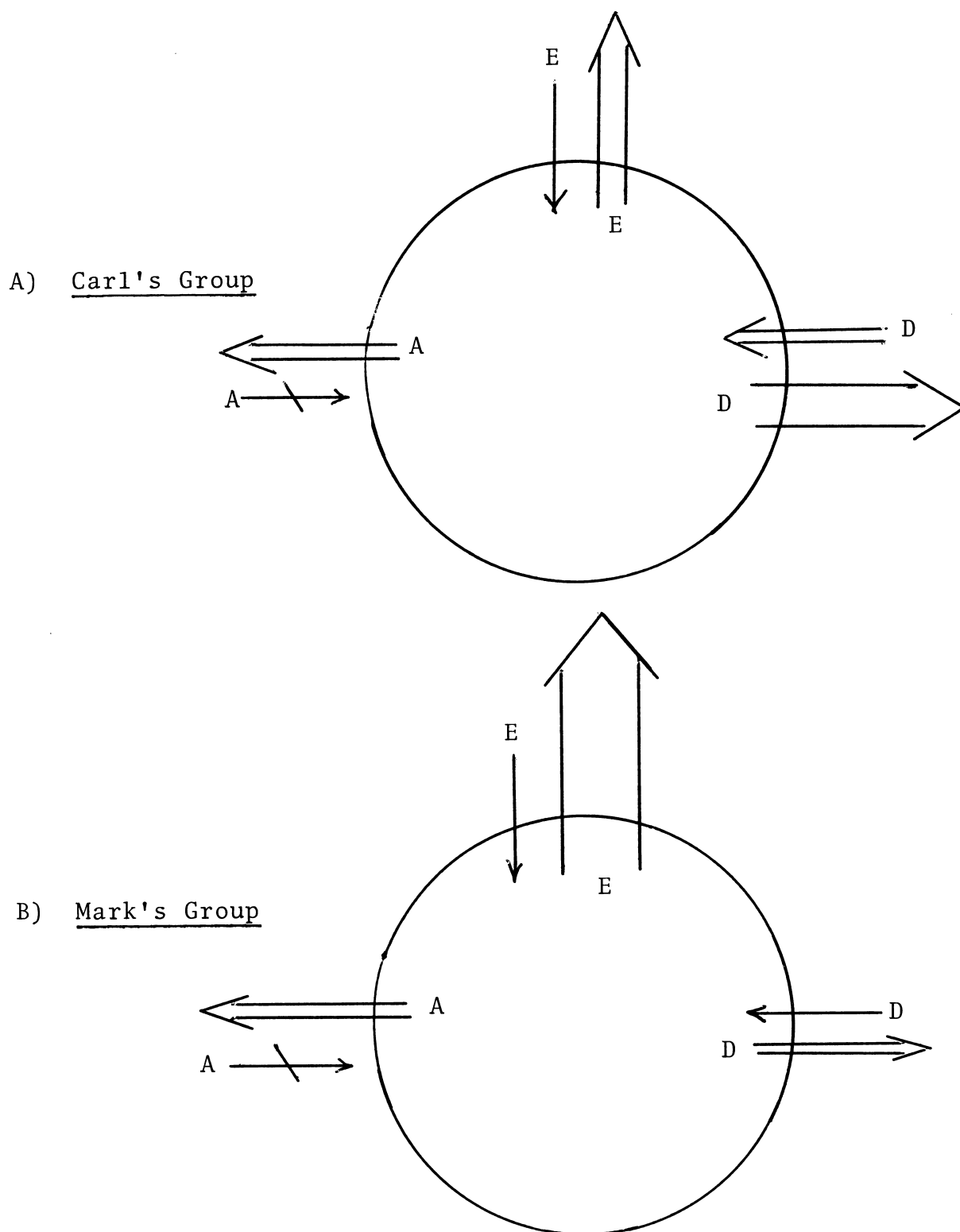


FIGURE 22 Diffusion Direction of Specific Moods

person.⁹ Once that person or object is out of sight and presence, the anger diminishes. One reason why there is outward anger diffusion is probably because the anger here is a defense against anxiety caused by the breaking down of personal defenses and the input of new information suggesting inadequacy in the member. An example of this is the anger felt by Steven in Carl's group in week 5 when he is evaluated as "paternalistic" by the group. His anger is not because he has been insulted or attacked, but because he has become anxious, he feels "not OK". The anger is a defense against his anxiety. We note that in his report he makes no reference to being angry at a specific person. For both groups combined there is less outward diffusion of anger than there is for other moods. The object-specific explanation applied to inward anger diffusion can be applied here. Once members are away from the persons (or the group as a whole) causing their anger, the anger diminishes. For both groups combined, outward diffusion of euphoria is almost twice that of outward depression. This suggests that euphoria is a mood that diffuses easily and frequently. Depression, although it diffuses less frequently, appears to diffuse with greater intensity, often being associated with interactional mood diffusion lasting over a period of weeks. The evidence suggests that a useful distinction to make when comparing diffusion rates of moods is between frequency and intensity. Few people experience intense fear or panic more than a few times in their lives - yet those experiences and moods remain indelible in the memory. More frequent moods, like euphoria,

⁹. I am indebted to Professor Dunphy for this insight.

are less intense - after a while we forget them. Using this distinction it becomes clear that although euphoria diffused more frequently, the diffusion of depression with its greater intensity probably made, overall, greater impact on group and environment.

VII CHARACTERISTICS OF DIFFUSERS

The individual characteristics associated with each of the diffuser categories seem to cluster together in meaningful patterns. High diffusers are high on Expression of feelings and affection, suggesting that their high mood diffusion is related to their high "emotionality". High diffusers are also high on several of the work subcategories suggesting that high diffusion is a sign of involvement in the group (involvement scores also high). Outward diffusers are similar to high diffusers in their Work and Expression orientation, but are more suspicious and anxious - suggesting that they are prone to taking negative moods out of the group.

Inward diffusers - mainly persons who are also inward depressives - lack rigid internal standards and are group dependent. These seem to be persons low on ego strength and independence, perhaps dominated by Child ego states (Berne, 1964). They experience negative moods in outside personal contacts, suggesting a lack of interpersonal competence on their part: they seem unable to obtain satisfaction from personal relationships. Trina, for example, had severe marital problems culminating in her leaving home temporarily. During one week she recounted an anecdote about how she once fired a shot from a rifle at (i.e. near) her husband. Charles reported continual problems in his

relationship with his sons. Allen spent most of his 14 weeks anguishing over his relationship with Martha (whom he was engaged to marry) who, together with her parents, struggled to get Allen to move to Melbourne. The domination contest ended in Allen's breaking off his engagement. Edward introduced his marital problems to the T-group during an early session and mentioned his dissatisfaction with his marriage several times in his *Daily Mood Checklists*. Arthur's dissatisfaction with his "de facto marriage" relationship has been recounted in the RMD examples. Almost without exception, the inward diffusers experienced significant difficulties with intimate others.

Outward euphorics, on the other hand, experience positive moods in primary relationships. They are high on Affiliation, Affection, and Work categories and are placid and tenderminded. They give euphoria to others and get euphoria back. Outward euphorics are highly involved in the T-group and include several T-group members as friends. They tend to associate with people they like. On the whole, outward euphorics seem more interpersonally competent and have a more supportive primary environment than depressives.

Outward aggressives are high mainly on the 16 P.F. category assertive. A discussion of the two types of outward aggressives - overt aggressives and covert aggressives - has been made in the previous chapter. This dichotomy is suggested by the "anger in" vrs "anger out" pattern reported by other researchers (Funkenstein, King, and DroLette, 1953).

Outward depressives lack rigid internal standards and are forthright. The forthright or artless characteristic of outward

depressives suggests that they "wear their heart or their sleeve" and tend to have Child ego states (Berne, 1964) - making them vulnerable to attack. They tend to give advice to others: this possibly reflects their own desire for help. Significantly, they tend to experience positive moods in relationships with others. This outside "support" possibly aids their desire to "improve" themselves more. The absence of Work categories for these diffusers suggests that it is they who are worked on by the group: the unconflicted members probe the defenses of, and support the vulnerable selves of, these conflicted, but willing to expose their conflict, members.

Depressives (inward and outward) are forthright and group-dependent. Significantly, they tend to tell stories, be inattentive, and ignore others: they "run" from facing their problems. They also spend much of their time in contact with people they don't like: this suggests the Child ego state trapped in unsatisfactory relationships it doesn't know how to, or is afraid to, get out of.

Inward depressives have the same unsatisfactory external relationships that inward diffusers do. They also tend to tell stories in group (i.e. avoid working) and to have few interpersonal contacts.

Outward negative diffusers were found to be controlled and assertive. The general absence of variable descriptions here is probably due to the combination of outward aggressives and outward depressives - two categories having fairly different underlying characteristics.

There seem to be two general types of diffusion related to

the diffuser categories reviewed above: learning diffusion and non-learning diffusion. Learning diffusion occurs when a positive or a negative mood is diffused and has a "positive" effect. For example, although many of the outward depressives in Carl's group took out moods of depression - the depression was due to the member's confronting and not denying his own depression and inadequacy. After facing up to personal inadequacy, some members continued to work on their problems even though it was painful and depressing for them. The process here involves growth and learning and the mood diffusion pattern characterizing it tends to be interactional. Non-learning diffusion is of two types: positive and negative. Members taking euphoria out of the group exemplify positive diffusion. Negative non-learning diffusion involves situations where a member experiences depression or anger in an interpersonal situation and is unable to discharge the mood, or resolve whatever difficulty is causing it, in the group situation in which it originates. Consequently, he carries the mood out to other group situations: the mood diffuses. A more interpersonally competent, high self-esteem, low anxiety person is more likely to be able to discharge his mood or resolve whatever is causing it; instead of carrying his mood around all day he expresses his anger or frustration directly, or takes some action to resolve interpersonal conflict. The interpersonally incompetent (Argyris 1962, 1965) cannot resolve their negative mood easily: against their will it diffuses. The consequences are unpleasant and undesirable - no benefit comes from this diffusion (unlike the benefits that accrue from learning diffusion). "Anger in" persons who become angry but are afraid - or don't know how - to

express their anger are typical examples of this type of diffusion.

SUMMARY OF CONCLUSIONS

- 1) Hypothesis 1 - that there will be a correlation between an individual's T-group scores and his environment (external group) scores was confirmed for Carl's group, but not for Mark's group.
- 2) Hypothesis 2 - that outward diffusion would be greater than inward diffusion was confirmed for moods of Euphoria and Anger and for moods of Euphoria, Anger and Depression combined. This indicates that the T-group has a greater impact on its environment than vice versa.
- 3) Hypothesis 3 - that moods of Anger and Depression diffuse more frequently than moods of Euphoria was not confirmed.
- 4) Hypothesis 4 - that there would be a 1 to 1 association between the type of mood developed by the group and the type of mood diffused, was not confirmed.
- 5) Hypothesis 5 - that weeks of high outward diffusion will be characterized by the predominance of particular content analysis categories was confirmed. It was found that low diffusion was characterized by high Submission, Euphoria, and Anxiety. High scores on these categories indicated low group impact.
- 6) Distinct personality and "individual" characteristics were found for the following diffusion categories:

High diffusers

Outward diffusers

Inward diffusers
 Outward euphorics
 Outward depressives
 Outward aggressives
 Outward negatives
 Inward depressives
 Depressives

The measures most frequently discriminating between persons high and low on these diffusion categories were: the 16 P.F. test, the Role Image Checklist, Network Mood scores, and the Personal Relationships Indices. This indicates that the type of diffuser a group member is depends on personality, role behaviour, and social network variables.

- 7) The impact of the T-group on its members was found to be related mainly to leader experience: the more experienced the leader, the greater the group impact. By group impact is meant extent and depth of emotional involvement and revelation of, and working on, personal problems.
- 8) Depression was found to be associated with group impact and personal growth. This "learning" depression was described as the first step in the personal growth process: the depression results from the realization of personal inadequacy and is resolved through acceptance of the reality of the problem and through actively working on the problem.
- 9) In the T-group studied the phase movement pattern found is described by the following sequences:

- a) Confrontation with the leader
- b) Defensive depression
- c) Premature euphoria
- d) Resistance to opening up
- e) Affiliation
- f) Intimacy - Depression
- g) Separation

Outward mood diffusion occurred most during the Affiliation and Intimacy - Depression phases.

- 10) Two types of mood diffusion were found: one-way and two-way (or interactional). Interactional mood diffusion was found to be mainly associated with "learning" mood diffusion and to knit together group and environment over a period of time. One-way negative mood diffusion was described as characteristic of persons who are interpersonally incompetent and who are unable to express or resolve their moods of anger and depression in the situations in which they arise.
- 11) Mood diffusion was estimated to occur about 15-30 percent of the T-group's life.
- 12) Inward depression was found to be associated with low in-group Euphoria (content analysis category) in Carl's group. This suggests a definite environmental impact on the T-group. The close synchronization of content analysis scores for Hostility, Affiliation, Depression, Euphoria, and Work for both groups were described as being possibly due to diffusion related to similar member experiences in pre-T-group sessions.

SUGGESTIONS FOR FUTURE RESEARCH

Future research can improve on, and add to, this study of mood diffusion in several respects. It would be desirable to conduct a similar study using a larger sample of T-groups and having leaders with varying experience. The results from this study must be regarded as tentative because of the small sample size. Also desirable would be a study of mood diffusion between different types of groups - families, peer groups, small groups within organizations - and their environments. The findings from such broader research would serve to pin down a more comprehensive theory of mood diffusion. Research on small groups having different degrees of connection with their environment could produce valuable information. Investigating a therapy group within a mental hospital, or other small group in an organizational setting, is more likely to produce results clarifying the effect of environment on the small group. When a single environmental aspect such as an organization is focused on, a clearer picture of the "environment" is obtained as it bears on the small group. An organizational-small group study involving several small groups in the same organization could produce valuable information on synchronized patterns in the small groups related to similar environmental stimuli.

In a replication of this study, it would be useful to have:

- 1) a matched control group (e.g. of other MBA students) which completed *Daily Mood Checklists* to show their "environment"

moods. This would help locate broader mood patterns in the environment not due to outward diffusion from the T-group.

- 2) A RMD questionnaire at the end of each T-group session to counteract any possible "recency" effect.
- 3) An environmental report questionnaire asking for a more detailed description of significant interpersonal events - this would permit a thematic analysis and comparison with concurrent themes in the T-group reports (as measured by content analysis).
- 4) A narrower, but more detailed focus on T-group members' closest primary associations rather than an extensive examination of all aspects of the environment. By focusing on a single type of environment group - e.g. the family - it would be possible to record more about that particular group than might be noted if the group was mentioned only once a week when something blatantly significant occurred there. As members grow in the T-group it is reasonable to expect this growth to show up first in their most intimate personal contacts (e.g. wife, husband, boyfriend, girlfriend, family). A comparative study of processes between and within these two primary group areas would be most valuable.
- 5) High participation from the group leaders in completing their reports and questionnaires, in order to aid assessment of the impact of the leader on mood diffusion.

Research is also needed on the diffusion of things other than mood. Some of the material gathered for this study shows

that behind the mood there is a thought, an idea, a belief generating the mood (e.g. the outward depressive who thinks "I'm not OK"). More research is needed on the diffusion of ideas and behaviours - and the integrating of these with mood.

More practically, it would be useful to conduct research into ways and techniques that could be used by leaders to get their T-groups over the authority issue (that so blocked Mark's group) and on with intimacy and work and outward learning diffusion.

This study shows that there is a definite connection between small group and environment, through mood diffusion. For the groups studied, the results confirm the significance of the open system small group models that specify interaction between small group and environment. The theory of mood diffusion presented here serves to clarify the nature of the small group - environment interaction and to delimit the range of relevant variables involved in that interaction with respect to T-groups. Research into a variety of small groups under different environmental conditions is now needed in order to build up a more comprehensive theory of the relationship between the small group and its environment. Such a theory should prove valuable to the small group researcher or the small group practitioner who wishes a comprehensive understanding of all the variables significantly affecting processes within the small group.

APPENDIX A

- COURSE OUTLINE -

INTERPERSONAL SKILLS - MBA OPTION - 1972

Course Aims:

The course is aimed at helping you to take more responsibility for your own personal development in:

- 1) Accurate self-perception, i.e., to improve your ability to see yourself as others see you and to predict more accurately how your behaviour will affect others.
- 2) Learning to cope more effectively with typical organizational situations such as superior-subordinate relations, interdepartmental conflict, group problem solving, consulting.
- 3) Becoming a more mature person by knowing yourself and your feelings better, understanding how your feelings affect your behaviour, becoming more comfortable in expressing your own feelings openly and honestly when it is appropriate, listening more effectively to others, extending your range of interpersonal behaviour.
- 4) Becoming a more effective change agent through improving interpersonal skills related to influencing and changing individuals, groups and organizations, coping with change that affects yourself, and understanding a range of approaches to organization development.

The staff of the course will take major responsibility in designing a program in which you can move toward realizing these objectives. However, you must take the major responsibility for your own learning.

Course Procedures:

The course sessions will be held from 1-4 p.m. on Tuesdays in Commerce 119 and 5-6 p.m. on Wednesdays in Commerce G.19.

There are five major strands in the course:

- 1) Laboratory exercises. The whole class will participate in these exercises which are designed to simulate an organizational situation or to throw light on some major aspect of interpersonal behaviour. Learning in these situations is from experience. "Topics" are planned in advance but not always announced as this would sometimes interfere with the inductive nature of the learning process. These exercises will normally be held in the first part of the Tuesday session.

- 2) T-group sessions. The class will be divided into two groups which will act as sensitivity training or encounter groups. The emphasis in these sessions will be on learning about interpersonal relationships and developing a wider range of effective interpersonal behaviour. Some suggestions about the most effective learning procedures in these groups are attached (see "Encounter Group Principles"). T-group sessions will generally follow the laboratory exercises in the Tuesday session.
- 3) Research. You are asked to contribute in a number of ways to a cumulative research record of the course development. The research has been designed to contribute to your understanding of group processes and summarised data will be fed back to you as the study proceeds. Some of the research data will be completed in class time; other research data will be completed out of course time but has been designed to occupy a minimum amount of time. Group sessions will be recorded on tape. The tape readings will be available only to members of the course, including staff. They may be used for research purposes, for discussion and evaluation by staff and for replay to members of the course. No tape will be released to others outside the course and all tapes will be erased on completion of research.
- 4) Theoretical input and conceptual analysis: The Wednesday one hour sessions will generally be used to deal in a more traditional academic way with issues emerging from the previous Tuesday session. An attempt will be made to achieve a fuller conceptual understanding of the experiential learning taking place in the laboratory and T-group sessions.
- 5) Readings and essays: There are no prescribed readings. E. Schein. *Process Consultation: Its Role in Organization Development*. Addison-Wesley, Mass. 1969, is highly recommended as a handbook for the course. In addition, a long list of books under several relevant headings has been provided (attached). You are expected to read one of these books (your choice) every three weeks and provide a written precise and critique of the book in sufficient copies (25) to distribute to each member of the class. That is, each student will provide *four book reviews* throughout the course and receive about 80 book reviews prepared by others. The same book may be reviewed more than once by different students. In addition, *two short essays* are required containing your assessment of group processes in your T-group. Details of these will be announced later.

Dates for completing book reviews are: 16th August, 6th September, 27th September, 18th October.

Dates for completing essays are: 13th September, 1st November.

There will be no examination.

MARKS:

Marks will be based on attendance, book reviews, essays and a self-assessment of your own learning in the course with 25% of final mark assigned for each of these. Opportunity will be provided for you to receive feedback from other course members and staff in making the final assessment of your own learning but the responsibility for assigning a final mark on this criterion rests with you alone. In other words, as far as course credit is concerned, you are the only one assessing your interpersonal behaviour in the course.

TWO ADDITIONAL POINTS:

Emotional Involvement: This is a practical course where you get feedback on your behaviour. You should be aware that the laboratory and T-group sessions can be emotionally involving. If you have a history of emotional instability or are currently undergoing therapy, you are advised to consult Professor Dunphy prior to Week 2 of the course. You are also advised that the course is *not* a substitute for therapy.

Privacy: It is up to the group to develop its own norms about what events in the group you can feel free to report to others outside the group. A good rule of thumb is to talk, if you wish to, about what occurs in the course in general terms but to avoid referring to individuals by name. If you want your privacy protected, extend the same privilege to others.

STAFF FOR THE COURSE: Dexter Dunphy, Barry Larkin, Brian Gerrard.

Staff Responsibilities:

Overall planning of the course	- Dunphy, assisted by Larkin & Gerrard
T-group trainers	- Dunphy, Larkin
Research Program	- Gerrard.

APPENDIX B

TO: All MBA group members
University of New South Wales

FROM: Brian A. Gerrard
School of Sociology, University of New South Wales
(Thesis Supervisor: Prof. Dexter Dunphy
Head: Department of Behavioural Science
School of Graduate Business Studies
University of New South Wales)

Re: Proposed Ph.D. study of self-analytic groups.

Topic: "The Self-analytic Group and its Environment".
Investigation involves a study of self-analytic groups
lasting about 14 weeks and requiring a measure of mood
in:

- a) self-analytic groups
- b) members while they are not in groups (i.e.
"environment").

This study has three objectives:

- (1) To contribute to the growing body of knowledge about the effect of the self-analytic experience upon members.
- (2) To provide feedback to members on their mood-related behaviour.
- (3) To help the researcher obtain his degree.

Measuring Instruments:

I would like to employ the following measuring instruments - which would require the cooperation and assistance of group members.

(A) Self-Analytic Groups

- (1) Brief *Postmeeting Report*¹ to be filled out at end of meeting. This would take 10-15 minutes.
- (2) Brief *Postmeeting Mood Checklist*² to be filled out at end of meeting (2 minutes).

(B) Environment

- (1) Brief *Weekly Mood Checklist*³ to be filled out on Fridays in *even* weeks (2 minutes).
- (2) Brief *Daily Mood Checklist*⁴ to be filled out daily in *odd* weeks (3 minutes).

(These checklists should be brought to group on Wed/Thurs for collection.)

These measures have been designed to yield a maximum of valid information while occupying a minimum of your time.

Anonymity: No material will be used in the thesis which will identify any group member by name. At the end of the study all reports and questionnaires will be destroyed or returned to you.

Feedback: I would like to make available to group members my research findings as they occur. Each week, your environmental and postmeeting mood checklist will be returned to you with your mood score plotted against that of the group. In order for me to provide this feedback it is essential that you be prompt in returning your environmental ("take-home") checklists to each subsequent meeting. Some provision could be made, if members find it desirable, for the researcher to give two short, formal feedback presentations of research findings during the duration of the group.

I would like all group members to feel free to question me at any time on any aspect of my study.

Sincerely,

Brian A. Gerrard

APPENDIC C

Name: _____

Date: _____

POSTMEETING MOOD CHECKLIST

Indicate your *overall mood* during the group meeting by placing a check (✓) nearest the polar word that best describes your feelings. Check every item which applies.

	Very Much	Moder- ately	Mildly	In Between	Mildly	Moder- ately	Very Much	Check here for 'does not apply'
1. Like	_____	_____	_____	_____	_____	_____	_____	Dislike _____
2. Dissatisfaction	_____	_____	_____	_____	_____	_____	_____	Satisfaction _____
3. Dominant	_____	_____	_____	_____	_____	_____	_____	Submissive _____
4. Angry	_____	_____	_____	_____	_____	_____	_____	Loving _____
5. Indecisive	_____	_____	_____	_____	_____	_____	_____	Decisive _____
6. Happy	_____	_____	_____	_____	_____	_____	_____	Sad _____
7. Rejecting	_____	_____	_____	_____	_____	_____	_____	Accepting _____
8. Humorous	_____	_____	_____	_____	_____	_____	_____	Serious _____
9. Relaxed	_____	_____	_____	_____	_____	_____	_____	Tense _____
10. Apathetic	_____	_____	_____	_____	_____	_____	_____	Involved _____
11. Optimistic	_____	_____	_____	_____	_____	_____	_____	Pessimistic _____
12. Ill (physical health)	_____	_____	_____	_____	_____	_____	_____	Healthy _____

APPENDIX D

Name: _____ Date: _____

POST-MEETING REPORT

After the group session, write about one page using the following questions to guide your analysis:

- 1) What were the *most significant events* in the group meeting?
- 2) What *led up* to these events in previous meetings and earlier in this meeting?
- 3) How did you and others *react* to this event(s):
What feelings did you experience in relation to these events?
What emotional reactions did you observe in others?
- 4) What was *your mood* during the group?
- 5) How would you describe the *overall mood of the group*?

Your Report:

APPENDIX E

Name: _____

Date: _____

WEEKLY MOOD CHECKLIST

Indicate your *overall mood* during the week by placing a check (✓) nearest the polar word that best describes your feelings. Check every item which applies.

	Very much	Moder- ately	Mildly	In- Between	Mildly	Moder- ately	Very Much	Check here for 'does not apply'	
1. Like	_____	_____	_____	_____	_____	_____	_____	Dislike	_____
2. Dissatisfaction	_____	_____	_____	_____	_____	_____	_____	Satisfaction	_____
3. Dominant	_____	_____	_____	_____	_____	_____	_____	Submissive	_____
4. Angry	_____	_____	_____	_____	_____	_____	_____	Loving	_____
5. Indecisive	_____	_____	_____	_____	_____	_____	_____	Decisive	_____
6. Happy	_____	_____	_____	_____	_____	_____	_____	Sad	_____
7. Rejecting	_____	_____	_____	_____	_____	_____	_____	Accepting	_____
8. Humorous	_____	_____	_____	_____	_____	_____	_____	Serious	_____
9. Relaxed	_____	_____	_____	_____	_____	_____	_____	Tense	_____
10. Apathetic	_____	_____	_____	_____	_____	_____	_____	Involved	_____
11. Optimistic	_____	_____	_____	_____	_____	_____	_____	Pessimistic	_____
12. Ill (physical health)	_____	_____	_____	_____	_____	_____	_____	Healthy	_____

APPENDIX F

INSTRUCTION SHEET - DAILY CHECKLIST

At the end of each day you are asked to fill out a checklist sheet. This should take no more than 5 minutes. On Tuesdays, bring to class for collection your checklist sheets for the previous week.

Use of checklist sheets

- (1) If you feel that a pair of polar words is inappropriate in describing your feelings, check "*does not apply*".
- (2) If the incident involved a *group* of people, check what you feel their moods were *as a group* - that is, average out the differences to get an "overall" mood.
- (3) When answering "*Who was this person(s)?*" you may indicate the person by their first name, by a "code" name, or by a letter or other symbol - so long as you use the same word or symbol if this person is mentioned at a later date. Indicate in brackets the sex of the person, e.g. Shiela (F); "X" (M).
If the incident involved a number of persons, that is, a group, identify by symbol the most significant persons and note their sex, e.g. Ralph (M); Martha (F); Dr.X (M); J.J. (F).
- (4) When answering "*In one or two sentences, summarize the incident*", be brief. Since you have already indicated the feelings involved, describe only what happened,
e.g. I had an argument with my boss.
e.g. I witnessed an argument between two of my friends.
e.g. I landed a big sale with a customer.
e.g. Took the wife and the kids to the zoo.
e.g. I went to a party at a friend's place and had a good time.
- (5) Be sure you place a check mark (✓) for *every* pair of polar words. Do not leave any out.

It may be helpful to consult this sheet while filling out the daily checklist.

APPENDIX G

Name: _____ Date: _____

DAILY MOOD CHECKLIST

Select the *most significant* incident that happened to you today and then place a check mark (✓) nearest the polar word that describes your feelings about (during and after) this incident. Check every item which applies.

	Very Much	Moder- ately	Mildly	In Between	Mildly	Moder- ately	Very Much	Check here for 'does not apply'
1. Like	_____	_____	_____	_____	_____	_____	_____	Dislike _____
2. Dissatisfaction	_____	_____	_____	_____	_____	_____	_____	Satisfaction _____
3. Dominant	_____	_____	_____	_____	_____	_____	_____	Submissive _____
4. Angry	_____	_____	_____	_____	_____	_____	_____	Loving _____
5. Indecisive	_____	_____	_____	_____	_____	_____	_____	Decisive _____
6. Happy	_____	_____	_____	_____	_____	_____	_____	Sad _____
7. Rejecting	_____	_____	_____	_____	_____	_____	_____	Accepting _____
8. Humorous	_____	_____	_____	_____	_____	_____	_____	Serious _____
9. Relaxed	_____	_____	_____	_____	_____	_____	_____	Tense _____
10. Apathetic	_____	_____	_____	_____	_____	_____	_____	Involved _____
11. Optimistic	_____	_____	_____	_____	_____	_____	_____	Pessimistic _____
12. Ill (physical health)	_____	_____	_____	_____	_____	_____	_____	Healthy _____

Cont....

My feelings lasted: a few minutes _____ an hour _____ a few hours _____ a half-day _____ all day _____

Did this incident involve another person or persons? Yes _____ No _____

(1) Who was this person(s)? _____

(2) Degree of Closeness

a) Intimate friend

b) Friend

c) Acquaintance

d) Stranger

(circle the appropriate letter)

(3) Category

a) Spouse, girlfriend

b) Family member

c) University student

d) Work colleague

e) Supervisor (at work
or at university)

f) Other

(4) Context

a) At home

b) At work

c) At University

d) Recreational

e) Other

(5) Summarize the incident in one or two sentences: _____

APPENDIX H

PERSONAL RELATIONSHIPS QUESTIONNAIRECONFIDENTIAL

Name: _____

Date: _____

List by first name or abbreviation, on the following page, *every* person you know who is *close* to you (a friend) or with whom you have *frequent contact* (an acquaintance). Indicate the nature of your relationship with this person by circling the appropriate number on each of the 5 scales shown. Read the instructions below before you begin.

Instructions:Meaning of the 5 scales

- a) Closeness - means how 'emotionally' involved with or close to someone you are.
- b) Likeability - means 'do you like or dislike this person?'
- c) Frequency of contact - means 'how many *days* a week would you be in contact with this person?' (the numbers represent days for *this* scale only).
- d) Length of contact - means 'on average, how much *time* would you spend in a *day* talking with this person?'. (m = minutes; h = hours).
- e) Status - means:
 - 1 = superior; someone in authority over you (e.g. boss, employer, doctor)
 - 2 = peer, and equal (e.g. a friend)
 - 3 = subordinate, someone *over* whom you have authority (e.g. employee, patient)

Groups: means 'list any groups that you have *significant* contact with' (YMCA, Church group, study group etc.). Score the group as if it were a person.

Special Instructions:MBA Students

Write out in full, and circle, the first name of anyone in your list who was a T-group, or MBA T-group course member.

Make out your list as you would have made it out during the final week of your T-group. (Do not include the names of any friends/acquaintances you have developed since the course).

APPENDIX I

	NAME	CLOSENESS TO YOU							LIKEABILITY							FREQUENCY OF CONTACT (days)	LENGTH OF CONTACT					STATUS								
		very close				not close			like			dislike																		
1)	_____	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	5m	15m	30m	1h	2h	1	2	3
2)	_____	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	5m	15m	30m	1h	2h	1	2	3
3)	_____	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	5m	15m	30m	1h	2h	1	2	3
4)	_____	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	5m	15m	30m	1h	2h	1	2	3
5)	_____	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	5m	15m	30m	1h	2h	1	2	3
6)	_____	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	5m	15m	30m	1h	2h	1	2	3
7)	_____	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	5m	15m	30m	1h	2h	1	2	3
8)	_____	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	5m	15m	30m	1h	2h	1	2	3
9)	_____	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	5m	15m	30m	1h	2h	1	2	3
10)	_____	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	5m	15m	30m	1h	2h	1	2	3
11)	_____	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	5m	15m	30m	1h	2h	1	2	3
12)	_____	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	5m	15m	30m	1h	2h	1	2	3
13)	_____	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	5m	15m	30m	1h	2h	1	2	3
14)	_____	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	5m	15m	30m	1h	2h	1	2	3
15)	_____	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	5m	15m	30m	1h	2h	1	2	3

GROUP: List any groups that you have significant contact with.

1)	_____	1	2	3	4	5	6	7	1	2	3	4	5	6	7	5m	15m	30m	1h	2h	1	2	3
2)	_____	1	2	3	4	5	6	7	1	2	3	4	5	6	7	5m	15m	30m	1h	2h	1	2	3
3)	_____	1	2	3	4	5	6	7	1	2	3	4	5	6	7	5m	15m	30m	1h	2h	1	2	3
4)	_____	1	2	3	4	5	6	7	1	2	3	4	5	6	7	5m	15m	30m	1h	2h	1	2	3
5)	_____	1	2	3	4	5	6	7	1	2	3	4	5	6	7	5m	15m	30m	1h	2h	1	2	3

FOR MORE THAN 15 PERSONS; USE EXTRA GROUP SPACES.

APPENDIX J

ROLE IMAGE CHECKLIST

Name of Scorer: _____

Name of person being Scored: _____

	Frequently	Fairly Often	Occasionally	Never
Commands or dominates others				
Gives advice or counsel to others				
Participates in decision-making				
Goes along with the decisions of others				
Is compliant, seeks help				
Submits to the direction of others				
Tries to persuade others to work for the group				
Actively pursues the task in hand				
Works reliably				
Is inattentive when the group is working				
Expresses feelings readily (e.g., jokes, laughs, shouts)				
Tells stories or relates incidents to amuse himself and the group				
Expresses affection for others				
Supports others				
Readily accepts others				
Ignores or avoids others				
Criticizes others				
Seems hostile and attacks others				

APPENDIX K

Name: _____

Environmental/T-Group Mood Influence Questionnaire (Remembered Mood Diffusion Questionnaire)

(A) T-Group Session:

Can you think of any instances in which you developed a *mood* (happy, sad, etc.) in or from a *T-Group session* which was sufficiently strong to *affect your behaviour/feelings* or *other of your group settings* or your personal life generally, later that day or during part of the rest of the week?

Please check one: YES _____ NO _____

If yes, list as many instances as you can remember; for each instance mention (1) During what *week/group* the instance occurred; (2) What your *mood* was; (3) *What caused* your mood; (4) *How it affected you in another group setting*.

Your Examples:

1.

2.

3.

Name: _____

(B) Environment:

Can you think of any instances in which you developed a *mood* (happy, sad, etc.) in or from a *group setting*, or *your personal life generally*, which was sufficiently strong to *affect your behaviour/feeling in a T-group session*?

Please check one: YES _____ NO _____

If yes, list as many instances as you can remember; for each instance mention (1) During what *week* of T-group the instance occurred; (2) What your *mood* was; (3) What *caused* your mood; (4) *How it affected you in T-group*.

Your Examples:

1.

2.

3.

APPENDIX L

TECHNICAL AND POPULAR LABELS FOR PERSONALITY FACTORS A TO Q₄

<u>Low Score Description</u>	<u>Factor</u>	<u>Factor</u>	<u>High Score Description</u>
Reserved (Sizothymia)	A-	vs A+	Outgoing (Affectothymia)
Less intelligent (Low 'g')	B-	vs B+	More intelligent (High 'g')
Emotional (Low ego strength)	C-	vs C+	Stable (High ego strength)
Humble (Submissiveness)	E-	vs E+	Assertive (Dominance)
Sober (Desurgency)	F-	vs F+	Happy-go-lucky (Surgency)
Expedient (Low super-ego)	G-	vs G+	Conscientious (High super-ego)
Shy (Threctia)	H-	vs H+	Venturesome (Parmia)
Tough-minded (Harria)	I-	vs I+	Tender-minded (Premsia)
Trusting (Alaxia)	L-	vs L+	Suspicious (Protension)
Practical (Praxernia)	M-	vs M+	Imaginative (Autia)
Forthright (Artlessness)	N-	vs N+	Shrewd (Shrewdness)
Placid (Assurance)	0-	vs 0+	Apprehensive (Guilt-proneness)
Conservative (Conservatism)	Q ₁ -	vs Q ₁ +	Experimenting (Radicalism)
Group-tied (Group adherence)	Q ₂ -	vs Q ₂ +	Self-sufficient (Self-sufficiency)
Casual (Low integration)	Q ₃ -	vs Q ₃ +	Controlled (High self-concept)
Relaxed (Low ergic tension)	Q ₄ -	vs Q ₄ +	Tense (Ergic tension)

(Cattell, 1965, p.365)

BIBLIOGRAPHY

- Allport, G.W. 1960. The Open System in Personality Theory.
Journal of Abnormal and Social Psychology.
Vol.61, 3, 303.
- Argyris, C. (Ed.) 1962. *Interpersonal Competence and Organizational Effectiveness*. Homewood, Ill.: Richard O. Irwin, Inc.
- Argyris, C. 1964. T-groups for organizational effectiveness.
Harvard Business Review. 42, 71.
- Argyris, C. 1965. Explorations in interpersonal competence - 1.
Journal of Applied Behavioral Science. 1(1).
58-84.
- Arnold, M.B. and Gasson, J.A. (Eds.) 1954. *The Human Person*.
Ronald.
- Arnold, M.B. 1960. *Emotion and Personality*. Columbia University Press.
- Arnold, M.B. (Ed.) 1968. *The Nature of Emotion*. London: Penguin.
- Aron, R. 1967. *Main Currents in Sociological Thought*. Vol.II.
London: Weidenfeld and Nicolson.
- Bennis, W.G. and Shepard, H.A. 1956. A theory of group development.
Human Relations. 9. 415-437.
- Bennis, W.G., Benne, K.D. and Chin, R. (Eds.) 1962. *The Planning of Change*. New York: Holt, Rinehart and Winston.
- Bennis, W.G. 1963. A new role for the behavioural sciences: effecting organizational change. *Administrative Science Quarterly*. 8. 125-165.
- Bennis, W.G. (Ed.) 1964. *Interpersonal Dynamics*. Homewood, Ill.: Dorsey.
- Berkowitz, L. 1962. *Aggression*. New York: McGraw-Hill.
- Berne, E. 1964. *Games People Play*. New York: Grove.
- Bion, W.A. 1959. *Experiences in Groups*. New York: Basic Books.
- Birdwhistell, R.L. 1952. *Introduction to Kinesics*. Louisville: University of Louisville Press.
- Bott, E. 1957. *Family and Social Network*. London: Tavistock.

- Boyd, J.B. and Ellis, J.D. 1962. *Findings of Research into Senior Management Seminars*. Toronto: The Hydro-Electric Power Commission of Ontario.
- Bradford, L.P., Gibb, J.R. and Benne, K.D. (Eds.) 1964. *T-group Theory and Laboratory Methods*. New York: Wiley.
- Bunker, D.R. 1965. Individual applications of Laboratory training. *Journal of Applied Behavioral Science*. 1, 131-148.
- Cannon, W.B. 1927. The James-Lange theory of emotion: a critical examination and an alternative theory. *Am. J. Psychol.* 39, 106-124.
- Cantril, H. 1940. *The Invasion from Mars*. Princeton, N.J.: Princeton University Press.
- Caplow, T., Stryker, S. and Wallace, S.E. 1964. *The Urban Ambience*. New York: Bedminster Press.
- Caudill, W. 1958. *The Psychiatric Hospital as a Small Society*. Cambridge: Harvard University Press.
- Claparède, E. 1920. Feelings and Emotions. In. *Reymert, M.L. (Ed.) (1928) Chapter 9*, 124-38.
- Clark, A.W. 1965. A therapeutic community in action. Unpublished Ph.d. thesis. University of New South Wales, Sydney.
- Cooper, C.L. and Mangham, I.L. (Eds.) *T-groups: a Survey of Research*. London: Wiley.
- Culbert, S.A. 1968. Trainer self-disclosure and member growth in two T-groups. *Journal of Applied Behavioural Science*. 4, 47-74.
- Duffy, E. 1941. An explanation of "emotional" phenomena without the use of the concept "emotion". *J. gen. Psychol.* 25, 283-93.
- Dumas, G. 1948. Emotional Shocks and Emotions. In *Arnold, M.B. (Ed.) (1948)*. pp.109-118.
- Durkheim, E. 1952. *Suicide*. London: Routledge and Kegan Paul.
- Dunphy, D.C. 1964. Social Change in self-analytic groups. Unpublished doctoral thesis, Department of Social Relations, Harvard University.
- Druckman, D. 1967. Dogmatism, prenegotiation experience and simulated group representation as determinants of dyadic behaviour in a bargaining situation. *Journal of Personality and Social Psychology*. 6, 279-90.

- Dunphy, D.C. 1968. Phases, Roles and Myths in Self-Analytic Groups. *Human Relations*. 4(2), 195-225.
- Dunphy, D.C. 1972. *The Primary Group*. New York: Meredith.
- Freud, S. 1922. *Beyond the Pleasure Principle*. London: Internat. Psychoanal. P.
- Friedlander, F. 1967. The Impact of Organizational Training Laboratories upon the Effectiveness and Interaction of Ongoing Work Groups. *Personnel Psychology*. 20, 289-309.
- Funkenstein, D.H., King, S.H. and Drolette, M. 1953. The experimental evocation of stress. In *Symposium on Stress*. Washington, D.C. Div. Med. Sciences Nat. Res. Council and Army Med. Serv. Grad. School W. Reed Army Med. Center, Washington D.C., GPO.
- Goldthorpe, J.H. 1969. Vilfredo Pareto. In *Raison, T. (Ed.) (1969)*, 110-118.
- Golembiewski, R.T. 1962. *The Small Group*. Chicago: University of Chicago Press.
- Goodenough, F. 1932. Expression of the emotions in a blind-deaf child. *Journal of Abnormal Social Psychology*. 27, 328-333.
- Hall, C.S., and Lindzey, G. 1957. *Theories of Personality*. New York: Wiley.
- Hare, A.P., Borgatta, F. and Bales, R.F. (Eds.) 1955. *Small Groups, Studies in Social Interaction*. New York: Knopf.
- Harrison, R. 1962. Evaluations and conclusions. In *(Argyris, C. (Ed.) (1962))*.
- Harrison, R. 1965. Group composition models for laboratory designs. *Journal of Applied Behavioral Science*. 1.
- Harrison, R. and Lubin, B. 1965. Personality style, group composition, and learning. *Journal of Applied Behavioural Science*. 1, 286-301.
- Hartman, J.J. 1969. The role of ego state distress in the development of self-analytic groups. Unpublished doctoral thesis. University of Michigan.
- Hebb, D.O. 1949. *The Organization of Behavior*. London: Wiley.
- Hebb, D.O. and Thompson, W.R. 1954. The Social Significance of Animal Studies. In *Lindzey, G. (Ed.) (1954)*.
- Harris, T.A. 1973. *I'm OK - You're OK*. London: Pan.

- Heinicke, C. and Bales, R.F. 1953. Developmental trends in the structure of small groups. *Sociometry*. 16(1). 7-38.
- Homans, G. 1962. *Sentiments and Activities*. New York: The Free Press.
- Homans, G. 1964. Bringing Men Back In. *American Sociological Review*. 29(5), 809-818.
- Horowitz, M. and Cartwright, D. 1953. A Projective Method for the Diagnosis of Group Properties. *Human Relations*. 6, 397-410.
- Inkeles, A. 1959. Personality and Social Structure. In: Mereton, R.K., Broom, L. and Cottrell, L.S. Jr. (Eds.) (1959). Vol.2, 249-276.
- James, W. 1884. What is an emotion? *Mind*. 9, 188-205.
- Johnson, D.M. 1945. The "Phantom Anesthetist" of Mattoon: a Field Study of Mass Hysteria. *Journal of Abnormal and Social Psychology*. 40, 175-186.
- Klages, L. 1950. *Grundlegung der Wissenschaft vom Ausdruck*. Bouvier. Also quoted in Arnold, M.B. (Ed.) (1968). 119-126.
- Knapp, P.H. (Ed.) 1963. *Expression of the Emotions in Man*. International Universities Press.
- Lakin, M. 1960. *Participants' Interpretations of a Group Sensitivity Training Experience: a Case Study*. Typewritten manuscript. Duke University.
- Lakin, M. and Carson, R.C. 1964. Participant perception of group process in group sensitivity training. *International Journal of Group Psychotherapy*. 14, 116-122.
- La Piere, R.T. 1938. *Collective Behavior*. New York: McGraw-Hill.
- Larguier des Bancelles, J. 1921. *L'Instinct et l'Emotion*. Payot.
- Lazarus, R.S. 1966. *Psychological Stress and the Coping Process*. New York: McGraw-Hill.
- Leeper, R.W. 1963. The motivational theory of emotion. In Stacey, C.L. and DeMartino (Eds.) (1963). 657-665.
- Lehmann, A. 1914. *Die Hauptgesetze des menschlichen Gefühlslebens*. Reisland, Leipzig. Also quoted in Arnold, M.B. (Ed.) (1968). 37-42.

- Lewin, K. 1935. *A Dynamic Theory of Personality*. Translated by Adams, D.K. and Zener, K.E., New York: McGraw-Hill.
- Lewin, K., Lippitt, R. and White, R. 1939. Patterns of Aggressive Behaviour in Experimentally Created 'Social Climates'. *Journal of Social Psychology*. 10, 271-299.
- Lieberman, M. 1958. The influence of group composition on changes in affective approach. In *Stock and Thelen (Eds.) (1958)*.
- Lindgren, H.C., Byrne, D., and Petrinovich, L. 1967. *Psychology: an introduction to behavioural science*. New York: Wiley.
- Lindzey, G. (Ed.) 1954. *Handbook of Social Psychology*. Cambridge, Mass.: Addison Wesley.
- Lubin, B. and Zuckerman, M. 1967. Affective and perceptual cognitive patterns in sensitivity training groups. *Psychological Reports*. 21, 365-376.
- McCall, G. and Simmons, J. 1966. *Identities and Interactions*. New York: Free Press.
- McDougall, W. 1926. *An Outline of Abnormal Psychology*. London: Methuen.
- McKellar, P. 1968. *Experience and Behaviour*. London: Penguin Books.
- Mahl, G.F. and Schulze, G. 1964. Psychological Research in the Extra Linguistic Area. In *Sebeak, T.A., Hayes, A.S., and Bateson, M.C. (Eds.) (1964)*.
- Mann, R.D. 1961. Dimensions of individual performance in small groups under task and social-emotional conditions. *J. abnormal social psychology*. 62, 674-682.
- Mann, F.C. 1962. Study and creating change. In *(Bennis, W.G., Benne, K.D., and Chin, R. (Eds.) 1962)*.
- Mann, R.D. 1966. The development of the member-trainer relations in self-analytic groups. *Human Relations*. 19, 84-117.
- Mann, R.D. 1967. *Interpersonal Styles and Group Development*. New York: John Wiley.
- Maranon, G. 1924. Contribution à l'étude de l'action émotive de l'adrénaline. *Rev. franç. d'endocrinol.* 2, 301.

- Marx, M.H. (Ed.) 1963. *Theories in Contemporary Psychology*. New York: Macmillan.
- Meares, A. 1970. *The Way Up*. London: Fontana.
- Menninger, K. 1963. *The Vital Balance*. New York: Viking.
- Merton, R.K., Broom, L. and Cottrell, L.S. Jr. (Eds.) 1959. *Sociology Today*. New York: Harper and Row.
- Miles, M.B. 1960. Human relations training: processes and outcomes. *J. counsel. Psychol.* 7, 301-306.
- Miles, M.B. 1965. Changes during and following Laboratory training: a clinical-experimental study. *Journal of Applied Behavioral Science*. 1(3), 215-243.
- Miles, T.M. 1964. Authority and Group Emotion. In *Bennis, W.G. (Ed.) (1964)*. 94-108.
- Mills, T.M. 1964. *Group transformation: An analysis of a learning group*. Englewood Cliffs, N.J.: Prentice-Hall.
- Mills, T.M. 1967. *The Sociology of Small Groups*. Englewood Cliffs: Prentice-Hall.
- Moore, R. 1960. Effects of emotions on mental functioning. Quoted in: *Resource Material: Careers and Guidance Syllabus*. New South Wales Department of Education.
- Morgan, C.T. and King, R.A. 1965. *Introduction to Psychology*. (3rd. ed.) New York: McGraw-Hill.
- Morris, D. 1967. *The Naked Ape*. London: Jonathan Cape.
- Moscow, D. 1969. The influence of interpersonal variables on the transfer of learning from T-groups to the job situation. *Proceedings of International Congress of Applied Psychology*. Amsterdam. 380-386.
- Munn, N.L. 1946. *Psychology: The Fundamentals of Human Adjustment*. London: Houghton Mifflin.
- Pareto, V. 1935. *The Mind and Society*. New York: Harcourt, Brace.
- Parkinson, C.N. 1963. *East and West*. New York: Houghton Mifflin.
- Parsons, T., Bales, R.F. and Shils, E.A. 1953. *Working Papers in the Theory of Action*. Glencoe: The Free Press.
- Parsons, T. and Smelser, N.J. 1956. *Economy and Society*. New York: The Free Press.

- Parsons, T. 1964. *Social Structure and Personality*. New York: The Free Press of Glencoe.
- Peters, D.R. 1966. Identification and personal change in laboratory training groups. Unpublished Ph.D. Thesis. Alfred P. Sloan, School of Management, M.I.T.
- Peters, H.N. 1963. Affect and Emotion. In *Marx, M.H. (Ed.) (1963)*.
- Philp, H. and Dunphy, D.C. 1959. Developmental trends in small groups. *Sociometry*, 22, 162-174.
- Plutchik, R. 1962. *The Emotions: Facts, Theories, and a New Model*. New York: Random House.
- Pradines, M. 1958. Feelings as Regulators. In *Arnold, M.B. (Ed.) (1968)*. 189-200.
- Raison, T. (Ed.) 1969. *The Founding Fathers of Social Science*. London: Penguin.
- Rapaport, D. 1950. *Emotions and Memory*. International Universities Press.
- Redl, F. 1955. Group Emotion and Leadership. In *Hare, A.P., Borgatta, F. and Bales, R.F. (Eds.) (1955)*.
- Reisel, J. 1959. The trainer role in human relations training. Paper read at the Western Psychological Association meeting, April, 1959.
- Reisel, J. 1959. A search for behaviour patterns in sensitivity training groups. Unpublished doctoral thesis, University of California, Los Angeles.
- Reymert, M.L. (Ed.) 1928. *Feelings and Emotions*. Clark University Press.
- Schackter, S. and Singer, J.E. 1962. Cognitive, Social, and physiological determinants of emotional state. *Psychol. Rev.* 69, 379-99.
- Schutz, W.C. 1958. *FIRO: A Three-dimensional Theory of Interpersonal Behaviour*. New York: Holt, Rinehart and Winston.
- Schutz, W.C. 1961. On group composition. *Journal of Abnormal and Social Psychology*. 62, 275-281.
- Schutz, W.C. and Allen, V.L. 1966. The effects of a T-group Laboratory on interpersonal behaviour. *Journal of Applied Behavioral Science*. 1(3). 265-286.

- Sebeak, T.A., Hayes, A.S. and Bateson, M.C. (Eds.) 1964. *Approaches to Semiotics*. London. Morton.
- Shand, A.F. 1922. Contribution to Symposium 'The Relations of Complex and Sentiment'. *British Journal of Psychology*.
- Shepard, H. 1960. 'An action research model'. In Esso Standard Oil Company, *An Action Research Program for Organizational Improvement*. Ann. Arbor. Esso Standard Oil Company, Foundation for Research on Human Behaviour.
- Spitz, R.A. 1963. Ontogenesis, the proleptic function of emotion. In Knapp, P.H. (Ed.) (1963). 43-59.
- Slater, P.E. 1966. *Microcosm*. New York: John Wiley.
- Stacey, C.L. and De Martino, M.F. (Eds.) 1963. *Understanding Human Motivation*. Howard Allen.
- Stanton, A.H. and Schwartz, M.S. 1954. *The Mental Hospital*. New York: Basic Books.
- Steele, F.I. 1968. Personality and the 'Laboratory Style'. *Journal of Applied Behavioural Science*. 4(1), 25-46.
- Stermerding, A.H. 1961. Evaluation research in the field of sensitivity training. Unpublished manuscript Leiden: Netherlands Institute of Preventive Medicine.
- Stock, D. and Thelen, H. 1958. *Emotional Dynamics and Group Culture*. Washington, D.C.: National Training Laboratories, N.E.A.
- Stock, D. 1964. A survey of research on T-groups. In (Bradford, L.P., Gibb, J.R. and Benne, K.D. (Eds.) 1964).
- Stotland, E. and Kobler, A. 1965. *Life and Death of a Mental Hospital*. Seattle: University of Washington Press.
- Sullivan, H.S. 1955. *The Psychiatric Interview*. London: Tavistock.
- Sullivan, H.S. 1964. *The Fusion of Psychiatry and Social Science*. New York: Norton.
- Sullivan, H.S. 1964. The Illusion of Personal Individuality. In *The Fusion of Psychiatry and Social Science*. New York: Norton, 198-226.

- Vroom, V. 1960. *Some Personality Determinants of the Effects of Participation*. Englewood Cliffs, N.J.: Prentice-Hall.
- Tannenbaum, R., Weschler, I.R. and Massarik, R. 1961. *Leadership and Organization*. New York: McGraw-Hill.
- Theodorson, G.A. 1969. *A Modern Dictionary of Sociology*. New York: Crowell.
- Torrance, E.P. 1955. Perception of Group Functioning as a Predictor of Group Performance. *Journal of Social Psychology*. XLII, 271-282.
- Tuckman, B.W. 1965. Developmental sequence in small groups. *Psychological Bulletin*. 63, 384-99.
- Watson, J.B. 1924. *Psychology from the Standpoint of a Behaviorist*. Philadelphia: Lippincott.
- Whittaker, J.O. 1966. *Introduction to Psychology*. Philadelphia: W.B. Saunders.
- Young, P.T. 1961. *Motivation and Emotion*. London: Wiley.