

Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

SMALL TASK-ORIENTED GROUPS

A systems analysis

A thesis presented in partial fulfilment of
the requirements for the degree of
MASTER OF ARTS IN EDUCATION
at
Massey University

Clarence James Patrick Nolan
Judith Ceridwen Irangani Harvey

1972

ACKNOWLEDGEMENTS

We would like to give our special thanks to the many people who helped us while we were writing this thesis, and in particular:

Professor Raymond S. Adams, supervisor and mentor, who turned most of our problems into opportunities,

Professor C.G.N. Hill, for having faith in the collaborative enterprise,

Richard Bates (who faced the cameras with temerity), for his willingness to participate in the study, and for his constant encouragement,

Professor G.S. Fraser, a structural functionalist exemplary, who aided and abetted us,

Murray Warn, electronics engineer, who supervised and set up the videotape equipment for the investigation,

Dr. Colin Boswell, for writing the computer programmes,

Dr. Jye Kang, who assisted with the coding,

Dr. Alta Gordon, for her careful proof-reading and forbearance in the face of our constant intrusion,

Carol Panny, for her assistance in preparing the profiles,

Kirsten Morgan, for whom typing is an art,

The Friday group, for listening to our ideas and providing constructive criticisms,

Russell Thompson, who helped us by accepting an extra teaching load,

Edith, Catherine, Richard and Andrew, for their patience and understanding, and for sharing in our enthusiasm and consoling us during crises.

LIST OF CONTENTS

	<u>Page</u>
Introduction	
Chapter 1: Parsons' Theory of Social Action	1
The Four Functional Problems	3
The Pattern Variables	7
The pattern variables distinguished	9
The cognitive dimension	11
The cathectic dimension	13
Integrating the cognitive and cathectic dimensions	14
Summary	20
Chapter 2: Setting Up the Model	22
Background to the study	22
The Harnessing of the Pattern Variables to the Four Functional Problems	26
GENESIS: Universalism / Affective-neutrality and Performance / Specificity	26
GOAL-ATTAINMENT: Performance / Specificity and Particularism / Affectivity	28
INTEGRATION: Particularism / Affectivity and Quality / Diffuseness	/ 31
LATENCY: Quality / Diffuseness and Universalism / Affective-neutrality	32
Diagram of the harnessing	33
The functional problems operationally defined	34
The pattern variables operationally defined	34
The modified pattern variable categories	35
The Research Model	36
Types of transitions	41
Hypotheses	42
Chapter 3: Research Design	46
Selecting the group	47
Programme of observation	48
Recording the observed data	49
Constructing the codes	50
Code I: The four functional problems - GROUP STATE	50
Code II: The modified pattern variables - EGO STATE	51
Coding the data	52
Inter-coder reliability scores	53
Computer tabulation	55

	<u>Page</u>
Chapter 4: Presentation of Findings	56
Group life span: An overview	56
Comparing the six sessions	64
The six sessions	60
Putting the Hypotheses to Test	98
Structure hypotheses	98
Inter-session comparison of structure hypotheses	100
Process hypotheses	102
Profiles	111
Chapter 5: Summary and Conclusions	117
Discussion of Findings	117
Ego state	117
Group state	119
Relating ego state to group state	121
Accounting for the absence of Integration and Latency	125
Evaluation of Operationalisation Procedures	127
Commentary on the Codes and Coding	127
A matter of fit - the codes and the theory	128
Some operational considerations	130
A question of measurement	131
Research Implications	132
Research Applications	133
Appendix A: Code I	137
Appendix B: Code II	146
Appendix C: Technical Equipment	154
References	157

LIST OF FIGURES

<u>Figure</u>		<u>Page</u>
1	The L-I-G-A paradigm of the four functional problems	8
2	Derivation of the pattern variable scheme	10
3	Components of action systems	18
4	The closed system of task-oriented groups	33
5	MCLEL I of the theory of small task-oriented groups	37
6	Mapping of the pattern variables for a closed system conceptualised on the four functional problems	38
7	The logic of the relationship between the modified pattern variables	39
8	Hypothesised relationships between ego state transitions and group state transitions	43

LIST OF TABLES

<u>Table</u>	<u>Page</u>
3:1 Inter-coder reliability scores for Code I	54
3:2 Inter-coder reliability scores for Code II	55
4:1 Ego state episodes - distribution: group life span	56
4:2 Ego state episodes - duration: group life span	57
4:3 Ego state transitions: group life span	58
4:4 Group state sequences - distribution: group life span	59
4:5 Group state sequences - duration: group life span	59
4:6 Group state transitions: group life span	60
4:7 Summary of co-occurrence of ego state transitions and group states	61
4:8 Ego state / group state co-occurrences - expressed as a percentage of the duration of each group state: group life span	63
4:9 Ego state episodes - number and average duration: Inter-session comparison	64
4:10 Ego state episodes - distribution: expressed as percentage of total number of episodes for each session: Inter-session comparison	65
4:11 Ego state episodes - duration: expressed as percentage of duration of each session: Inter-session comparison	66
4:12 Group state sequences - number and average duration of sequences: Inter-session comparison	67
4:13 Group state sequences - distribution: expressed as percentage of total number of sequences for each session: Inter-session comparison	67
4:14 Group state sequences - duration: expressed as percentage of duration of each session: Inter-session comparison	68
4:15:1 Ego state episodes - distribution: Session 1	69
4:15:2 Ego state episodes - duration: Session 1	69
4:15:3 Ego state transitions: Session 1	70
4:15:4 Group state sequences - distribution: Session 1	71
4:15:5 Group state sequences - duration: Session 1	71
4:15:6 Group state transitions: Session 1	72
4:15:7 Co-occurrences of ego state transitions and group states: Session 1	73
4:15:8 Ego state / group state co-occurrences: expressed as a percentage of the duration of each group state: Session 1 (75.5 time units)	74

<u>Table</u>	<u>Page</u>
4:16:1 Ego state episodes - distribution: Session 2	75
4:16:2 Ego state episodes - duration: Session 2	75
4:16:3 Ego state transitions: Session 2	75
4:16:4 Group state sequences - distribution: Session 2	76
4:16:5 Group state sequences - duration: Session 2	76
4:16:6 Group state transitions: Session 2	77
4:16:7 Co-occurrences of ego state transitions and group states: Session 2	78
4:16:8 Ego state / group state co-occurrences: expressed as a percentage of the duration of each group state: Session 2 (52.0 time units)	79
4:17:1 Ego state episodes - distribution: Session 3	80
4:17:2 Ego state episodes - duration: Session 3	80
4:17:3 Ego state transitions: Session 3	80
4:17:4 Group state sequences - distribution: Session 3	81
4:17:5 Group state sequences - duration: Session 3	81
4:17:6 Group state transitions: Session 3	82
4:17:7 Co-occurrences of ego state transitions and group states: Session 3	83
4:17:8 Ego state / group state co-occurrences: expressed as a percentage of the duration of each group state: Session 3 (55.5 time units)	84
4:18:1 Ego state episodes - distribution: Session 4	85
4:18:2 Ego state episodes - duration: Session 4	85
4:18:3 Ego state transitions: Session 4	86
4:18:4 Group state sequences - distribution: Session 4	86
4:18:5 Group state sequences - duration: Session 4	87
4:18:6 Group state transitions: Session 4	87
4:18:7 Co-occurrences of ego state transitions and group states: Session 4	88
4:18:8 Ego state / group state co-occurrences: expressed as a percentage of the duration of each group state: Session 4 (50.0 time units)	89

<u>Table</u>	<u>Page</u>
4:19:1 Ego state episodes - distribution: Session 5	90
4:19:2 Ego state episodes - duration: Session 5	90
4:19:3 Ego state transitions: Session 5	90
4:19:4 Group state sequences - distribution: Session 5	91
4:19:5 Group state sequences - duration: Session 5	91
4:19:6 Group state transitions: Session 5	92
4:19:7 Co-occurrences of ego state transitions and group states: Session 5	92
4:19:8 Ego state / group state co-occurrences: expressed as a percentage of the duration of each group state: Session 5 (75.0 time units)	93
4:20:1 Ego state episodes - distribution: Session 6	94
4:20:2 Ego state episodes - duration: Session 6	94
4:20:3 Ego state transitions: Session 6	94
4:20:4 Group state sequences - distribution: Session 6	95
4:20:5 Group state sequences - duration: Session 6	95
4:20:6 Group state transitions: Session 6	96
4:20:7 Co-occurrences of ego state transitions and group states: Session 6	97
4:20:8 Ego state / group state co-occurrences: expressed as a percentage of the duration of each group state: Session 6 (37.0 time units)	98
4:21:1 Ego state / group state co-occurrences: expressed as a percentage of the duration of group state Genesis: Inter-session comparison	100
4:21:2 Ego state / group state co-occurrences: expressed as a percentage of the duration of group state Goal- attainment: Inter-session comparison	101
4:21:3 Ego state / group state co-occurrences: expressed as a percentage of the duration of group state Integration: Inter-session comparison	101
4:21:4 Ego state / group state co-occurrences: expressed as a percentage of the duration of group state Latency: Inter-session comparison	102
4:22:1 Co-occurrence of ego state transitions with group state transition: Genesis / Latency	104
4:22:2 Co-occurrence of ego state transitions with group state transition: Goal-attainment / Latency	106
4:22:3 Co-occurrence of ego state transitions with group state transition: Latency / Genesis	108
4:22:4 Co-occurrence of ego state transitions with group state transition: Latency / Goal-attainment	109

INTRODUCTION

"Where two or more people are gathered together in order to engage in social interaction - there is a social system".
(Anon.)

The question of why it is that people come together in systems of interaction and how these systems persist as viable social arrangements is one which has been taken up by social philosophers and sociological theorists as far back as Hobbes. Subsequently Spencer, Durkheim, and such contemporary figures as Homans, Merton and Parsons have also taken issue with this problem. The present thesis shares a similar concern with the problem and derives its stimulus from the way in which sociologists have attempted to formulate adequate explanatory theories.

The thesis exhibits a convergence in the interests of the two authors - on the one hand, an interest in the application of Parsonian theory to small group phenomena, and on the other, the use of 'systems theory' in the explanation of social interaction in educational settings. The specific focus of attention is on those groups which have the properties of being small and task-oriented. Such groups are ubiquitous in educational contexts. At the most general level the thesis uses Parsons' voluntaristic theory of social action as the frame of reference from which a theory of small task-oriented groups can be derived. The thesis is therefore an expedition into the realms of sociological theory and an exploration of the way in which Parsons' theory in particular can be applied to an empirical situation. Elements of a general systems theory have been employed to further limit the scope of the investigation by focussing only on the internal dynamic of small task-oriented groups, rather than the way in which they adapt to their surrounding environments, thus enabling such groups to be conceptualised as discrete social systems in their own right.

The investigation reported in this thesis consists of a series of related steps which systematically link the abstract theory to a concrete empirical situation.

Chapter 1 is a brief exposition of Parsons' frame of reference and the elements of his theory of social action that are used in this study--namely the four functional problem and the pattern variable schemes. These two schemes are discussed in turn as they provide the theoretical basis of a research model which is capable of describing

and explaining the processes and conditions under which small task-oriented groups come into existence and persist over time. In Chapter 2 the research model is constructed by harnessing these two conceptual schemes in a manner that allows specification of a limited set of relationships between the behaviour of individual actors and the state of the social system of which they are members. Chapter 2 also provides a detailed statement of the scope of the research problem and definitions of the operational categories that are used in the analysis of on-going interaction in task-oriented groups. Chapter 3 provides the operational links between the research model and 'the real world' by specifying the empirical conditions under which the relationship hypothesised in the model are to be tested. The results of the investigation are presented in Chapter 4. The final chapter of the thesis presents a discussion of the conclusions to be drawn from the findings: an evaluation of the theoretical strategy and the methodology employed, and a commentary on the theoretical importance of the study.