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EXPLORATORY RESEARCH INTO
THE KNOWLEDGE GAP HYPOTHESIS
AND THE EFFECT NETWORK CENTRALITY
HAS ON PRODUCTION, INNOVATION
AND SOCIAL ACTIVITY INFORMATION
GAIN IN KNOWLEDGE BASED ORGANISATIONS

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Robyn Leigh Barnes

1999

MASSEY UNIVERSITY



1061439479

ABSTRACT

When information is infused into a system, the likelihood that individuals of high socio-economic status will gain knowledge faster than those individuals with a lower socio-economic status has been described as the knowledge gap hypothesis. The literature relating to the hypothesis maintains that, as the growth in knowledge is greater amongst higher socio-economic status individuals, a relationship tends to exist between education and greater knowledge. The present study explores whether a knowledge gap exists between the most central and the least central individuals in the verbal production, innovation and social activity networks of ten knowledge organisations based in New Zealand.

Once self-reported responses to a sociometric questionnaire were gathered, network analysis was carried out in order to reveal the communication relationships in the three networks. The most and least visible individuals in the network in terms of centrality were then determined by use of the "degree", "closeness" and "betweenness" indices. Once the centrality of the actors in each network was established the socio-economic status, as measured by the educational attainment of each actor, was applied.

A significant difference was found to exist between the means for the most central and least central actors in the innovation network. The closeness and betweenness measures exhibited

much higher mean results for the most central actors in the innovation network. This illustrates that a difference may exist with respect to information access, whereby, the most central actors appear to have more access to, and control over, the information resources.

The demographic characteristics of the most central and the least central actors revealed that actors occupying central positions in the innovation network tended to have managerial roles. Those actors that exhibited a lack of centrality had generally been employed with their respective organisation for between 6 and 10 years. Therefore, the suggestion is that any difference in knowledge concerning information relating to the communication of organisational goals is not related to educational attainment. This may provide a modicum of support for the contention that socio-economic status, as measured by education, is not the only variable that contributes to the existence of a knowledge gap.

Managers in the knowledge organisations were perceived to be influential with respect to control over and access to information relating to solving organisational problems and the development of organisational goals. The implications for organisational environments are briefly discussed, followed by recommendations for future research concerning the application of the knowledge gap hypothesis to organisational settings.

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TABLE OF CONTENTS

ABSTRACT	i
ACKNOWLEDGEMENTS	iii
TABLE OF CONTENTS	iv
LIST OF TABLES	vii
1. INTRODUCTION	1
2. LITERATURE REVIEW	3
2.1 The knowledge gap hypothesis	3
2.2 Traditions of structural analysis	8
2.3 Network analysis	12
2.4 Communication network linkages	14
2.5 Sociometric technique of network analysis	16
2.6 Network metrics	16
2.7 Research objectives	22
2.8 Importance of this research	24

3.0	METHODOLOGY	26
3.1	Population and sample	26
3.2	Data collection	28
	3.2.1 Data collection instrument	28
	3.2.2 Preliminary data collection	32
	3.2.3 Data collection	32
3.3	Structural measures	33
3.4	Data analysis	37
4.0	RESULTS	43
5.0	DISCUSSION	61
5.1	Communication patterns	61
5.2	Access to and control over information resources	62
5.3	Knowledge gaps	65
5.4	Conclusions	71
5.5	Limitations	73
5.6	Directions for future research	75
	REFERENCES	78

APPENDICES

Appendix A Background data relating to each organisation.

Appendix B	Sociometric questionnaire.
Appendix C	Demographic characteristics of the sample accompanied by a breakdown of the information with respect to educational attainment.
Appendix D	Organisational charts for each organisation.
Appendix E	Binary matrix for each network relating to Organisation One.
Appendix F	Recoded binary matrices and descriptive statistics relating to the centrality measures for Organisation One.
Appendix G	Spreadsheet outlining the centrality of each actor in the production, innovation and social activity networks of Organisation One and their educational attainment.
Appendix H	Spreadsheet outlining the centrality of each actor in the production, innovation and social activity networks of Organisation One and their demographic characteristics.
Appendix I	Spreadsheet outlining the demographic characteristics of the most central and the least central actors in the production, innovation and social activity networks of Organisation One.
Appendix J	Summary of the results organisation by organisation.

LIST OF TABLES

Table	Page
1. The most commonly used structural measures.	17
2. Mean scores for the centrality measures of each network.	44
3. Indicators of the centrality of actors in the production network.	46
4. Indicators of the centrality of actors in the innovation network.	47
5. Indicators of the centrality of actors in the social activity network.	49
6. Characteristics of the most central and the least central actors in the production network.	51
7. Characteristics of the most central and the least central actors in the innovation network.	53
8. Characteristics of the most central and the least central actors in the social activity network.	54
9. Characteristics of the most central and the least central actors according to the degree measure of centrality.	56

10. Characteristics of the most central and the least central actors according to the closeness measure of centrality. 57
11. Characteristics of the most central and the least central actors according to the betweenness measure of centrality. 58