Australians in Antarctica: A study of organizational culture

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TABLE OF CONTENTS

LIST OF TABLES........................................................................................................... vi
LIST OF FIGURES........................................................................................................ vili
LIST OF APPENDICES................................................................................................... ix
ABSTRACT.................................................................................................................... x
ACKNOWLEDGMENTS................................................................................................... xiv
CHAPTER 1....................................................................................................................... 1
  1.1 Organizational Culture .......................................................................................... 2
    1.1.1 Background ....................................................................................................... 2
    1.1.2 Organizational Culture Defined ....................................................................... 4
    1.1.3 Elements of Organizational Culture ................................................................ 5
    1.1.4 Assessment of Organizational Culture ............................................................ 13
    1.1.5 Person-Culture Fit ........................................................................................... 18
  1.2 Antarctica .............................................................................................................. 22
    1.2.1 Background ....................................................................................................... 22
    1.2.2 History ............................................................................................................ 23
    1.2.3 Australian National Antarctic Research Expeditions ........................................ 26
    1.2.4 Women and ANARE ...................................................................................... 27
    1.2.5 Australian Antarctic Stations .......................................................................... 31
    1.2.6 The Application and Selection Process ........................................................... 33
    1.2.7 ANARE research ........................................................................................... 38
    1.2.8 This Research Investigation .......................................................................... 43
CHAPTER 2....................................................................................................................... 47
  2.1 Introduction .......................................................................................................... 48
  2.2 Method .................................................................................................................. 48
    2.2.1 Participants ..................................................................................................... 48
    2.2.2 Procedure ....................................................................................................... 50
  2.3 Results and Discussion ......................................................................................... 51
    2.3.1 The best aspect of Antarctica .......................................................................... 52
    2.3.2 The worst aspect of Antarctica ...................................................................... 53
    2.3.3 Is Antarctica a good place to work? ............................................................... 55
    2.3.4 Fitting in to Antarctic station culture ............................................................. 56
    2.3.5 Characteristics of a good Station Leader ......................................................... 57
    2.3.6 The culture of Antarctic stations .................................................................... 59
    2.3.7 Cultural change in Antarctica ........................................................................ 61
ABSTRACT

The principal aim of this thesis was to investigate the culture of isolated Australian Antarctic stations using qualitative and quantitative research methods. The research also investigated the assessment of person-culture fit within the context of Antarctic station life and culture. Five studies were undertaken on returned Australian Antarctic expeditioners and the results reflect a historical overview of Antarctic station culture from 1950 to 1999.

The first study was a qualitative investigation that explored the culture of Australian Antarctic stations using a two-part interview with a group of 31 returned Australian National Antarctic Research Expeditioners (ANARE). The investigation examined the experiences and attitudes of men and women towards Antarctic station life and culture. It also identified specific elements of Antarctic station culture, including symbols, heroes, rituals, stories, values, and the characteristics required for good "fit" into Antarctic station life. On the basis of a thematic analysis, a series of issues were identified, including: (i) the existence of two distinct eras of Antarctic station culture; (ii) the perceived ascendancy of occupational competence over social competence in expeditioner screening and recruitment; (iii) discrepancies between the values espoused in new recruits and the behavioural norms of Antarctic stations; (iv) the residual influence of the early all-male era of ANARE on subsequent Antarctic station culture; and (v) the impact of interpersonal conflict on stations, particularly gender based problems following the introduction of women to ANARE.

The results of Study I provided support for a second follow-up qualitative investigation on the attitudes and experiences of women towards Antarctic station life and culture. In particular, Study II was undertaken to: (i) further explore gender issues identified in Study I using a larger group of women expeditioners; and (ii) explore the extent of "fit" of women into Antarctic station life and culture. The participants were 14 women who participated in expeditions to the Antarctic and sub-Antarctic between 1985 and 1999 in a range of positions. The group included station leaders, medical practitioners, chefs, scientists, meteorological technicians and communications personnel. The women were administered the same interview used in Study I. Thematic analysis of the information
identified a series of recurring social issues, including: the prevalence of a male-dominated workers culture; sexual harassment and discrimination; group friction between scientists and support staff; and a discrepancy between espoused values and values expatriated in order to "fit" into station culture.

On the basis of the information and themes identified in Studies I and II, it was possible to formulate hypotheses about underlying assumptions of Antarctic station culture according to past theoretical models of organizational culture (Schein, 1984 and Rousseau, 1990a, 1990b) and person-culture fit (Chamman, 1989), and to explore these hypotheses using quantitative research methods. Study III was undertaken to explore the quantitative assessment of Antarctic station culture and the notion of person-culture fit within the context of Antarctic station life. The investigation was also undertaken to determine the extent to which congruence between individual and organizational values affects individual attitudes and job outcomes, including subjective fit perceptions, job satisfaction and perceived group cohesion. Person-culture fit was assessed in terms of the congruence between perceived Antarctic station values and individual values using the Organisational Culture Profile (O'Reilly, Chatman and Caldwell, 1991), which is an idiographic measure of organizational culture based on Q-sort methodology. The study was undertaken on a group of 117 men and women who participated in Australian Antarctic expeditions between 1950 and 1999. The group included station leaders, medical practitioners, chefs, scientists, meteorological technicians and trades and communications personnel. The results of the study revealed that congruence between Antarctic station values and individual values, along with demographic characteristics such as age and gender, predicted subjective fit with Antarctic station culture. The results also showed that person-culture fit predicted job satisfaction and group cohesion, and consistent with the findings of the qualitative studies, two distinct eras of Antarctic station culture were identified.

In order to further explore the quantitative assessment of organizational culture and the extent to which specific dimensions of Australian Antarctic station culture could be identified, a second quantitative study was undertaken. While Study III focused on Antarctic station values, the principal aim of Study IV was to identify the behavioural norms and expectations considered characteristic of station culture since behavioural
norms and values are considered distinct elements of culture (Rousseau, 1990a). The study also explored the impact of behavioural norms and expectations on individual attitudes and job outcomes, including job fit, role clarity, role conflict and job satisfaction. The study was undertaken on a group of 116 expeditioners drawn from the sample used in Study IV. The Organizational Culture Inventory (Cooke and Lafferty, 1989), which is a normative measure of organizational culture, was used to identify Antarctic station norms and expectations. The results of Study IV revealed gender differences in perceptions of Antarctic station culture. The results also highlighted that different behavioural norms and expectations were reported by: (i) those who participated in expeditions prior to 1980 and those who participated in expeditions from 1980 onwards; (ii) expeditioners of different station positions; and (iii) those who participated in summer expeditions and those who wintered in Antarctica.

A third quantitative study of Antarctic station culture was undertaken using the same participants to examine the extent to which perceptions of Antarctic station behavioural norms and expectations were consonant with certain personality traits. Accordingly, Study V explored the relationship between personality and perceived fit into Antarctic station culture, and the relationship between personality and individual job outcomes. Personality was assessed using the Revised NEO Personality Inventory (NEO PI-R; Costa and McCrae, 1992), which is based on a five factor model of personality (Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness). The results identified links between personality traits and perceptions of culture, subjective fit perceptions, and individual attitudes and job outcomes.

The results of this investigation show that organizational culture is amenable to both quantitative and qualitative assessment. In particular, results show the effectiveness of combining qualitative and quantitative research methods to assess the deeper levels of organizational culture, including values, behavioural norms, and underlying unconscious assumptions (e.g., concerning gender roles, with women being less likely to fit into the prevailing male-dominated workers culture on stations). The results also show that congruence between perceived organizational values and individual values is effective in determining the extent to which individuals are likely to perceive themselves as "fitting in" to Antarctic station culture. This investigation generated a profile that represents the
development of Australian Antarctic station values and behavioural norms since the establishment of ANARE. The data reflect the evolution of Antarctic station culture over time and may be useful for the ongoing monitoring of Australian Antarctic station culture and similar investigations on other international Antarctic bases. This investigation also identified the requirements of "good fit" into Antarctic station life. In particular, it considered the extent to which "good fit" with the prevailing culture is desirable given recurring social problems on stations. Although the results suggest that Australian Antarctic station culture is in transition, further change may be facilitated through intervention to ensure Antarctic station culture is better aligned with ANARE goals and practices, and that recurring social problems are adequately addressed through a managed change process.