The Armed Services: A Career Choice?

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ABSTRACT

The aim of this research was to identify what factors were preventing secondary school students from enlisting as army officers to the same extent as they had in the past, and to measure the relative merits of significant others and organizational projection on the vocational development of youth. A sample of 485 male and female, sixth and seventh form students from seven Christchurch and four rural secondary schools in the Canterbury region were surveyed. Two questionnaires (one assessing the situational influences on students during vocational development, and the second assessing attitudes towards the armed services), and the Vocational Preference Inventory (VPI) were administered. The findings indicated the usefulness of the VPI as an instrument for predicting and assessing suitable entrants into the armed services. Differences were found between informative and influential sources on students while making vocational choices; the role of parents (significant others) was influential and advertising (organizational projection) was informative. These two sources had the greatest impact. Results offered some support for the situational approach to career choice. Finally, it appeared that students are not joining the army because they are not informed and have a narrow image of what an army officer career entails. The recommendations that follow consist of: the broadening of the image that is portrayed through organizational projection; the maintenance of parental support for the armed services; and the possibility of using realistic job previews to deal with the false or incorrect expectations that students hold towards the army as an organization.

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CHAPTER ONE

INTRODUCTION

Theories of vocational choice vary considerably and therefore

demand a broad overview to place this research into perspective. One

very simple classification (Keeling, 1962) illustrates the variety of

approaches that exist:

A. Sociological Theories

B. Personality Theories

C. Developmental Theories

D. Interest Theories

Sociological Theorists vary from those whose position emphasizes

chance events as determinants of career choice, to those stressing the

effects of significant others, such as family and peers, on vocational

development. Sociological theories are predominantly social

environmentalist in nature as opposed to stressing individual

determinants.

In direct contrast from sociological theories, personality

theories emphasize the subjective determinants of vocational choice

and the needs and motives of the individual. For example Roe (1956),

one of the leading theorists in this field, stresses the importance of

childhood experiences and genetic factors in the selection of a

vocation.

Super (1953) and Ginzberg (1951) are theorists who recognise the

importance of Developmental Psychology and its contribution to career

choice theory. In Developmental Psychology the concept of "maturation"

involves the idea that an individual moves through a series of life stages. According to Super, vocational development consists of a series of life stages too. Ginzberg asserts that occupational choice is a developmental process where a series of decisions are made over a period of time that are meaningful to those which precede and follow them.

Strong (1943) is one of the foremost exponents of an Interest Theory perspective which emphasizes a person's likes and dislikes. Holland's theory of vocational choice can fall into the category of interest or personality theory. For Holland, interests are an expression of personality and those individuals with similar interests will have similar personality profiles.

It is important to be aware of the broad spectrum of vocational development and career choice theories that have been researched. Great variety exists among the various approaches to career choice, although there may well be some validity to each. While these approaches differ many appear to have a common element, this being the influence from the social environment that includes life history experiences, family, peers, and the community. This suggests that the sociological approach to career choice is, or should be, an important theme for all the vocational development theories.

Ginzberg (1951) the main exponent of viewing vocational choice as a developmental process foresaw the relevance of biographical information (biodata) for predicting occupational choice. He states: "In the life of every individual there are certain life experiences which so stimulate the individual that he responds in a manner which has important consequences" (p. 19).

Holland (1973) another leading vocational development theorist acknowledges that biodata could provide partial information concerning the antecedents of vocational preferences. However, he does not state explicitly how background experiences formulate personalities or how these vocational types develop.

Recent research (Eberhardt and Muchinsky, 1982; Neiner and Owens, 1985) has combined two approaches, Holland's model of vocational typology and Owen's use of biodata. These studies, which examine life history experiences of individuals of particular occupations, provide what appears to be a sound basis for understanding the origins of vocational preference.

Therefore, it was considered appropriate to review literature on these two approaches to career choice, that is, the Situational Approach and Holland's theory. The remainder of the literature review will be devoted to studies of the armed services particularly research drawn from the situational perspective. Chapter three outlines the methodology and involves a description of the procedures used in conducting the research. Following this, chapters four and five cover the results and discussion respectively.

CHAPTER TWO

REVIEW OF THE LITERATURE

A. The Situational Approach

i. Introduction

In this chapter I intend to discuss in detail the situational approach to career choice, Holland's theory of career choice and a small number of relevant armed services' studies.

Career choice includes the development of vocational interests and a decision to follow a career. The theory under discussion will be known as the Situational Approach (Osipow, 1983), it has also been labelled the Social Factors Theory (Pietrofesa and Splete, 1975). The situational approach to career choice encompasses all social influences on youth during their vocational development, including environmental influences and the influences of significant others.

The situational approach to career choice is based on the notion that elements beyond the control of the individual exert a major influence on the course of his/her life, and therefore the degree of freedom a person has over his/her career choice may be far less than what is assumed. Pietrofesa and Splete (1975) state that the situational approach:

... has as its central point the notion that circumstances

beyond the control of the individual contribute

significantly to the career choices he makes and that

the principal task confronting youth (or older person,

for that matter) is a development of techniques to cope effectively with his environment. (p.75)

Caplow (1954) emphasizes that family social status and the individual's education are the two most important determinants of vocational development. Caplow suggests parental expectations influence the vocational aspiration of their children and assist in the "inheritance" (p.214) of an occupational level.

Miller and Form (1964) call the accident of birth the determining factor of the occupations of youth because it is this accident that establishes family, sex, residential area and educational opportunity. Other writers postulate that social learning can be extended to the secondary reference group as well, such as the school, church and peers (Borow, 1973).

The situational approach to career choice encompasses a number of factors and discussion in the following sections will identify the major infuences on youth during vocational development.

ii. The Family

Crites (1969) states:

As the basic social and psychological unit in the transmission of the culture and the development of personality, the family conditions almost all the responses the individual makes early in life and continues to exert control over his behaviour into adolescence and sometimes adulthood. (p.230)

Often a family's most significant experiences and discussions involve the parents' occupations. This is justified if we consider that work provides a major link that draws man into social relationships with others. Jobs frequently establish time allocations and day to day living arrangements, they determine social status and identity, and are seen by some as the principal means of achieving satisfaction. Roe (1956) is well known for her support of interpersonal relationships in the family as a major influence on one's vocational development and career choice.

According to Caplow, children can inherit the occupational level of their parents in two ways, physically and psychologically. It is physical in the sense that childhood participation, for example in farming or capital investment in a retail business, tend to perpetuate specific attitudes towards occupations. Psychological inheritance can occur where occupations are passed down through several generations and the obligation to continue is sufficiently strong that selection of a different career can imply revolt.

The types of occupations chosen by children tend to be influenced by parents, and in the past, typically fathers. During the 1940's and 1950's a number of studies reported results supporting the situational approach to career choice. The findings included the strong tendency for children to inherit their fathers' occupational level (Miller and Form, 1951; Jenson and Kirchener, 1955). Job aspirations of youth were also closely related to the vocational levels of their families (Hollingshead, 1949). Samson and Steffle (1952) found that parental occupations in manual, service, agriculture, and professional groups were significantly correlated with their childrens' vocational objectives.

In a study involving 76,000 freshmen, Werts (1968), undertook to compare fathers' occupations with sons' career choices. The results identified three broad categories of occupations that tended to be passed on from father to son. Werts and Watley (1972) continued research in this area with a large sample of college freshmen. The subjects were grouped according to their fathers' occupations and the father's occupation was then compared in terms of the probability of sons and daughters having attained various types of achievement in high school (scientific, artistic, oral, leadership, musical, literary). Results indicated that sons and daughters excel in a particular skill the father used in his occupation. Further the study demonstrated that the individual's career choice had been restricted due to narrowing of skills while still at high school. Methodological problems in these studies, including unreliability in the students' reports of their fathers' occupations, and of their own anticipated career choices tends to weaken the findings. Some of the studies used only college students, who were likely to be taking professional courses and possess middle and upper socio-economic backgrounds, giving somewhat biased samples (Werts, 1968; Werts and Watley, 1972).

In 1974, 569 sixth formers in a provincial area in New Zealand were asked to rate the importance of a number of agencies thought to have played a role in their career decisions. Parents were ranked as having the most influence, followed by school vocational guidance counsellors. When 200 of the original sample were questioned again four years later the results indicated that guidance counsellors were only slightly important in influencing youth in their career decisions (Maclean, 1980). Absolom (1981) concluded that males tended to enter apprenticeships through parents' help, whereas females tended to enter through their own initiative. However results indicated that most students felt that they themselves had the greatest influence in

making a career choice. These results supported earlier research

conducted by McEwan (1972) and Powell and Bloom (1962).

Parents are the primary reference group influencing educational

and occupational achievement of youth and this carries with it

implications and responsibilties for society. Parents play a large

role in society and are involved in the process of preparing young

people for work. An individual's achievement is directly related to

his/her self-perceptions of ability and an individual's

self-perceptions are directly related to cultural and reference group

influences impinging on them.

iii. The Role of Parents

The main source of influence in the family comes from parents.

Shoffner and Klemer (1973) suggest that there are five means by which

parental influence on the career choice of youths occurs.

a. Role Models

Parents act as role models for their children, as their personal

habits, attitudes and social skills affect their children's task

orientation and behaviour. The family, in general, functions as a

primary group and tends to define the child's occupational world by

providing work role models with which the youth can identify

(Burchinal, 1961). More specifically, certain types of father's

occupations are associated with similar types of career choices by

sons (Werts, 1968). Generally, parents who are interested in the

talents of their children tend to provide standards and supervise them

in problematic situations (Elder, 1963).

b. Influences on Children's Self-concepts

The self-concept of an individual and its influence on occupational aspirations and expectations has been shown to be important. Anderson, Mawby, Miller and Olson (1965) found that an individual's self perception is directly related to cultural and reference group influences impinging upon the individual, with parents being the primary reference group influencing their children's educational and occupational aspirations. Anderson et al (1965) stated "to change parents' expectations for the child, changes the self perception of the child" (p.3)

Therefore the manner in which parents view the abilities and aspirations of their child will tend to be reflected in the child's self-concept of ability and consequently his/her level of performance.

c. Parents as Motivators

Parental support and encouragement during a child's career development acts as an important motivating factor. Noeth, Engen, and Noeth (1984) reported that students rated interesting high school classes and their families as the most helpful factors in their career decision making. Other studies refer specifically to parents as motivators of a child's decision to follow a certain career (Absolom, 1981; Maclean, 1980). Anderson et al (1965), proposed that parents were the major influence in the formation of the educational and occupational aspirations of youth. This further supported the research by Chown (1958) who found that parents were the most important single factor motivating grammar school and secondary school pupils. More recently a New Zealand study by Hesketh (1981) demonstrated the

important roles which parents played in helping their children obtain
jobs.

d. Parents as Providers of a Developmental Environment

Child rearing practices that foster the development of
achievement potential in children are also important determinants of
successful vocational choices.

Roe (1957) has studied the relationship of child-rearing
practices to vocational choices and has hypothesised three climates in
the parent-child relationship:

1.) Excessive emotional concentration on the child, that is, over
demanding and over protective.

2.) Severe avoidance of the child, that is, rejecting or neglecting.

3.) Acceptance of the child, that is, loving or casual.

The three different climates will develop different work
orientations in the child. For example, if parental attitudes are warm
and accepting, Roe predicts that children will develop a major
orientation of moving toward others and choose occupations which
involve contact with people as the primary focus of their work.
However, Roe does not explain how erratic or uneven parental styles
impact on parent-child relationships. It is unlikely that parents
uniformly reject or overprotect their children. This has made it
difficult for investigators to validate Roe's theory empirically
(Osipow, 1983).

e. Parents as Information Providers

Parents can encourage their children to explore and collect information on various occupations. Harris and Wallin (1978) confirmed their hypothesis that students receiving the most career information would consider a wider range of career options. Hesketh (1981), while researching factors affecting the implementation of career plans, asked a number of students (who were employed part-time) to state the source from which they obtained the most help in finding their jobs. Of the respondents 21 percent said parents were the most important and 27 percent named themselves as a helpful source when making career decisions. When Hesketh asked the respondents with whom they had discussed their future job plans, 32 percent said their parents had been important and 15 percent said friends. However, there is a difference between sources of information and sources of influence during a child's career decision-making and in some studies this discrepancy has not been recognized or accounted for. Hesketh talks of her sample discussing future job plans with various mentors, such as, parents, friends and siblings. Hesketh does not discriminate between informing and influencing factors and it is possible that information desseminated in this way also had an influence on the sample. It is accurate to say however, that information leading to a specific job seemed to be obtained relatively less often from school-based sources (as is assumed in many cases) and more from family-based sources, especially parents.

Educating parents in vocational development is important when we consider the significance of vocational choice for the future of the nation. In this process the role of parents is crucial. If guiding young people's occupational achievements can be carried out by parents, then the role of parent-educators must be to provide parents

with materials and support to fulfil that role.

iv. Education

Education has a varying impact on people depending on an
individual's length of stay and his/her success within the educational
institution. Formal education provides two main ways to limit
occupational choice: firstly, by an individual committing him/herself
to a long course of training; and secondly, by excluding from training
those students who lack the intellectual skills or application of
them, to continue. One could easily assume that the educational
system plays the most important role in informing and influencing
youth on career decisions. The school is the institution from which an
individual obtains the qualifications in order to follow a particular
career and normally it will provide some kind of vocational guidance
service. Research has indicated this is not always so. Noeth, Engen
and Noeth (1984) reported that teachers were rated highly in terms of
helping youth with career decision making, but conversely, a low
level of help from career counsellors was reported. Research in New
Zealand reporting the amount of information obtained from a
school-based source is low (McEwan and Tuck, 1973). However, one
particular study, Ambrosius (1983) reported that up to 70 percent of
her respondents obtained information about occupations from a
school-based source. It is disappointing that there is a lack of
research results clearly indicating the effectiveness of school career
advisers. Caplow (1954) took a very pessimistic view of the apparent
necessity to advice school students, early on, of career choices.

It is sad but inevitable that attempts to improve the
educational process by careful counselling and by the
establishment of pre-vocational sequences are likely to

lower the age at which a decision must be made, and thereby

substitute one form of maladjustment for another. (p.218)

v. Peers

School is the medium through which friendships begin and where

the secondary reference group affects attitudes and aspects of the

individual's self-concept. Hadley and Levy (1962) state that during

adolescence:

...the groups influencing an individual's attitudes and

behaviour, (that is, his reference groups) become

increasingly more numerous and diverse. Such groups...

occupy increasing proportions of his time, and assume

increasing importance as reference groups both as

comparison points and sources of values. (p.112)

The influence of peers on vocational choice is notable in the

values and attitudes the individual holds, and the amount and quality

of information regarding the world of work they have to hand. It is

also through peer groups that contacts and experiences occur that help

individuals in obtaining employment, as well as providing feedback on

positions held or known to them (Hoppock, 1976).

In a study by Noeth et al (1984) students rated friends highly in

terms of helpfulness in the career decision making process. Other

researchers have reported the impact of peers on career choice through

vocational exploration and the importance of peers' opinions on issues

involving possible career choices. (Spady, 1970; Tangri, 1972; Vassos,

1971).

Peer influence can extend to subject choices at school. In a review Dunnette (1976), reports a study that demonstrated that the proportion of peers with science or non-science goals in a student dorm floor clearly influenced a students tendency to maintain or change goals. Thus for example, students in the minority fields tended to move to majority fields. Using a sample of grammar school pupils, Chown (1958) found that both sexes ranked friends of their own age, next to parents, as important influencers of their career choices. Holland (1959) sees the peer group at school affecting the choice of educational training and occupational goals of young people.

Peer groups outside of the school setting often determine continuation in a work setting. Miller and Form (1951), state that peer groups and friendships function to help workers maintain job stability. Peer groups also exist within larger institutions such as, church, business, and interest groups. Baumgardner (1982) has proposed the use of peers for counselling in career development. He suggests that students who find rewarding work have sponsors or friends who provide social support and inside information on those jobs. As a result Baumgardner postulates the use of mentoring as a career guidance technique where the mentor is a role model who acts as an adviser to an inexperienced individual. Three areas that provide benefits are identified. Firstly, personal contacts provide students with concrete experiences neccessary to cope with the world of work. Secondly, searching and finding a sponsor means one has successfully negotiated his/her way into the world of work. Lastly, the information obtained from an insider is not available elsewhere and it is the experience of being in an occupation that is the most important. Others (Borman and Colson, 1984) propose mentoring as a career guidance technique and suggest it provides an opportunity for

modelling and exploration of career options.

To summarise, it can be asserted that peer group influences do play a major role in the vocational development of youth, but that this role is still secondary to the role parents play.

vi. The Environment

A number of environmental factors outside the family and peer group exist to create differential influences on those involved in the process of career choice. The culture in which we are born immediately defines the limits on our freedom of choice. This is particularly relevant when considering career choice. For example, in Middle Eastern countries a woman's marriage is arranged and consequently her career opportunities are limited, and a man's career is chosen by his family.

At birth an individual acquires a socio-economic status which is based largely on parents' income and occupational status. Socio-economic status has been reported to have had an effect on the different occupational preferences of middle and lower class boys (Clark, 1967).

Other environmental influences include the mass media, where cultural values and standards are transmitted to the population in general, by means of newspaper, radio, television, magazines, and advertising. Through this means a person is exposed to basic information relating to vocational and career possibilities. Porter, Lawler and Hackman (1975), reported that there is a strong source credibility effect, such that, information from some sources is accepted and acted on much more readily than is information from other

sources. Organisational recruiters have lacked credibility with the applicants they attempt to attract. Fisher, Ilgen and Hoyer (1979) found that applicants perceived job incumbents to be more likeable, knowledgeable and trustworthy sources of job information than actual recruiters. These respondents also said they were more likely to consider acceptance of a job' offer when their informational source was a job incumbent, rather than a recruiter. These reports suggest individuals do not perceive the recruiters as credible and therefore that recruitment of this kind may not effective.

Church and religious belief will also provide a major influence for those who choose to follow it. For example, the Protestant Work Ethic, has dominated men's and women's attitudes to work in several Western societies for many years. Individuals strove to work diligently in the hope that they would succeed and this would serve as a manifestation of their faith.

vii. The Role of Chance

The situational approach to career choice acknowledges that chance plays a major role in occupational decisions and therefore environmental, or situational, circumstances are as important in career decision making as the individual's interests and abilities. Thus, being in the right place at the right time may be just as important in a given individual's career choice as systematically planning vocational counselling.

Miller reports that the role of what he calls "happenstance" (1983, p.16) in many career choice decisions seems commonplace, that is, an individual's choice is governed by chance events, occurrences and meetings. At the same time Miller comments on factors such as

interests, abilities, values and job market realities as being equally important.

Other vocational theorists have concentrated their respective theories solely on the individual, implying that he/she is minimally affected by external factors. To hold this view these theorists must assume that a completely open market exists and therefore an individual is free to function without effect of situational constraints, such as, socio-economic status, education, race and occupational aspirations. This situation is not credible today when jobs are scarce and the competition for them is increasing.

Some researchers believe that unpredictable events have an impact on an individuals career choice, however, the individual is more likely to view their vocational decision as being planned and rational. (Hart, Rayner and Christensen, 1971; Salomone and Slaney, 1981). It is difficult in practice to give greater emphasis to unplanned situational events given that they tend to be unpredictable.

viii. Conclusion

Varying influences of the situational environment have been discussed. It is clear that situational factors are of great importance in the vocational development and career planning of an individual. It is necessary to help the individual understand these influences and develop methods to cope with social pressures so that a person can make plans that will lead to a satisfying career. It is appropriate for guidance counsellors, when providing career advice on educational and occupational aspirations to take into consideration social class membership, family influence, community, pressure groups, and role perceptions and aspirations, while not denying the importance

of interests and intelligence. This implies co-ordinating the involvement of significant others in the young person's social environment (that is, parents, peers and teachers) at various stages through out the process.

B. A Theory of Vocational Choice: J.L. Holland

i. Introduction

The following quotation serves to link Holland's theory (1959)
with the situational approach to career choice:

> Essentially, the present theory (Holland's) assumes
>
> that at the time of vocational choice the person is the
>
> product of the interaction of his particular heredity with
>
> a variety of cultural and personal forces including peers,
>
> parents and significant adults, his social class, American
>
> culture, and the physical environment. Out of this experience
>
> the person develops a hierarchy of habitual or preferred methods
>
> for dealing with environmental tasks. (p.35)

Holland's theory of vocational development hypothesises that
career choices or interests are an extension of an individual's
personality and that people view the world in terms of occupational
stereotypes. Vocational stereotypes are generated by sometimes
inaccurate information people have of what various occupations are
like. For example, we believe accountants are precise. However
interest inventories do rely on the assumption that people perceive
occupations accurately. The theory postulates that members of a
vocation have similar personalities and similar histories of personal
development, and therefore it follows, each vocation attracts and
retains people with similar personalities and these people tend to
respond to problems and situations in similar ways. The more closely a
person resembles a particular occupational type, the more likely one
is to exhibit the personal traits and behaviours associated with that

occupational type and to achieve congruence between one's personality and the environment in which one works.

Holland states most people can be categorized into six modal personality types. Through a procedure of allowing individuals to express their preferences for a particular occupational title, Holland assigns people to the personality types. These are: realistic; intellectual; artistic; social; enterprising; and conventional. A person's total resemblance to the six personality types forms a pattern called a personality profile. Holland also assumes there are six kinds of environments in which people live: realistic; intellectual; artistic; social; enterprising; and conventional. Each environment is dominated by a given type of personality and is typified by a particular physical setting. Therefore, where people congregate they create an environment that reflects the types they are and this allows them to exercise their skills and abilities. The ultimate outcome of the application of the theory is the successful pairing of persons and environments.

As an individual undergoes vocational development and begins to align him/herself with one of the six personality types the career choice within that type becomes a function of intelligence and self-evaluation. Holland presumes this self-evaluation is a function of life history in which socio-economic origin, education, and family influences are major determinants.

In the vocational choice process Holland outlines the interaction of the person and the vocational environment as having three levels. Firstly, a person directs him/herself towards a major occupational group. Secondly, the selection of this major occupational group is a function of the individual's self-evaluation and intelligence to

perform adequately. Finally, both these processes are mediated by a series of situational factors which include: self knowledge, knowledge of occupations, environmental factors, and social pressures (for example, family and peers). The time at which this situational influence occurs is crucial in affecting choice. In early adolescence social pressures probably have a marked effect on the individual. In contrast, social pressures in late adolescence or early adulthood would be less influential.

In a broad review of the literature, Dunnette (1976) concluded that there is a wide range of evidence that suggests four to eight categories of interest account for most interest inventory scales, and that relationships among them tended to have a characteristic order. Studies of actual job descriptions also revealed that there were four to eight different categories of occupations. Vocational interests are found to be positively correlated with many classes of psychological variables (such as, scores on personality measures, aptitude tests, perceptual tests) as well as with other psychological and situational variables. It is in fact difficult to think of variables that are not associated to some degree with vocational interests, for example, investigators have found significant correlations between the Vocational Preference Inventory (VPI) and life goals, self ratings of abilities, and potential for achievement (Baird 1970). The VPI provided the basis for Holland to develop further his theory of vocational development and to devise a classification scheme of occupations based on Guilfords's six factor classification of human interest (Guilford, Christensen, Band, and Sutton, 1954).

ii. The Vocational Preference Inventory

If vocational interests are an expression of personality, then it follows that interest inventories are personality inventories as well. The Vocational Preference Inventory (VPI) is composed entirely of occupational titles. In general, the scales were developed by hypothesising that preferences for occupations are expressions of personality. The rationale that Holland (1965) used for the development of the inventory lies in the following statement:

> The choice of an occupation is an expressive act which reflects the person's motivation, knowledge, personality, and ability. Occupations represent a way of life, an environment rather than a set of isolated work functions or skills. To work as a carpenter means not only to use tools but also to have a certain status, community role, and a special pattern of living. In this sense, the choice of an occupational title represents several kinds of information: The S's motivation, his knowledge of the occupation in question, his insight and understanding of himself, and his abilities. (p.5)

By a simple process of allowing an individual to express his/her like or dislike toward a particular occupational title, Holland categorizes people according to various types and creates a personality, or interest, profile for each individual. This method of selecting occupational titles that are liked and disliked permits the investigator to draw inferences about future employment based on these vocational preferences.

Until recently self-predictions of vocational preference have been regarded as unworthy. However, Holland and Whitney (1968) demonstrated that the predictive validity of college students'

expressed vocational preferences over eight to twelve months were twice as efficient as the individuals' highest score on the VPI. In a review by Whitney (1969), he concluded that: "a person's expressed vocational choice predicts his future employment about as well as interest inventories or combinations of personality and background characteristics" (p.279)

iii. Recent Research

Over the past 20 years many researchers have undertaken tests of Holland's hypotheses, mostly with positive results. Hypotheses about the personality types have attracted the most research interest. Most of the earlier studies looked at the characteristics attributed to types, while tests of the theory's validity were conducted by Holland.

The early studies were characterised by multiple dependent variables and methods for defining the different types. The result was a number of exploratory studies producing an abundance of data. Holland found that a broad range of personal characteristics were associated with the types and the several reports that followed repeated these findings (Holland, 1963; Holland and Nichols, 1964; as cited in Holland, 1973). However, these studies were limited by the size of the samples and therefore there was a necessity to increase the sample size in order to produce reliable findings. A fifth report Holland (1964), as cited in Holland (1973), replicated earlier findings and developed further the range of personal characteristics found to be related to the types. In conjunction with this he also correlated VPI scores with self-ratings, life goals, and achievements.

The prediction of vocational choice based on VPI scales has

tended to be statistically significant, ranging from 25 percent to 51

percent correct identification. However, the qualitative data such as

expressed choice of occupation, when categorized according to one of

Holland's types, has tended to be more efficient than predictions from

the VPI (Holland, 1973)

In general evidence from the early studies was favourable and

supported the usefulness of the theory.

In a review of more recent research Osipow (1983) praises

Holland's very comprehensive approach to the study of vocational

choice, and his use of longtitudinal studies that have assessed a

variety of personal, family, social, and achievement correlations

important to his theoretical formulation.

A number of the earlier studies of Holland's theory lead to an

attempt to answer the question: "What kinds of personal-environmental

characteristics influence work choice?" Holland responded by pointing

to parents, school, and neighbours as reinforcing some work patterns.

One of the most significant factors he saw was the influence of

parents and this lead to a series of studies to investigate this

influence. Osipow speculates that the behaviour of parents creates

environments which have a powerful influence on the off-spring's

vocational choice and that Holland's theory leads to the prediction

that individuals will choose vocations consistent with their personal

orientations.

One longtitudinal study by O'Neil, Magoon, and Tracey (1978) as

cited in Osipow (1983) demonstrated the long term predictive validity

of Holland's theory. The results indicated that the use of the Self

Directed Search (SDS) in assigning a particular type remained

predictive over a seven year period of job entry, graduating major, and projected career plans.

Some of the criticisms of Holland's theory lie in his hypothesis that suggests vocational satisfaction, stability and achievement depend on the congruence between one's personality and the environment in which one works. Research by Salomone & Sheehan (1985) has demonstrated no positive relationship between vocational stability and person-environment congruence. However, Osipow concludes that there is considerable evidence that personal orientations exist and that personality types are reasonalbly stable. In conjunction with this, the data strongly indicate that personal orientations are related to family patterns.

Siess and Jackson (1970) found that people with social interests have high scores on sociability, those with scientific interests appear less social, and people with accounting interests correlate with being orderly. Occupational stereotypes appear to be supported.

Further Marks and Webb (1969) conducted a study in which two occupational titles (industrial management and electrical engineering) by three levels of experience (freshmen, seniors and professionals) were compared before, during, and after training. This demonstrated that inexperienced and experienced people see occupations in the same way. Others have reported that demographic factors make only small differences to the perception of occupations and that large samples of college students, high school students, men and women perceived a group of occupations in much the same way (O'Dowd and Beardslee, 1960). These studies indicated that occupational stereotypes were stable over time, regardless of experience and demographic variables.

Research by Grandy and Stahmann (1974) was designed to test Holland's hypothesis that parents encourage the development of their own personality types in their off-spring. Parents' personality types (occupations) were compared to off-springs' personality types (expressed occupational choice). The results indicated sons' personality types resembled the types of their fathers'. However, no relationship was found to exist between the personality types of sons and mothers. Findings for daughters indicated that relationships existed between both mother-daughter and father-daughter personality types. However, the sample only contained 'decided' university students, omitting 'undecided' students, and a small subject size in some categories tended to limit the extent to which the findings can be generalised to other samples. There is some support for the hypothesis that a relationship exists between parents' and off-springs' personality types. Dewinne, Overton and Schneider (1978) attempted to replicate the study by Grandy and Stahmann (1974) but employed a larger sample and more stringent statistical criteria. The results of this research indicated the relationship between paternal and off-spring personality types were in agreement with the findings of Grandy and Stahmann (1974), but the role of maternal personalities remained unclear. A further study by Schneider, Dewinne and Overton (1980) focused on the development of off-spring personality types when both parents possess the same personality type. Female off-spring tended to develop personality types more congruent with their parental pair type, whereas congruence between male off-spring and parents' personality types was weaker. Schneider et al (1980) suggest this is due to the greater emphasis placed on the male off-spring to be independent and assertive, and the cultural tradition for the female to be dependent.

To conclude, Holland's theory of vocational development and the

predictive validity of the VPI appears to have been well substantiated

in the past. The research discussed demonstrates that both the kind

and level of a person's vocational preference is pedictable and

therefore relatively stable over time.

iv. Limitations

One of the shortcomings of Holland's Theory is that he does not

state explicitly, how the vocational types are developed. Most of

Holland's research is theoretical and empirical work tied to his

classification system. However, Holland (1973) suggested that biodata

may provide the basis for understanding the development of types, but

goes no further than this.

What are the possible determinants of the development of

vocational types? To help answer this question Eberhardt and Muckinsky

(1982) integrated two very separate paradigms of research: Holland's

model of vocational typology, and Owen's use of biodata for the

assessment and classification of individuals. In this research they

identified several approaches which have been used to determine

vocational preference, including the situational approach. Eberhardt

and Muckinsky extend the situational approach to include the use of

biodata and life-history information as possible determinants of

vocational type. This provides a more systematic and organised manner

in which to summarize possible determinants of vocational types. The

Biographical Questionnaire used covers a broad group of prior

experiences, for example, family life, school, religion, interests,

attitudes and extra-familial relationships.

Previous research by Owens (1979) has demonstated that

life-history experiences can be reduced to meaningful dimensions that

have a high degree of external validity. Eberhardt and Muckinsky

proposed to determine whether subgroups, formed on the basis of

subjects' responses to Holland's VPI, differ in regard to information

obtained from subjects' responses to a life-history questionnaire. If

there were differences among the sub-groups on the biodata

questionnaire, this would indicate what life-history events determine

whether a person falls into one vocational type versus another.

Results provided evidence to support the hypothesis that a person's

modal vocational type is shaped largely by his/her past life

experiences.

A related study by Neiner and Owens (1985) examined the utility

of biodata as a predictor of vocational choice among a sample of

college graduates. In contrast with the previously discussed study by

Eberhardt and Muchinsky (1982), this research overcame two significant

limitations. Firstly, the data in this study are based on the

subject's actual job choice, not on inferences drawn from a vocational

interest questionnaire. Secondly, the research design is predictive.

It was hypothesised that biodata will predict job group membership

above chance levels. Biodata were collected from the subjects four and

six years prior to their occupational entry. Discriminant analysis

demonstrated that self-reported life-history experiences predicted

membership in Holland's six job categories.

v. Conclusion

In a comprehensive review of Holland's theory, Osipow (1973),

concluded that tests of Holland's theory were, in general, valid and,

that there is considerable evidence that personal orientations exist,

and further more, that vocational types are reasonably stable.

However, Holland's theory is seriously limited in that it explains

little about the process of vocational and personality development.

To conclude, research in this chapter indicates that personal orientations are related to familial patterns, particularly parental behaviours, beliefs, ambitions, and goals for their off-spring. Holland's theory postulates that an individual seeks an occupational environment that corresponds to their strongest personality orientation. Presumably, the development of personality orientations are highly influenced by environmental experiences (for example, home, school, friends) which provide special opportunities and reinforcements. The ability of biodata to discriminate membership in Holland's job grouping scheme lends support to this belief.

C. The Armed Services

i. Introduction

To function effectively the armed services rely on manpower both in a constant intake of recruits and the retention of them. Therefore recruiting is a major factor influencing operational effectiveness in the armed services.

At present the New Zealand Army faces a problem of retention, particularly amongst Commissioned Officers. As a result attempts to address the retention problem have been made by increasing recruiting activities, advertising campaigns, and displays.

In the past, research has focused on the motivating factors of potential officer candidates (Mirfin, 1985; Mullin, 1983) but little attention has been given to determining what factors are preventing young people from enlisting as army officers.

The target area for recruiting is the secondary school age group and while in New Zealand the population numbers of school students continues to decline so does the number of potential officer candidates. In 1986 the total number of females and males between the ages of 15 and 24 years was 654,700. In 1996 it is expected to be 617,520, that is, a reduction of 37,180 over the next ten years (Department of Statistics, 1986). This same group of young potential employees are also heavily sought after by both government and commercial organisations. Therefore, the New Zealand Army must compete in the market with these other organisations for the same waning numbers of potential employees.

Evidence (Mirfin, 1985) suggests that the level of awareness amongst secondary school pupils of the nature of an officer career is low and may be a factor in reducing the propensity of these students from enlisting.

ii. Sources of Information and Influence About the Armed Services

a. Research from Overseas

Mullin's (1983) review, on situational variables affecting enlistment propensity into the armed services, suggest that information and influence variables were the two main situational factors. Although there is a certain amount of overlap with these two variables they should be treated as conceptually distinct. Situations may arise in which highly informative sources provide a negative influence and for this reason they can not always be assumed to be synonymous.

Mullin revealed that significant others (parents, teachers, and friends) provided the greatest influence on, and most information to, respondents about the military. An Australian study, by Gallimore (1977), of recruit applicants concluded friends and relatives had the most influence on career decisions. A study conducted in the United States by Cowin, O'Connor, Sage, and Johnson (1980) concluded that an enquirer is more likely to consider a job offer when the source of information is a job encumbent.

A study by James (1981), dealing with the effects of advertising on the propensity to enlist, found that advertising was the most frequently reported influence for visiting a recruiting office, but that it had little impact on respondents in terms of increasing their

awareness or information about the armed services. A second finding
looking at women only, reported that advertising had little impact
until after the individual had developed an interest in an armed
services career. Carroll and Rao (1982) found virtually no
statistically significant difference between regions of increased
advertising and regions of decreased advertising on measures such as:
awareness of the military, contact with recruiters, and reported
perception of the military. There is considerable inconsistency in the
findings regarding effectiveness of advertising in informing and
influencing respondents. However, it generally appears to have a
positive impact on awareness of military careers. One of the reasons
for these inconsistencies lies in methodological differences between
studies, such as, the ambiguity of purpose that characterises
advertising, and the single or multi-purpose objectives of some
advertising.

The impact that socio-demographic variables have on informing and
influencing respondents about, and towards, the military, play an
important role. These variables include: age, sex, ethnicity, race,
socio-economic class, education and geographic location. In a
Canadian report by Fabyanic (1976) males were generally more
interested in a military career. Higher levels of education and
income were related to lower levels of interest in military membership
and younger respondents were less interested than older respondents.
Finally, respondents from smaller communities favoured a military
career more so than respondents from large cities.

b. New Zealand Research

Easton and Moloney (1979a) reported that 35 percent of
respondents, in a survey they conducted, acknowledged that they had

been influenced by military advertising when they enlisted. However, the sample used were Commissioned Officers who had been enlisted in the army for periods ranging from six months to six years and therefore their responses were retrospective. Further, Easton and Moloney (1979b) asked respondents to identify important influences on them to join the army. Of the sample, 88 percent replied that it was their own search for a suitable career that caused them to join the armed services. The remainder of the sample identified the following factors, in descending order of importance, as influences to join the army: relatives, friends, interest in army equipment, and advertising. The sample size in each of these categories was very small. Again this research sampled individuals already enlisted in the army and their responses were retrospective.

Officer applicants for the New Zealand Army were asked what their sources of information were prior to applying (Mirfin, 1985). It was reported that 28.5 percent of the informational source came from what might be termed organizational projection, that is, "the active projection by the army of the image it seeks to portray" (p. 10). This projection involves, recruiters, advertising, presentations and displays. Of equal importance in informing applicants about the army was the impact of friends and family (28 percent). However, this research is again limited in that it sampled respondents that had already directed their interests towards the army. The respondents were interviewed while applying to join the army and had already been exposed to organizational projection, and therefore, the sample was biased. Research in the United States reported results directly opposite to those of Mirfin. Armstrong, Farrell and Card (1979) found that Regular Officer Training Corps (ROTC) candidates and non-ROTC candidates differed in their reasons to join and not to join. ROTC cadets became aware of ROTC through people, rather than through the

media, and in contrast non-ROTC students reported personal beliefs and career goals were reasons for them deciding not to join.

Further research, supporting the impact of organizational projection in informing individuals of an army career, includes research reports by the New Zealand Defence Psychology Unit on various Territorial Force intakes. The Territorial Force (TF) involves a part-time career in the army and caution must be observed when comparing this to potential applicants for the Regular Force (RF), which involves the full-time working element of the NZ Army. It has been suggested that TF members' motivation for joining the army as a part-time career is distinct from those of RF applicants (Brooks, 1986), and therefore it is likely that their sources of information could be different as well. Research conducted by the Defence Psychology Unit (1980) of Regular Force Cadets indicated that respondents were not satisfied with information given to them about their training course, and that the information provided by the recruiter was misleading. In a review by McDowall (1985) of the sources of information for applicants in the New Zealand Armed Forces, awareness and recall of military advertising was reported to be more than adequate. Limited by experimenter effect and sample bias, McDowall interviewed respondents who visited the Wellington Regional Recruiting Centre over a two week period. All respondents visiting the centre were seeking information or applying to enlist. This implies that the respondents were already positively disposed to the armed services and had likely been recently exposed to organizational projection. The results of McDowall's survey also acknowledged the importance of servicemen and ex-servicemen as information sources for respondents on armed services careers.

The research discussed above indicates the importance of both,

significant others and organizational projection, in the process of informing potential officer applicants about an army career. Some limitations are evident in the New Zealand research, which supports organizational projection as the main source of information avaliable to individuals about the armed services. Much of the research has used samples containing either individuals who are applying to enlist in the army or individuals who are already members of the armed services. This suggests the individuals in the samples have either been recently exposed to advertising, or already favour a career in the armed services. Therefore the reported prevalence of organizational projection can be explained, at least in part, by the use of biased samples. As a result the importance of significant others, as information sources, has been obscured.

iii. Attitudes Towards the Armed Services

Attitude refers to the degree of favourableness or unfavourableness with which the armed services is viewed.

It appears that when civilian and soldier attitudes towards the army are compared, few differences exist (Salas, 1965). The major difference between the groups is the readiness of the soldier to consider military service as a long term career and the rejection of the contractual aspect of army service by civilians. Both groups viewed army status as moderate to low, but favoured the army as a community defender. Salas suggested that the masculine image of the army may be an important factor to consider in assessing motivation to join.

Studies of the level of interest in joining the armed services are consistent. Rodger (1976) reported that 21 percent of high school

students sampled had a high interest in becoming a member of the Canadian Forces. Karmas (1982) revealed variables found to correlate with interest in a military career included: age, sex, geographic location, education, income, and linguistic group. Although there are no studies of this kind in New Zealand and Australia, the findings above do appear to have some consistency across other nations, such as, the United States and the United Kingdom (Central Office of Information, 1975; Fisher, 1972). An earlier study by Gunderson and Nelson (1965) also found support for situational variables influencing choice of an army career. They observed differences in socio-economic background among navy occupational groups, where officers were significantly higher on the socio-economic index than enlisted men. Other research in this area (United States Airforce Human Resource Laboratory, 1972) reported that, in a sample of 16 to 21 year old males, high school students had a higher enlistment potential than college students or males not in school as the opportunity of a fully paid college education was an enlistment incentive.

iv. Conclusion

It appears from reviewing the military research that there is some discrepancy between the relative importance of various informational and influential sources when considering an armed services' career. Although previous research in New Zealand emphasizes the role of organizational projection it is likely that significant others play a greater role, in influencing and informing individuals about careers, than has been reported. Methodological problems, such as, biased samples and experimenter effect, limit the validity of this research. In some cases the researchers have not distinguished between information and influence sources, the result being, that these two sources are presented as one. This functions to

confuse this area of research further.

D. Integration and Rationale

In this chapter three distinct areas of research have been discussed. The situational approach to career choice and Holland's theory of vocational development, although both concerned with career development, are two separate research paradigms. The third section, dealing with military oriented research, contains research drawn from a situational perspective.

The situational approach to career choice emphasizes the importance of social factors (that is: family, school, peers, community) in the process of vocational development. It is proposed that as a result of this an individual develops into a particular personality 'type' (Holland, 1965). As discussed earlier, Holland acknowledges that social factors do play a role in the vocational development of an individual but does not investigate this in any detail. It is proposed that vocational development can be usefully examined by a combination of the situational perspective and Holland's personality types. The role of the military oriented research in this thesis is to provide an example of an occupation and to identify the process involved in becoming aware of that occupation. In addition, the author has a personal interest in the armed services having been a member of the Territorial Force Army since 1983. During this time there has been considerable concern about recruitment and retention of personnel in both the Regular Force Army and the Territorial Force Army. It is the particular concern about the decline in the recruitment of army officers for the Regular Force Army, that has led to the author's investigation of factors preventing secondary school students from enlisting as army officers.

CHAPTER THREE

METHODOLOGY

A. Aim

The aim of this research is to find out what factors are preventing secondary school students from enlisting as officers in the New Zealand Army.

More specifically, this research aims to establish what the level of awareness is, among secondary school students, of the career of an army officer, what it includes, its image, and its attractiveness. Following from this is the intent to measure the relative merits of two sources of information that facilitate career awareness. These are:

1.) Significant Others. This includes parents, peers, siblings, teachers, the community and counsellors.

2.) Organisational Projection. This includes advertising by the army itself, for example: radio and television (Mirfin, 1986).

This research also aims to identify school students' career aspirations and preferences, by the use of the Vocational Preference Inventory (VPI), and in particular, to identify those people who would consider a career as an army officer.

In order to clarify the research aim, it was appropriate to identify a number of general guides to the research in the form of research questions.

B. Research Questions

1.) What is the level of awareness, among students, of the job of an army officer?

2.) What impact do significant others have on career choices made by secondary school students?

3.) What impact does organisational projection have on career choices of secondary school students?

4.) What career aspirations do the students have?

5.) How does the VPI profile differ between students interested in an army officer career and those not interested?

6.) What interests and attitudes exist among secondary school students for a career in the armed services?

C. The Sample

Secondary school students were chosen as the research population as they are the target audience for recruiting of officers into the army. A sample drawn from this population was used in the study. There are a number of practical advantages of using this sample. Firstly, there are a wide variety of secondary schools in Christchurch and therefore the students are easily accessible. Secondly, career choice theory is centered around the secondary school age group and vocational guidance counselling.

To enable easy access to the behaviour and attitudes of this group a questionnaire survey was considered most suitable, as opposed to structured interviews. This decision was made as the school environment provides a captive type audience, in that, the information can be obtained from students and with little disruption to school time. Secondly, in some cases, teachers are available to help with supervision and administration of the questionnaires.

i.Selection of Schools

The selection of schools was made from the Canterbury area with four rural and seven urban high schools. The sample covers single sex/co-educational, private/public, urban/rural plus two integrated schools. Table 1 contains the schools which participated in this survey. Table 2 illustrates the composition of the sample by sex and form level. The average age of the student sample was 16 years and five months.

These particular schools were chosen in an attempt to survey a group of students from all locations in the Christchurch area. However with the refusal of two high schools, Cashmere and Aranui, the final sample had a northwest bias with most schools coming from higher socio-economic areas. Each school provided one sixth or seventh form class, or one of each, to be surveyed.

ii. General Procedure

Contact was first made with the school career adviser by telephone to establish interest, and for permission to visit and discuss the proposed research. This was followed by a meeting with the career adviser of the school to discuss the initial draft of the

Table 1: Schools which participated in the survey.

SCHOOLS	FREQUENCY
Urban schools:	
Riccarton High School	33
Linwood High School	70
Villa Maria College	26
Xavier College	14
Rangi Ruru Girls' School	51
Hornby High School	60
Papanui High School	43
	TOTAL = 297
Rural schools:	
Lincoln High School	31
Methven High School	40
Rangiora High School	50
Ashburton High School	67
	TOTAL = 188

N = 485

Table 2: Composition of the research sample by form level and sex.

		FORM 6TH	7TH	ROW TOTAL
SEX	MALE	110	57	167
		(66.3%)	(33.7%)	(34.2%)
	FEMALE	203	115	318
		(63.8%)	(36.2%)	(65.4%)
COLUMN TOTAL		313	172	485
		(64.4%)	(35.1%)	(100.0%)

questionnaire, and to establish whether the school would accept involvement in the research. Following this, a letter was sent to each school either thanking them for their support or formally approaching the school Principal for permission to administer the questionnaire. Later in the year a further letter was sent to each school enclosing the final draft of the questionnaire for perusal by teachers, as well as a suggested time for administration. The final contact was made by telephone and a specific time and date was established for administration of the questionnaire that was suitable to both parties. All correspondence to the schools is contained in Appendix A.

D. Research Instruments

i. The Vocational Preference Inventory (VPI)

The Vocational Preference Inventory (VPI) is a personality inventory composed of occupational titles. A person completes the inventory by indicating the occupations which he or she likes or dislikes. The personal characteristics, which the inventory assesses, yield a broad range of information about the person's interpersonal relationships, interests, values, self-perception, coping behaviour, and identifications. The inventory has twelve scales: Realistic, Intellectual, Conventional, Artistic, Enterprising, Social, Investigative, Self-control, Masculinity, Status, Infrequency, and Acquiescence.

The VPI was developed primarily to assess personality. The evidence (Baird, 1970; Holland, 1973, 1975) indicates that it provides a broad range of information about a person's personality traits, values, competencies, and coping behaviours. At the same time the

evidence (Dewinne et al, 1978; Grandy and Stahmann, 1974; Holland, 1975) also indicates that the VPI is useful for:

1.) Assessing vocational interests, since the Realistic, Intellectual, Social, Artistic, Conventional, and Enterprising scales incorporate the main dimensions found in interest inventories.

2.) Assessing personality within the context of a theory of careers.

3.) Stimulating occupational exploration among High School and College students. (Holland, 1975, p.5).

The validity of the VPI in New Zealand has not been tested. However, research by Keeling & Tuck (1979) on the Self Directed Search (a research instrument developed by Holland and based on the same typology as the VPI) indicated that a demonstrable validity existed between, the United States sample used by Holland where it had quite an impressive performance, and the New Zealand sample used by Keeling and Tuck. Therefore on the basis of what is, admittedly only indirect evidence, it is assumed that the VPI will have a reasonable measure of validity with New Zealand samples.

VPI norms for New Zealand (Table C1) do exist for a particular occupational group consisting of New Zealand Airforce and Navy officer applicants (Bryson, 1985). These are based on a study where the VPI was administered among a battery of tests to all candidates seeking selection for an intake for training in the R.N.Z.A.F. and R.N.Z.N. (N= 170). The mean age of the candidates was approximately 20 years.

ii.The General Questionnaire

This consisted of questions concerning the sources of influence

and information that are used by secondary school students in making

career choices. Also the impact of significant others and

organisational projection on' career choices was analysed. The

questions attempted to identify the occupational areas that parents'

and siblings' jobs fell into and to look at the students' own career

aspirations.

Where questions were concerned with mothers', fathers', siblings'

and students' occupational choices one universal set of categories was

used. Table 3 contains the nine major occupational categories used

for coding occupations. These categories are based on the

International Standard Classification of Occupations (ISCO) which were

adopted by the New Zealand Department of Statistics in 1970 (Johnston,

1983). Any occupations relating to the New Zealand Armed Services

were coded into a separate category (labelled "armed services") in

order to obtain a separate indication of those students' interested,

or with family, in the armed services.

iii.The Military Questionnaire

The items in this questionnaire specifically concerned the army,

with the main emphasis being on identifying attitudes towards the army

and the images held by students towards a career in the army. Item

construction was based on several research reports produced by the New

Zealand Defence Psychology Unit (Defence Psychology Unit, 1980;

McDowell, 1985; Mirfin, 1985). Three open-ended questions were used

in the questionnaire to encourage maximum response. Based on the two

pilot studies, categories were developed for these questions, into

Table 3: The nine major occupational categories used to code reported occupations (Johnston, 1983).


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OCCUPATIONAL CATEGORIES

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Professional

Administrative and managerial

Sales

Clerical

Service

Agriculture and animal husbandry

Production and labourer

Transport

Armed services

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which all responses from the actual survey were coded. Copies of the research instruments used are contained in Appendix B.

E. Pilot Studies

The first pilot study was administered to a Stage One Laboratory group in the Department of Psychology at the University of Canterbury during June 1986. A total of 45 students completed the questionnaire. They ranged in age from 17 to 21 years, and the mean age was 18 years and four months. The students were instructed that this was a pilot study for research on career choices and that they were free to make any comments about the questionnaire either, to the author personally following administration, or by writing their comments on the questionnaire itself. If the students had any problems while completing the questionnaire they were instructed to ask for help. The pilot study brought to the author's attention a number of problems that students had while answering the questionnaire. As a result some changes were made to the structure of the questions concerned and these were re-examined in a second pilot study at St Andrew's College in July of 1986. The subjects in the second pilot study comprised of 76 sixth and seventh formers, and the mean age was 16 years. Only minor problems were encountered.

F. Administration of the Questionnaires to the Sample

All questionnaires were completed in class time and, with the exception of one school, the researcher was present at all times. Group sizes ranged from 15 to 50. Following an introduction to the class, a brief set of instructions on the questionnaires was given to clarify the important points. The questionnaires were handed out together but in a particular order, the general questionnaire, the

VPI, and finally the military questionnaire. The students were
instructed that it was important to work through the questionnaires in
the order given. The students were also instructed to answer the
questions individually, and to ask for help if it were neccesary.

G. Follow-up

When the questionnaires were administered and the initial
analyses were completed, a letter containing the results was compiled
and sent to the schools that participated in the survey. An offer was
also made to each school indicating the author's availability to
return to discuss with students the research and results. No
additional follow-up was requested. This was probably due to the fact
that the schools were moving into the year-end examination period.

CHAPTER FOUR

RESULTS

The analyses performed in this research include descriptive, bivariate and multivariate statistics. Many of the results described are merely descriptive, and while these may not involve tests of significance, they do provide a considerable amount of information on particular variables. The specific analyses used include frequencies of major variables, cross-tabulations and breakdowns, and discriminant analyses used to discriminate between the students that report being interested and those who are not interested in an army career. This chapter will be divided into areas of reported results based on the research questions presented in the methodology chapter.

A. Awareness of The Army

When the students in the sample were asked whether they considered themselves informed about the career of an army officer, a one-way frequency distribution showed that 74 percent responded that they were not and 26 percent said that they were informed.

A cross-tabulation demonstrated that there was a significant relationship (chi sq = 68.79, df = 18, p<.001) between preferences for the armed services and whether students considered themselves well informed of the career of an army officer. Those students who said they were 'not informed', ranked the armed services eighth on a scale of occupational preference from one to nine. Those students who considered themselves 'informed' ranked the armed services first on a scale of occupational preference. Table 4 illustrates how the sample

Table 4: Mean preference rankings of the nine occupational categories.

OCCUPATIONAL AREAS	MEAN RANK
Professional	1.7
Administrative and managerial	2.9
Sales	4.7
Service	4.8
Clerical	5.1
Agriculture and animal husbandry	5.5
Transport	5.8
Armed services	6.0
Production and labourer	8.6

N = 485

rank the nine occupational categories in order of preference.

Of the students who said they were interested in a career as an army officer, a cross-tabulation revealed over half of these (62.6 percent) were not informed of the career of an army officer. (chi sq = 15.6, df = 2, p< .0001). When a cross-tabulation was conducted, in order to identify if there was a sex difference, a significant result (chi sq = 22.4, df = 1, p<.001) was achieved, with more female students (72 percent) than male students (28 percent) responding that they were 'not informed' about the job of an army officer.

Therefore awareness of the officer career appears low even for those students who demonstrate some interest in the career.

B. Information from and Influence of Significant Others

When students were asked how often they had discussed their future job plans, a five point response scale ranging from 'never' to 'frequently' was used. Results indicated that 44.5 percent of the students spoke frequently with their parents, and 32.4 percent spoke frequently with their friends. Job plans were not discussed with teachers, career advisers and siblings as frequently.

Students felt that several sources were very important in 'informing' them about jobs (Table 5). Thirty percent said career advisers were very important, 20 percent felt newspapers/magazines and mothers were very important, 18 percent reported fathers as being very important and 10 percent said teachers were very important. Students were also asked how important several sources had been in 'influencing' them about jobs (Table 6). Twenty eight percent of the students thought mothers were very important in influencing them,

Table 5: Sources considered very important by the research sample in informing them about career choices.

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INFORMATIVE SOURCES                    PERCENTAGE (%)

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Career advisers                            30.0

Mothers                                    20.7

Newspapers and magazines                   20.1

Fathers                                    18.7

Teachers                                   10.0

Friends                                     8.8

Books                                       8.6

Holiday employers                           8.0

Siblings                                    5.3

Relatives                                   4.7

Television                                  3.0

Radio                                       1.6

Neighbours                                  1.0

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N = 485

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Table 6: Sources considered very important by the research sample in influencing them about career choices.

INFLUENTIAL SOURCES	PERCENTAGE (%)
Mothers	28.6
Fathers	26.7
Career advisers	22.0
Teachers	10.2
Newspapers and magazines	10.0
Friends	8.8
Siblings	8.6
Holiday employers	8.4
Books	5.5
Relatives	5.3
Television	5.7
Radio	2.0
Neighbours	0.4

N = 485

followed by fathers (26 percent), career advisers (22 percent) and newspaper/magazines and teachers (both 10 percent). In both cases, five point scales were used; these ranged from 'very important to you' to 'definitely not important'.

The majority of the sample (73.9 percent) reported that they had visited a school career adviser in the previous two years.

A cross-tabulation revealed that, of the students informed of an army officer career, 69.5 percent had a family member or friend who had been, or was in, the armed services, while 30 percent did not know of anyone who had been, or was in the armed services. An analysis of parents' current jobs revealed that only 1.2 percent of subjects' parents in this sample held current positions in the armed services.

The occupations of parents (as reported by the sample) were coded into one of the nine occupational categories (refer to Table 3). Following this a cross-tabulation of fathers' occupations and off-spring preferences illustrated that 22.6 percent of female students, and 15.7 percent of male students wanted jobs in the same occupational categories as their fathers. A cross-tabulation comparing mothers' occupations and off-spring preferences indicated that 21.4 percent of female students, and 8.4 percent of male students wanted jobs in the same occupational categories as their mothers' current jobs. This analysis indicates there is a significant sex difference (chi sq = 12.9, df = 1, $p < .001$) in that more females preferred a job in the same occupational category as their mother. For parents who were unemployed a separate category was assigned; those parents who worked predominantly in the home were categorized into the group 'service' occupations.

It appears that significant others have a more dominant affect on both influencing and informing students about jobs, with significantly more females wanting jobs in the same occupational categories as their mothers'.

C. Information from and Influence of Organisational Projection

Students were asked if they had recalled seeing or hearing any advertising for the army, particularly for officer candidates. Eighty percent said they had, and 19 percent said they had not. Of the sample who had, 24 percent remembered 'nothing' of the advertisements, 29.2 percent remembered 'very little', 19.3 percent recalled 'some' information, and 6.9 percent remembered 'detailed' information. When a check was made for specific information recalled the majority of the responses included information based on recruiter discussions or presentations, and promotional material. Most students saw or heard the advertisements in the newspaper or in magazines (49 percent), on television (44.2 percent), and on radio (35.4 percent). The most popular time to listen to the radio was from six a.m. to nine a.m. (50.8 percent). The periods four p.m. to seven p.m. and seven p.m. to midnight combined, accounted for 42.5 percent.

A discriminant analysis (see Table 7) was performed to discriminate between those students who consider themselves 'informed' and those who consider themselves 'uninformed' about the career of an army officer. Eight predictor variables were selected for inclusion in the discriminant function. These comprised a selection of information and influence variables, including: mother, siblings, television, relatives, vocational guidance counsellor, advertising and information recall, and finally discussion of career preferences with siblings. The variable 'advertising' made the greatest contribution,

Table 7: A discriminant analysis performed to discriminate between
those students in the sample who consider themselves informed of the
career of an army officer and those who do not.

Eigenvalue	Wilks lambda	Canonical correlation
0.03482	0.9663506	0.1834377

The classification results:

ACTUAL GROUP	NO. OF CASES	PREDICTED GROUP MEMBERSHIP	
		1	2

Informed of officer career	124	80	44
		64.2%	35.8%
Not informed of officer career	361	174	187
		48.3%	51.7%

Percent of 'grouped' cases correctly classified = 54.87%

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with a standard canonical discriminant function coefficient of

(0.79140). This variable measures whether students recall hearing or

seeing any advertising for the army, particularly for officer

candidates. The variable 'school career adviser' also made a

contribution to the discriminant function, but to a lesser extent

(0.53782). This variable measures whether students have talked to a

school career adviser in the previous two years. Although there is a

considerable amount of overlap of the group centroids, the

classification results suggest the discriminating power of the

function to be average to good. Of the cases, 54.87 percent were

correctly classified into the group to which they belong.

Advertising appears to discriminate between those students in the

sample who are informed of the career and those who are not. Most

students in the sample recalled some advertising about officer careers

but it appears that very little of the information was retained.

D. Student Aspirations

Student aspirations were identified by asking the sample what

their plans were when they left school. The results in Table 8 show

that 39.0 percent of the sample wanted to continue their education at

university, 14.5 percent indicated they would like to attend a

polytechnic, 11.2 percent would attempt to get a job, and 9.1 percent

wanted a job which had on-the-job training avaliable. The remaining

26 percent said they would like to get a cadetship, were undecided,

would try for an apprenticeship, or would go to a teachers' college.

A cross-tabulation revealed some significant sex differences. Five

times more females wanted to attend a teachers' college than males,

and three times more females wanted to attend polytechnic than males.

Three times more males wanted to get a cadetship and six times more

Table 8: A cross-tabulation of students intended aspirations on leaving school.

ASPIRATIONS	SEX		
	Female	Male	ROW TOTAL
Get a job	34	20	54
	10.7%	12.1%	11.2%
On-the-job training	30	14	44
	9.5%	8.5%	9.1%
University	118	70	188
	37.2%	42.4%	39.0%
Teachers' college	22	2	24
	6.9%	1.2%	5.0%
Polytechnic	59	11	70
	18.6%	6.7%	14.5%
Cadetship	14	21	35
	4.4%	12.7%	7.3%
Apprenticeship	6	19	25
	1.9%	11.5%	5.2%
Undecided	25	6	31
	7.9%	3.6%	6.4%
Other	9	2	11
	2.8%	1.2%	2.3%
COLUMN TOTAL	317	165	482
	65.8%	34.2%	100.0%

males wanted an apprenticeship than females (chi sq = 52.9, df = 8, p<.0001).

Students were asked what jobs they had seriously considered doing in the future. Their responses were analysed and categorized into nine occupational areas as shown in Figure 1.

A cross-tabulation revealed further significant sex differences. More females wanted jobs in administrative and managerial, and service occupational categories than males, and more males wanted jobs in the armed services and agriculture categories than females (chi sq = 28.3, df = 6, p<.0001).

E. The Vocational Preference Inventory

When comparing the United States norms for the VPI (Holland, 1975) with the data from the research sample some differences became apparent. The results (Table 9) show that the female sample used in this research significantly differed from the United States norms on the enterprising, realistic, and conventional scales. Males in this sample differed significantly from the United States norms on the enterprising, status, and conventional scales. The New Zealand sample scored higher on these particular VPI scales when compared with the United States norms.

An analysis of the VPI profiles from the research sample, using a two-tailed t-test, revealed that a significant difference existed on the masculinity scale. This was between male students who were definitely interested in joining the army as an officer (N = 17) and those who were definitely not (N = 103). The interested group scored higher on this scale (t = 3.2, df = 2, p<.05).
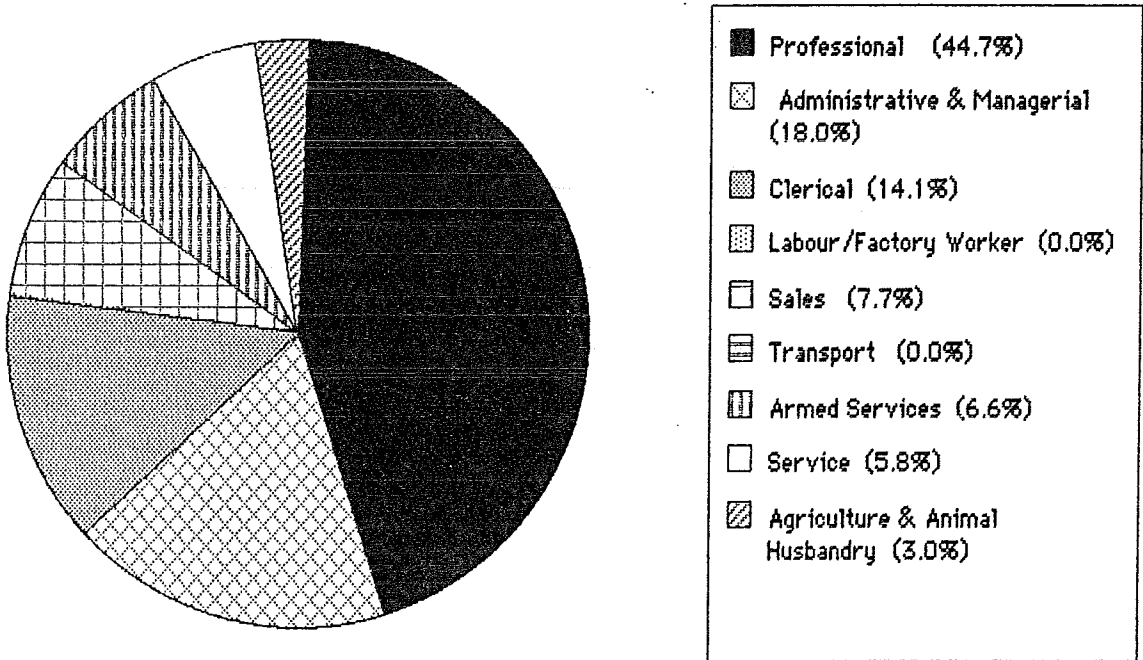
Figure 1 : The percentage of students selecting career preferences in the nine occupational areas.

Legend:
- ■ Professional (44.7%)
- ⊠ Administrative & Managerial (18.0%)
- ▦ Clerical (14.1%)
- ▦ Labour/Factory Worker (0.0%)
- ☐ Sales (7.7%)
- ⊟ Transport (0.0%)
- ⊞ Armed Services (6.6%)
- ☐ Service (5.8%)
- ▨ Agriculture & Animal Husbandry (3.0%)

Table 9: Interest dimensions of the VPI which have significant differences between the United States norms (Holland, 1975) and the research sample.

	US sample	NZ sample	t-score	p-value
FEMALE	N=175	N=318		
Interest dimension:	Mean scores			
Enterprising	1.95	4.90	t=8.3	p< .01
Realistic	1.39	3.30	t=3.6	p< .01
Conventional	1.63	2.74	t=4.0	p< .01

	US sample	NZ sample	t-score	p-value
MALE	N=191	N=167		
Interest dimensions:	Mean scores			
Enterprising	1.88	3.86	t=8.8	p< .01
Status	6.26	7.48	t=8.3	p< .01
Conventional	1.08	2.85	t=4.8	p< .01

Figure 2 illustrates the differences between male students in the sample who were definitely interested in a career as an army officer, those who were definitely not, and the VPI norms for navy and airforce male officer applicants developed by Bryson (1985). Due to a lack of data on these norms t-tests could not be calculated to test for significant differences between the research sample and Bryson's officer applicants.

F. Interest in an Army Career

From the sample there were 30 students (6.2 percent) who were interested in joining the army as an officer and who met the required educational standard, that is, who had a University Entrance qualification or better.

The results (Table 10) show which job characteristics were 'very important' to the sample when choosing a career. Most students (79.2 percent) felt 'job satisfaction' was very important and very few students (14.1 percent) felt 'being in charge' was very important when choosing a career.

A discriminant analysis (see Table 11) was performed on the data in an attempt to discriminate between those students who were interested in joining the army and those who were not. Five predictor variables relating to information and influence variables were used as discriminating variables, that is, variables on which the groups were expected to differ. These included: mother, siblings, radio, newspaper, and parents reaction to their off-springs' career choice. A frequency of information and influence variables indicated that the above variables were the most important. The standard canonical
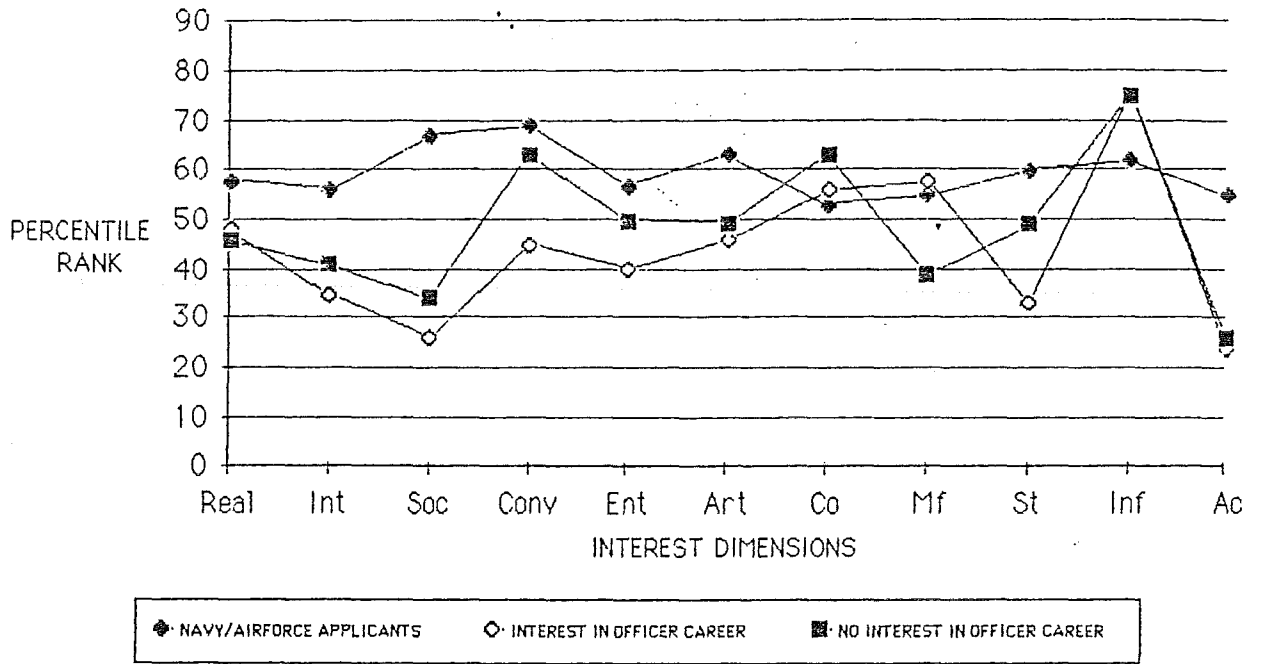
Figure 2:

The VPI profile of male students in the sample who are definitely interested in an Army Officer career, those who are definitely not, and the norms of male Officer applicants for the Air Force and Navy.

Table 10: Job characteristics the sample consider to be very important when making career choices.

JOB CHARACTERISTICS	PERCENTAGE (%)
Job satisfaction	79.2
Variety in work	56.0
Job security	52.5
Opportunities for future employment	50.8
Good income	48.5
Promotion opportunities	46.7
Independence	42.0
Working with people	41.6
Intellectual challenge	32.7
On-the-job training	31.9
Physical challenge	25.7
Responsibility	23.3
Benefits	20.6
Social status	15.2
Being in charge	14.1

N = 485

Table 11: A discriminant analysis performed to discriminate between those students in the sample who were interested in joining the army and those who were not.

Eigenvalue	Wilks lambda	Canonical correlation
0.16034	0.8618135	0.3717344

The classification results:

ACTUAL GROUP	NO. OF CASES	PREDICTED GROUP MEMBERSHIP	
		1	2

Interested in an army career	257	172	85
		66.8%	33.2%
Not interested in an army career	228	86	142
		37.7%	62.3%

Percent of 'grouped' cases correctly classified =64.67%

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discriminant function coefficient (which represents the relative

contribution of the discriminating variable) for the variable

'parents' was (0.74665) indicating they made the greatest

contribution. The variable 'parents' constitutes the parents'

reaction, whether positive, neutral, or negative, towards off-spring

choosing a career in the army. On examination of the classification

results it is evident that the discriminating power of the function

was reasonably good. The classification result shows that 64.67

percent of the cases were correctly classified.

A further discriminant analysis (see Table 12) revealed that the

variable 'physical challenge' was important in discriminating between

two other groups, namely those who were interested in joining the army

as an officer and those who were not interested in joining. The

fifteen predictor variables selected include all of the job

characteristics listed in Table 9. These were included as past

research (Mirfin, 1985) has indicated that they are important reasons

for current officers joining the army. The standard canonical

discriminant function coefficient for the variable 'physical

challenge' was (0.93935) and the classification result demonstrated

that 64.96 percent of the cases were correctly classified.

When the sample was asked what features about the career of an

army officer attracted them, the results were as illustrated in Table

13. If the responses 'no features attractive' and 'no response' are

combined, and they are assumed to be related, this accounts for one

third (33.3 percent) of the sample. Minor factors considered

attractive included: promotion opportunities, training,

responsibility, intellectual challenge and patriotism.

When asked what features about an army officer career were

Table 12: A discriminant analysis performed to discriminate between those students in the sample who were interested in joining the army as an officer and those who were not interested.

Eigenvalue	Wilks lambda	Canonical correlation
0.09029	0.9171855	0.2877750

The classification results:

ACTUAL GROUP	NO. OF CASES	PREDICTED GROUP MEMBERSHIP	
		1	2

ACTUAL GROUP	NO. OF CASES	1	2
Interested in an army officer career	141	95	46
		67.4%	32.6%
Not interested in an army officer career	327	118	209
		36.1%	63.9%

Percent of 'grouped' cases correctly classified = 64.96%

Table 13: Features about the career of an army officer that are reported as being attractive to the research sample.

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---------------------------------------------------------
FEATURES                          PERCENTAGE(%)
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No features attractive                17.9

Physical challenge                    17.0

No response                           15.4

Job security                          12.9

Benefits                              12.9

Working with people                   10.9

Discipline                            10.4

Opportunity for promotion              8.8

Training                               8.0

Responsibility                         7.8

Intellectual challenge                 5.1

Other                                  2.4

Patriotism                             2.0

Don't know                             1.4

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N = 485

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disliked, the results were as illustrated in Table 14. Minor factors that were disliked included: lack of individuality, authority, the uniform, and having to move frequently.

Students were asked what image did they consider the job of an army officer has among people of their own age. The results (Table 15) indicated that if we combine the response 'don't know' and 'no response', and assume that they are related, then this combination accounts for nearly one third (28.9 percent) of the sample.

Limited interest in an army officer career exists within the sample, this is highlighted by the fact that many students were unsure of what they considered attractive about the career and what they disliked. Most students had very simplistic views of what the image of an army officer was among students of their own age. This was evident in both their comments on the questionnaire and verbal comments made during the administration of the questionnaire. Many students appeared to see the army as only playing a role in war, and evidence pointed to the fact that the majority of the students did not consider themselves informed of an officer career.

Table 14: Features about the career of an army officer that are

reported as being disliked by the research sample.

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FEATURES                    PERCENTAGE ( %)
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FEATURES	PERCENTAGE (%)
War and killing	18.1
No response	15.2
Discipline	13.3
Formality	12.9
Training	10.6
Everything about the career	9.8
Lack of individuality	9.6
Other	7.4
Authority	4.1
Uniform	3.7
Having to move regularly	3.2
Don't know	3.0
No future	2.4

N = 485

Table 15: Features that are reported by the sample as describing the
image of an army officer.

FEATURES	PERCENTAGE (%)
No response	19.3
Command and authority	17.9
Discipline	16.0
Macho man	13.9
Responsibility	10.2
Don't know	9.6
Hard work	9.6
Other	7.6
No image	5.5
Glamourous	4.3
War and killing	4.1
No future	2.8

N = 485

CHAPTER FIVE

DISCUSSION

The aim of this research was to identify what factors are
preventing school students from joining the army as officers. In an
attempt to identify this, six research questions were developed.
These included an attempt to establish the level of awareness amongst
secondary school students of the career of an army officer, to measure
the impact of significant others and organisational projection on
students' career choices, to identify the career aspirations of the
students, to compare VPI profiles of interested and non-interested
groups, and finally to identify attitudes towards the career of an
army officer.

The research questions will be discussed individually, and an
attempt will be made at the conclusion to address the main aim.

A. Awareness of the Army

The results indicate that secondary school students in general do
not consider themselves informed of the job of an army officer, and in
particular many of the students interested in such a career do not
consider themselves informed. It is possible this is due to the
present level of promotion employed by the army, or alternatively, is
due to the isolation of the job from the general public. The
isolation of the job makes it very difficult to relate the job title
to what the job actually involves in the work setting. As result, few
students get the opportunity to observe an army officer in his/her
role, whereas, say a police officer, has a higher public profile. The
research result suggesting that students interested in an army officer

career are not informed of the job implies a need to work more specifically at aiming information at this sector of the population. A means of achieving this could be through more extensive contact with schools. Currently teachers from schools around the country are regularly invited to attend a military camp to experience army life. Perhaps this could be extended to include students in the form of work experience. This can be contrasted with the period when the institution of school cadets was strong and many pupils had the opportunity to attend military camps. Today there are very few schools remaining in the cadet scheme, and thus the opportunities to visit military camps are limited.

Promotion of the armed services by professional public relations experts, rather than senior officers may help to increase the public awareness of the army. It is not the intention of the author to criticise previous public relations work conducted by army officers. However, it is considered by the author to be a specialist job which should maintain a consistent approach to promotion rather than being characterised by the idiosyncrasies of different officers every two years or so. The type of promotion the author refers to includes television documentaries and articles in newspapers and magazines, thus helping to promote, and increase the profile of the army in the community. This appears to be a logical step if we consider how the present research demonstrates that being informed about the career of army officer is valuable for those who are interested in it. Those who are informed tend to rank the armed services first when considering occupational preferences. It is probable that students interested in a particular job are more likely to seek information on it and therefore become more informed although no causal link has been suggested.

B. Impacts of Significant Others and Organisational Projection

When considering how students become informed about occupations this research looked at the informative and influential role of both, significant others and organisational projection. This differed from past research in New Zealand which has tended to regard informing and influencing factors as the same (Hesketh, 1981).

Although results show that advertising of army officer careers is remembered by most students in this survey, very little content is recalled. Students' responses to the questionnaire indicated that rather than recalling specific information from the advertising, an image or theme was portrayed and recalled. Therefore through a single image very little specific information is actually conveyed. For example, specific information not conveyed includes, the different careers available within the army, skills acquired and how they can be applied outside of the army.

The literature demonstrates considerable inconsistency in findings regarding the effectiveness of advertising in informing respondents about occupations (James, 1981; Carroll and Rao, 1982). However, part of the inconsistency originates from the variety of advertising and its purpose. Even so advertising appears to have a positive impact on awareness of military careers. This was demonstrated in the present research where a discriminant analysis showed that the variable 'advertising' (which measures whether students recall advertising of army officer careers) discriminates well between students who are interested in a career as an officer and those who are not.

In keeping with the literature the greatest impact on students

vocational development comes from significant others (Ambrosius, 1983; Chown, 1958; Maclean, 1980; Powell and Bloom, 1962). However, this research made an attempt to distinguish between 'informing' and 'influencing' student job plans. It appears from this research that some discrepancies do exist between informing and influencing factors. The greatest influence on students comes from mothers and fathers, then school career advisers, and following that, newspapers and magazines. The most important source of information however was school career advisers, followed by newspapers and magazines, then both parents. This is indicative of the formal role of 'information giver' that the school career adviser plays, and it also points to the strong familial impact of parental influence on youth during vocational development. Therefore, to increase awareness of an army officer career, it is suggested that the informative role be achieved through organizational projection and the school career adviser service. Means of achieving increased organisational projection include: increased advertising, better public relations, more contact with schools, and community activities. For example, running a weapons safety course in the local community or school. In conjunction with this, parental support of the armed services should be enhanced as they appear to be the chief influencing factor on youth. Means of achieving this include: building on the positive image of the army and what it can offer to the community, and more public displays not necessarily focusing on displaying weapons but on giving demonstrations of skills learnt in the army, for example, the work of army chefs, engineers, signallers, and drivers. This has been achieved to some extent in quite different contexts with activities like 'The Driver of the Year' competition, and various cooking competitions. Parents' reaction to their off-springs' choice to take up a career in the army is an important variable that discriminates between those interested in an army career and those not interested.

Therefore parents' attitudes towards the army should be considered very important.

In the present research approximately 20 percent of subjects said they wanted jobs in the same occupational category as their mother and/or father. However, it was interesting to note that in both cases it was predominantly females who wanted jobs in the same area as their mothers and/or their fathers. Based on previous research (Werts, 1968) the author's expectation was that more males, as opposed to females, would like jobs in the same occupational area as their fathers. The apparent turn around may be an indication of the changing role of women in society, and the changing vocational aspirations that females have for themselves. Socialisation in the past has tended to inhibit the development of many females to their fullest potential and therefore to disallow some vocational aspirations. An alternative explanation may be that females tend to be more dependent on parents for guidance during career choice than males. Past research has tended to focus more on the relationship between father and son, as opposed to father and daughter, or mother and daughter similarity in career choice. However the lack of research into mother and daughter career similarities does not help to explain this result.

C. Student Aspirations

A large proportion of the sample have stated intentions to continue their education to a professional level either through polytechnic or university. This seems reasonable when remembering that the sample was made up of sixth and seventh form students. In itself this indicates that, educationally, the sample is biased towards the upper educational levels of the youth of this age. Some

differences between the sexes were evident with more females wanting to attend a teachers' college or a polytechnic and more males wanting an apprenticeship or cadetship. This seems to be consistent with the stereotypic sex roles of females and males. Even so, approximately equal numbers of males and females wanted to go to university and equal numbers wanted occupations in a professional area. Twice as many females wanted jobs in the managerial and administrative occupational categories.

D. The Vocational Preference Inventory

The results from the VPI lend support to the finding that twice as many females as males wanted jobs in the managerial and administrative occupational categories. New Zealand females were found to be more enterprising than females in the United States sample. This could be a function of time, as the United States norms were calculated in 1965. Alternatively, it could be due to a possible sampling bias in that students attending schools in the sample were mainly drawn from the middle to upper socio-economic areas of Christchurch.

The usefulness of the VPI as an instrument for predicting entry into an occupational area or type was given some support. There was a significant difference on the VPI's masculinity scale between students interested in an army officer career and those not interested. This indicates that the VPI could be used to identify those genuinely interested in an army officer career. It was also interesting to note that there was a difference between navy and airforce applicants from a New Zealand sample, and the interested students. However, tests of significance were unable to be conducted to adequately test any relationships.

E. Interest in an Army Career

Predominantly students in this sample either held, no image of an army officer, or a very narrow image tending to cluster around the perceived physical characteristics of the career. The sample disliked the idea of an army career because of the possibility of being involved in a war and the chance of being killed, with again the physical characteristics of the job becoming evident. Physical challenge was revealed as the most important variable in discriminating between those interested in enlisting in the army as an officer and those not interested. However, when students rated the importance of various job characteristics in choosing a job, physical challenge was not considered important across a range of other jobs. This implies that the image that the army has projected in the past of the physical challenge has been a narrow image and suggests that an image of this kind is not as effective as it once was. Physical challenge is not important to the majority of the sample when choosing a career, therefore it may not be appropriate to promote this when advertising for army officer careers. Rather, it may be appropriate to broaden the scope of the image to stress the managerial skills involved in an army officer career. If changing the projected image of an army officer can also change the quality of the information provided, then organizational projection may become more effective.

In addition there is an increase in the number of private and public sector organisations that present opportunities for employment to students. The author assumes, that in part, competition among organisations, and the variety of jobs available, has had some impact on the drop in number of students applying to join the army as officers. Further, there is concern within the community about the

nuclear issue and its impact on adolescents (Barnhart-Thomson and

Stacey, 1987). The association of the army with this issue is likely

to have had some impact on the drop in army enlistment.

F. Comments on The Present Research

It seems appropriate to begin with the sample used in this

research. Although not intentional, the schools which agreed to

participate in this study appear to be predominantly situated in the

north-west suburbs of Christchurch, and therefore the students drawn

from the schools may have a middle to upper socio-economic class bias.

An advantage, however, was that rural schools were well represented in

the survey. This was regarded as being important since the New Zealand

Defence Psychology Unit have identified that a large number of army

officers come from rural environments (A. McCone, personal

communication, April, 1986). Because the sample included only

schools from the Christchurch location few Maoris were surveyed. An

Auckland based sample would however differ considerably. Therefore,

it is also possible that some cultural bias is present, particularly

considering that the proportion of Maoris in the army to the total New

Zealand Maori population is quite large.

Other possible disadvantages of this research include the use of a

questionnaire-type survey and the accompanying experimenter effects.

Although all controls possible were adhered to during the

administration of the questionnaire, with one of the larger groups it

was difficult to control all talking between students, such that some

responses may not have been totally independent. One question relied

on the students' recall of their parents' jobs. The author found that

some of the more ambiguous jobs were difficult to categorize and at

times it appears students found it difficult to describe their

parents' jobs. Students were also asked to state what jobs they had seriously considering doing in the future, this relied on the students' ability to accurately predict what they were likely to do when they left school. At the average age of 16 years and five months it is difficult to say whether the students would know, and there is a strong possibility, that they could change their mind.

Although the author makes reference to the impact of other organisations competing with the army for potential student employees, no specific question regarding this was included in the questionnaire. This may be an area for futher research.

One further comment concerns the lack of similar research in New Zealand. Although other studies conducted by the New Zealand Defence Psychology Unit (Mirfin, 1985) have approached similar questions as presented in this research, all samples have included army (or other defence personnel). Also most of the questionnaires have been administered during the recruitment process or given to officers who have had up to six years service in the army. This makes it difficult to compare any other research with the present study. However, on a positive note, using a student sample allows for an insight into the attitudes and intentions of students and this has not been achieved by the Defence Psychology Unit's own research to date. Further, school students are the target population for army officer recruiting.

G. Ideas For Future Research

Ideally the present research would have benefited from the application of the VPI to active army officers of one to two years service. Therefore, any future research in this area should compare the VPI profiles of students interested in an army officer career,

those being recruited, and active army officers.

Given the present results, research into an appropriate
advertising and promotional strategy for the army should be undertaken
by experts in this area. It is beyond the author's present knowledge
to comment further on alternative marketing and promotional
strategies. However it is perceived to be an area of great importance
to the armed services in general.

There is some inconsistency in the research findings regarding
the effectiveness of school career advisers in informing students of
careers. This is a potential area for future research.

Finally, the level of expertise and professionalism required to
develop effective recruitment advertising must be recognised by the
army. Advertising has been shown in the present research to be an
important variable in discriminating between those who are interested
in an army officer career, and those who are not. This suggests a
need to plan and develop recruiting strategies that pay-off. This can
best be achieved by using professionals in the area of public
relations and advertising. These experts can develop strategies for
increasing the army's profile and improving it's image. This is the
case overseas where the armies of today must rely on marketing
research to attain their recruitment goals ("Today's army", 1984).

H. Conclusion

In considering the main aim of this research, it is proposed that
one of the major reasons why eligible school students are not inclined
towards joining the army as officers is that largely these students
are not well informed about this career. Some students are not aware

that this job exists and the majority of the remainder do not know what the job entails. Added to this is the secondary reason, that is that the image portrayed through organizational projection is a very narrow one. Thirdly, competition for student employees from other organisations may have had an impact.

Providing realistic job previews (Wanous, 1973) may be one way to deal with false expectations that potential candidates have towards the army as an organization. Realistic job previews emphasize specific facts which are typical of both desirable and undesirable aspects of the organization. The traditional approach to organizational projection attempts to maximize the number of recruits by selling the job in its most positive light. However recruitment by the traditional approach also tends to overlook the costs associated with high quit rates. Realistic job previews can be implemented through booklets, films, and job sampling. Ilgen and Seely (1974) used realistic job previews as an aid in reducing voluntary resignations of West Point cadets, with favourable outcomes.

Another approach is for the army to increase contact with secondary schools by developing and maintaining a relationship with students and teachers, through a liason officer, rather than one-off presentations by army recruiting personnel. Alternatively sending army officers back to their own schools to recruit or talk to students may be appropriate. With the increasing desire for students to gain work experience in the community, this may be a possible further way of providing some insight into the work of army personnel and at the same time provide valuable work experience for school students. More recently there has been an increasing emphasis on career counsellors and teachers attending military camps around New Zealand to expose them to the army lifestyle. This is considered to be a good method of

increasing awareness of army careers as well as providing up-to-date

information on these careers to the people who will disseminate the

information to the students.

With an increasing number of opportunities arising for students

to obtain monetary compensation while training for a particular

career, or alternatively, to receive scholarships from private or

sector organisations, many students will obtain guaranteed employment.

This may be a suitable option for the army to develop further.

Finally, when addressing the question of attracting suitable

candidates to an army officer career, two points must be considered.

First, parental support for the army officer career as an option for

their sons an daughters must be achieved. Second, many situational

variables will impact on a student's career choice. These include:

community, peers, media, siblings, family, education, school, and

socio-economic status. These two factors together will help to

determine the 'type' of career sought by an individual. Some of the

situational variables will remain constant and others will be affected

by adopting some of the strategies suggested above, that is,

increasing the profile of the army, providing opportunities for work

experience in army camps, and planning marketing strategies.

Therefore all efforts by the army to increase the number of students

enlisting as officers in the army must be directed at parents and at

other situational factors. Holland (1973) suggested that factors such

as family, education, community and life history events may provide

the basis for understanding the development of types. This, in the

end, will work to attract the particular 'type ' of person required to

the career.

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APPENDIX A

1/23 Plynlimon Road

Christchurch

515-013

20 April 1986

Dear Mr Alexander,

Last week I visited you with regard to research I am
undertaking on vocational choice among secondary school students.

I would like to take this opportunity to thank you for your support
for and interest in my survey and look forward to administering the
proposed questionnaire at your school.

If you have any further queries on this matter please feel free to
contact me. The questionnaire will be ready after the May holidays
for your perusal.

Yours faithfully

Philippa Jones

1 23 Plynlimon Rd

Christchurch 5

515-013

2 July 1986

Dear Mr Alexander,

Earlier this year I contacted you concerning a Questionnaire that I would like to administer at your School. Enclosed is the final draft of that questionnaire. As I indicated earlier it will take 20 minutes to complete.

In addition, I am considering using the Vocational Preference Inventory by J.L. Holland (see annex A). This takes 8 minutes to administer and therefore a total of 30 minutes for both would be required. However, I realise that the School has a tight timetable and therefore I would like to make this addition optional. I would like to add that the VPI could be a useful tool for the School in terms of identifying Career interests of students.

I will contact you by phone next week to obtain your final approval and identify possible dates and times for administering the questionnaire. The final draft will be printed and ready by the end of July.

I would like to thankyou again for your support.

Regards Philippa Jones

Annex A

The Vocational Preference Inventory (VPI) is a personality inventory
composed entirely of occupational titles. A person takes the inventory
by indicating the occupations which he or she likes or dislikes. The
complex clusters of personal characteristics which the inventory
assesses yield a broad range of information about the person's
interpersonal relationships, interests, values, self-conception,
coping behaviour, and identifications. The inventory has eleven
scales: Realistic, Intellectual, Social, Conventional, Enterprising,
Artistic, Self-control, Masculinity, Status, Infrequency, and
Acquiescence.

The VPI was developed primarily to assess personality. The evidence
indicates that it provides a broad range of information about a
person's personality traits, values, competencies, and coping
behaviour. At the same time, the evidence also indicates that the VPI
is useful for:

1. Assessing vocational interests, since the Realistic, Intellectual,
Social, Conventional, Enterprising, and Artistic scales incorporate
the main dimensions found in interest inventories.
2. Assessing the personality in a theory of careers (Holland, 1973b).
3. Stimulating occupational exploration among High School and College
students.

Other desirable properties are its neutral content, simple form, and
brevity.

1/23 Plynlimon Road

Christchurch

515-013

6 November 1986

Dear Mr Alexander,

During this year I visited your school to administer a questionnaire concerning career choices of secondary school students. I have now completed the initial analysis of the survey results and here enclose a summary of the main findings that may be of interest to you.

I would be happy to return to your school and talk to the students involved in this study if you wish, however due to personal commitments and with the school year nearing the end it seems improbable this year, but I would be available in February 1987 should you still be interested. Please do not hesistate to contact me if you would like some further information.

I would like to take this opportunity to thank you again for your support in this research and for taking the time to arrange the administration of this questionnaire.

Yours sincerely

Philippa Jones

RESULTS

INTRODUCTION

The sample consisted of 485 subjects from 11 schools in the Canterbury area.

Table 1 illustrates which schools participated in the survey and Table 2 shows the age and sex composition of the sample. The average age of the student sample was 16 years and 5 months.

THE VOCATIONAL PREFERENCE INVENTORY

In general terms the pattern that emerged from this sample of students is similar to that of the United States norms for the same age group. Small differences between the US group and this sample include a generally higher score for both males and females in NZ on the Enterprising scale. NZ males appear to score higher on the Status scale than US males, however this may be due to cultural differences or possibly a biased sample in the present sample since most schools in the sample were situated in middle to upper socio-economic areas.

OCCUPATIONAL PREFERENCES

When students were asked to rank a group of occupational areas in order of preference the response was as illustrated in Table 3. The occupational areas are based on the revised socio-economic indices for New Zealand by Raylee Johnston (1983).

There were no differences between the sexes when ranking agriculture, professional, sales and service occupations. However there were some

highly significant sex differences when ranking transport, clerical, and labourer occupations. When ranking the occupational areas of transport females tended to rank it lower than males whereas females ranked clerical occupations more highly than males. In the area of labour and production work females ranked it consistently lower than males.

INFORMATION AND INFLUENCE SOURCES

When the students were asked who or what had been important in informing them about job opportunities, the most important source was career advisers. (see Table 4).

When the students were asked who or what had been important in influencing their feelings towards jobs the most important factor was mothers. (see Table 5).

STUDENT ASPIRATIONS

The students were asked to identify what they planned to do when they left school. (see Table 6).

When discussing future job plans most students spoke to either their parents or friends. During the previous two years 74% of the sample said they had visited a school career adviser.

PARENTS CURRENT OCCUPATIONS

The students were asked to name their parents' current jobs and they were subsequently categorised into 10 occupational areas (see Table 7 & 8).

The students were asked to list the jobs they had seriously considered doing in the future and the majority of the jobs fell into the professional category. (see Figure 1).

THE ARMED SERVICES AS A CAREER CHOICE

Seventy four percent of the students did not consider themselves informed about the career of an army officer. There was a significant relationship (p<.001) between ranking of the armed services according to occupational preferences and whether students consider themselves informed about the job of an army officer. Those who consider themselves not informed rank the army career eighth on the preference scale and students who consider themselves informed rank the army career first.

Table 1: Schools which participated in the survey.

SCHOOLS   FREQUENCY

Urban schools:

Riccarton High School   33

Linwood High School   70

Villa Maria College   26

Xavier College   14

Rangi Ruru Girls' School   51

Hornby High School   60

Papanui High School   43

                              TOTAL = 297

Rural schools:

Lincoln High School   31

Methven High School   40

Rangiora High School   50

Ashburton High School   67

                              TOTAL = 188

                              N = 485

Table 2: Composition of the research sample by form level and sex.

		FORM		
		6TH	7TH	ROW TOTAL
SEX	MALE	110	57	167
		(66.3%)	(33.7%)	(34.2%)
	FEMALE	203	115	318
		(63.8%)	(36.2%)	(65.4%)
COLUMN TOTAL		313	172	485
		(64.4%)	(35.1%)	(100.0%)

Table 3: Mean preference rankings of the nine occupational categories.

OCCUPATIONAL AREAS	MEAN RANK
Professional	1.7
Administrative and manageri'al	2.9
Sales	4.7
Service	4.8
Clerical	5.1
Agriculture and animal husbandry	5.5
Transport	5.8
Armed services	6.0
Production and labourer	8.6

N = 485

Table 4: Sources considered very important by the research sample in informing them about career choices.

INFORMATIVE SOURCES	PERCENTAGE (%)
Career advisers	30.0
Mothers	20.7
Newspapers and magazines	20.1
Fathers	18.7
Teachers	10.0
Friends	8.8
Books	8.6
Holiday employers	8.0
Siblings	5.3
Relatives	4.7
Television	3.0
Radio	1.6
Neighbours	1.0

N = 485

Table 5: Sources considered very important by the research sample in influencing them about career choices.

```
---------------------------------------------------------------
INFLUENTIAL SOURCES                      PERCENTAGE (%)
---------------------------------------------------------------
Mothers                                      28.6

Fathers                                      26.7

Career advisers                              22.0

Teachers                                     10.2

Newspapers and magazines                     10.0

Friends                                       8.8

Siblings                                      8.6

Holiday employers                             8.4

Books                                         5.5

Relatives                                     5.3

Television                                    5.7

Radio                                         2.0

Neighbours                                    0.4
---------------------------------------------------------------

N = 485
---------------------------------------------------------------
```

Table 6: Students' intended aspirations on leaving school.

ASPIRATIONS	PERCENTAGE
	%

University	39
Polytechnic	14
Get a job	11
On-the-job training	9
Cadetship	7
Undecided	6
Apprenticeship	5
Teachers' college	5
Other	2

Table 7: Fathers' current jobs.

OCCUPATIONAL AREA	PERCENTAGE
	%

Administrative and managerial	27
Agriculture and animal husbandry	17
Professional	14
Sales	13
Clerical	7
Labourer and production	5
Service	5
Transport	3
Other	2
Armed services	1

Table 8: Mothers' current jobs.

OCCUPATIONAL AREA	PERCENTAGE %
Service	4
Clerical	15
Administrative and managerial	11
Sales	8
Professional	7
Labourer and production	3
Agriculture and animal husbandry	3
Transport	0.4
Other	0.2
Armed services	0
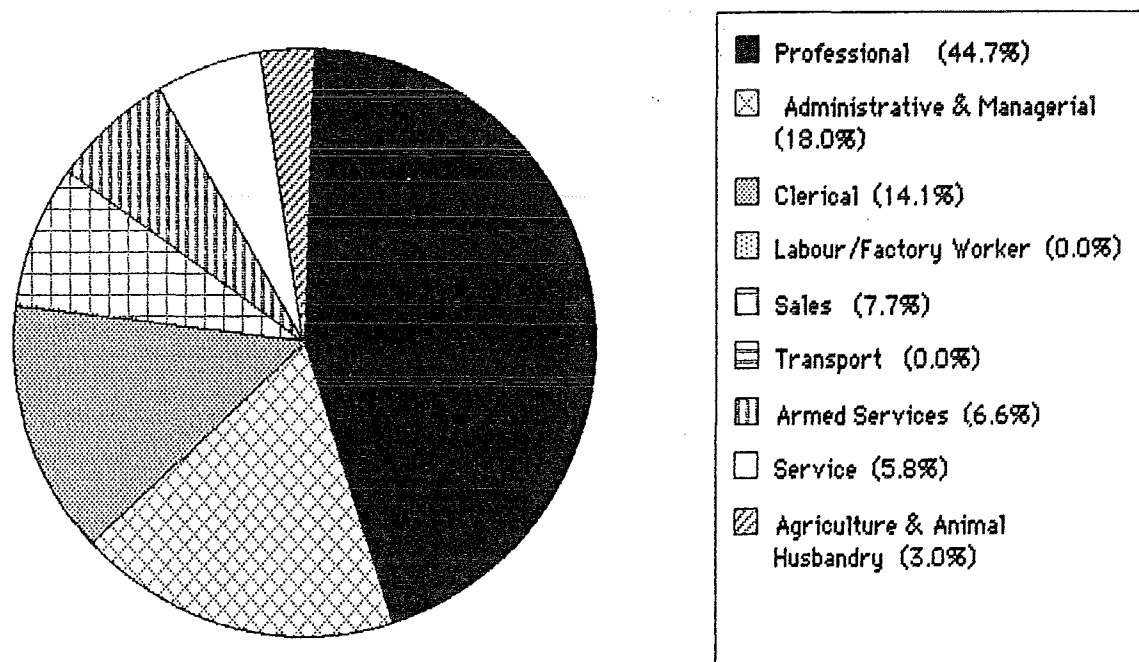
Figure 1 : The percentage of students selecting career preferences in the nine occupational areas.

Legend:
- Professional (44.7%)
- Administrative & Managerial (18.0%)
- Clerical (14.1%)
- Labour/Factory Worker (0.0%)
- Sales (7.7%)
- Transport (0.0%)
- Armed Services (6.6%)
- Service (5.8%)
- Agriculture & Animal Husbandry (3.0%)

Code Number: ☐☐☐

Today's Date : _____

A SURVEY OF SECONDARY SCHOOL PUPILS AND FACTORS AFFECTING
CAREER CHOICES.

This survey is being conducted to find out where you as students
get your information about careers from, and also to look at
what influences your attitudes towards careers.

Please complete this Questionnaire as honestly as you can. It
will take you about 20 minutes.   This is not a
test and there are no right or wrong answers.

Thank you for your co-operation.

INSTRUCTIONS
In this questionnaire there are two ways of answering:
1. Place a tick in the box beside your chosen answer.
   For example:

                    Sex: male   ☐
                            female ☑

2. Print   your answer in the space provided.
   For example:

            What job(s) has your father had?

            _____Plumber_____   ___Insurance Clerk___

            _____   _____

            _____   _____

For Office Use Only

1. Age:

_____ years _____ months
4-7

2. Sex:

Female ☐ 1
Male ☐ 2
8

3. School:

_____
☐ 9

4. Form:

6th Form ☐ 1
7th Form ☐ 2
1∅

5. What qualifications do you already have?

School Certificate ☐ 1
6th Form Certificate ☐ 2
University Entrance ☐ 3
Bursary ☐ 4
11-14

6. What do you hope to qualify for this year?

School Certificate ☐ 1
6th Form Certificate ☐ 2
Entrance into University ☐ 3
Bursary ☐ 4
Scholarship ☐ 5
15-19

7. a) What is your father's current job?

_____
☐ 20

b) What other job(s) has your father had?

_____ _____
_____ _____
_____ _____

	21-22
	23-24
	25-26

8. a) What is your mother's current job?

_____
☐ 27

b) What other job(s) has your mother had?

_____ _____
_____ _____
_____ _____

	28-29
	30-31
	32-33

9. What are your bother's and/or sister's Ages and Occupations?

Brother/Sister	Age	Occupation
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

B/S	Age	Occ	
			34-37
			38-41
			42-45
			46-49
			50-53
			54-57

10. Name the city, town or rural area you have lived in during most of your Secondary School years.

_____
☐ 58

11. What do you plan to do when you leave school?

attempt to get a job ☐ 1
get a job with on-the-job training
 e.g. Trainee Manager in a Bank, Hospital Nurse ☐ 2
go to University ☐ 3
go to Teachers' College ☐ 4
go to Polytech ☐ 5
get a cadetship, i.e. Police, Armed Services ☐ 6
get an apprenticeship, i.e. plumbing, mechanic ☐ 7
undecided ☐ 8
other (please specify) _____ ☐ 9
59

12. During this year how often have you thought about the job you will take up when you leave school or leave tertiary education (i.e. University, Teachers' College, Technical Institute)?

never	1	
hardly ever	2	
occasionally	3	60
quite often	4	
frequently	5	

13. Have you visited a School Career Advisor in the last two years?

yes	1	
no	2	61

14. During this year how often have you discussed your future job plans with the people listed below?

Circle the number under the description that is most accurate for you. For example: If you discuss your job plans with your parents 'frequently' then you would circle '5' (under the 'frequently' column) of the parents' row.

	never	hardly ever	occasionally	quite often	frequently	
Parents/ Guardians	1	2	3	4	5	62
Teachers	1	2	3	4	5	63
Guidance Counsellors	1	2	3	4	5	64
Friends	1	2	3	4	5	65
Brothers/ Sisters	1	2	3	4	5	66
Other (Specify)						
_____	1	2	3	4	5	67
_____	1	2	3	4	5	68

15. Have you ever looked in the 'Situations Vacant' section of the newspaper for a job that you'd like?

yes	1	69
no	2	

If Yes, which newspaper(s)?

_____
_____
_____

70-72

16. From the list below choose the one time you listen to the radio most.

breakfast 6am-9am	1
morning 9-12	2
afternoon 12-4pm	3
tea 4-7pm	4
evening 7-12	5
night 12-6am	6
none of the above	7

73

17. Which one radio station do you mostly listen to?

3ZB	1
91.3FM/ZM	2
National Programme	3
Radio Avon	4
Radio Rhema	5
Other	6
None	7

74

18. How important have the following factors been in INFORMING you about jobs?

The word INFORMING means getting information about jobs or increasing your awareness about job opportunities.

Circle the number under the description that is most accurate for you. For example: If the Radio is 'very important' in informing you about jobs you would circle '1' (under the 'very important' column) of the Radio row

	very important to you	important to you	neutral	not important to you	definitely not important to you	
Father	1	2	3	4	5	75
Mother	1	2	3	4	5	76
Brothers/sisters	1	2	3	4	5	77
Teachers	1	2	3	4	5	78
Books	1	2	3	4	5	79
TV programmes	1	2	3	4	5	80
Friends	1	2	3	4	5	81
Radio	1	2	3	4	5	82
Newspaper/ magazines	1	2	3	4	5	83
Relatives	1	2	3	4	5	84
Neighbours	1	2	3	4	5	85
Holiday employers	1	2	3	4	5	86
Career advisors/ or counsellors	1	2	3	4	5	87
Other (Specify)						
_____	1	2	3	4	5	88
_____	1	2	3	4	5	89
_____	1	2	3	4	5	90

19. How important have the following factors been in INFLUENCING you about jobs?

The word INFLUENCING above means that something or someone has affected your feelings towards jobs.

Answer this question in the same way as the last one.

	very important to you	important to you	neutral	not important to you	definitely not important to you	
Father	1	2	3	4	5	91
Mother	1	2	3	4	5	92
Brothers/sisters	1	2	3	4	5	93
Teachers	1	2	3	4	5	94
Books	1	2	3	4	5	95
TV programmes	1	2	3	4	5	96
Friends	1	2	3	4	5	97
Radio	1	2	3	4	5	98
Newspaper/ magazines	1	2	3	4	5	99
Relatives	1	2	3	4	5	100
Neighbours	1	2	· 3	4	5	101
Holiday employers	1	2	3	4	5	102
Career advisors/ or counsellors	1	2	3	4	5	103
Other (Specify)						
_____	1	2	3	4	5	104
_____	1	2	3	4	5	105
_____	1	2	3	4	5	106

20. How important will the following factors be to you in choosing a job?

Circle the number under the description that is most accurate for you. For example: If benefits are 'important to you' then you would circle the number '2' (under the 'important to you' column) in the benefits row.

	very important to you	important to you	neutral	not important to you	definitely not important to you	
Benefits (e.g. travel)	1	2	3	4	5	107
Responsibility	1	2	3	4	5	108
Promotion opportunities	1	2	3	4	5	109
Working with people	1	2	3	4	5	110
Challenge: Physical	1	2	3	4	5	111
Intellectual	1	2	3	4	5	112
Job security	1	2	3	4	5	113
Good income	1	2	3	4	5	114
Training	1	2	3	4	5	115
Social status	1	2	3	4	5	116
Variety in the work	1	2	3	4	5	117
Job satisfaction (enjoyment)	1	2	3	4	5	118
Independence	1	2	3	4	5	119
Being in charge	1	2	3	4	5	120
Chance for future employment	1	2	3	4	5	121

21. Rank the following occupational areas in order of preference
For example: The most preferred = 1, the second most preferred = 2, and the third most preferred = 3 and so on till the least preferred which will = 9 .
Place the numbers in the boxes provided

agricultural	122
professional & technical	123
sales	124
transport	125
clerical	126
armed services	127
factory worker/labourer	128
service	129
managerial	130

22. What job(s) have you seriously considered doing in the future?

_____   _____   131-132

_____   _____   133-134

_____   _____   135-136

VOCATIONAL PREFERENCE INVENTORY *by John L. Holland*

Blacken "Y" for Yes, "N" for No. For example: ▨ or ▨

1 Y N	11 Y N	21 Y N	31 Y N	41 Y N	51 Y N	61 Y N	71 Y N	81 Y N	91 Y N	101 Y N	111 Y N	121 Y N	131 Y N	141 Y N	151 Y N
2 Y N	12 Y N	22 Y N	32 Y N	42 Y N	52 Y N	62 Y N	72 Y N	82 Y N	92 Y N	102 Y N	112 Y N	122 Y N	132 Y N	142 Y N	152 Y N
3 Y N	13 Y N	23 Y N	33 Y N	43 Y N	53 Y N	63 Y N	73 Y N	83 Y N	93 Y N	103 Y N	113 Y N	123 Y N	133 Y N	143 Y N	153 Y N
4 Y N	14 Y N	24 Y N	34 Y N	44 Y N	54 Y N	64 Y N	74 Y N	84 Y N	94 Y N	104 Y N	114 Y N	124 Y N	134 Y N	144 Y N	154 Y N
5 Y N	15 Y N	25 Y N	35 Y N	45 Y N	55 Y N	65 Y N	75 Y N	85 Y N	95 Y N	105 Y N	115 Y N	125 Y N	135 Y N	145 Y N	155 Y N
6 Y N	16 Y N	26 Y N	36 Y N	46 Y N	56 Y N	66 Y N	76 Y N	86 Y N	96 Y N	106 Y N	116 Y N	126 Y N	136 Y N	146 Y N	156 Y N
7 Y N	17 Y N	27 Y N	37 Y N	47 Y N	57 Y N	67 Y N	77 Y N	87 Y N	97 Y N	107 Y N	117 Y N	127 Y N	137 Y N	147 Y N	157 Y N
8 Y N	18 Y N	28 Y N	38 Y N	48 Y N	58 Y N	68 Y N	78 Y N	88 Y N	98 Y N	108 Y N	118 Y N	128 Y N	138 Y N	148 Y N	158 Y N
9 Y N	19 Y N	29 Y N	39 Y N	49 Y N	59 Y N	69 Y N	79 Y N	89 Y N	99 Y N	109 Y N	119 Y N	129 Y N	139 Y N	149 Y N	159 Y N
10 Y N	20 Y N	30 Y N	40 Y N	50 Y N	60 Y N	70 Y N	80 Y N	90 Y N	100 Y N	110 Y N	120 Y N	130 Y N	140 Y N	150 Y N	160 Y N

Please transfer your Code Number here | | | |

The next group of questions is concerned with one particular career. That is the career of an Army Officer.

Remember there are no right or wrong answers.

INSTRUCTIONS

1. Please tick in the box beside your chosen answer.

    For example: How many sisters do you have?

    1 ☐
    2 ☑
    3 ☐

2. For some questions you will be required to print your answer in the space provided.

    For example: What sports do you play?

    ___Hockey___   ___Tennis___

1. Have you ever considered a career in the Army?

    Yes ☐ 1
    No ☐ 2

    137

2. How likely are you to seriously consider the career of an Army Officer?

    definitely will ☐ 1
    very likely ☐ 2
    possibly ☐ 3
    not likely ☐ 4
    definitely won't ☐ 5
    don't know ☐ 6

    138

3. What features about the career attract you?

    _____

    _____

    _____

    _____

    ☐ 139
    ☐ 140

4. What features about the career do you dislike?

    _____

    _____

    _____

    _____

    ☐ 141
    ☐ 142

5. Are there any other similar or related careers that you have considered?

    Yes ☐ 1
    No ☐ 2

    143

    If yes, please specify
    which career(s)

    _____

    _____

    _____

    ☐ 144-146

6. Do you consider yourself well informed about the career of an Army Officer?

    Yes ☐ 1
    No ☐ 2

    147

7. What image do you think the job of an Army Officer has among people of your age?

    _____

    _____

    _____

    _____

    ☐ 148
    ☐ 149

8. If you decided to choose the occupation of an Army Officer, how do you think the following people would react?

Circle the number under the description that is most accurate for you. For example: If your parents would be 'neutral' then you would circle the number '2' (under the 'neutral' column) of the parents' row.

	positive	neutral	negative	don't know	
parents/guardians	1	2	3	4	150
brothers/sisters	1	2	3	4	151
friends	1	2	3	4	152
teachers	1	2	3	4	153

9. Have you ever belonged to any of the following groups?

Air Training Corps	1	154
School Cadets	2	155
Sea Cadets	3	156
Sea Scouts	4	157
Boys/Girls Brigade	5	158
Boy Scouts/Girl Guides	6	159
none of the above	7	160

10. Have any family members or friends ever been members of the Armed Services?
(i.e. Navy, Airforce, Army or Territorial Force)

Yes	1	161
No	2	

If yes, state the person's relationship to you and the position they held in the Services

Person   Position

162-163

11. Do you recall seeing or hearing any advertising for the Army recently, particularly for Officer candidates?

Yes	1	164
No	2	

If yes, which of the following was it on?

TV	1	165
radio	2	166
newspaper/magazine	3	167
poster	4	168
pamphlet	5	169

What do you remember from this advertisement?

170

THE VOCATIONAL PREFERENCE INVENTORY .

Developed by John L. Holland, Ph.D.

This is an inventory of your feelings and attitudes about many kinds of work. Fill out your answer sheet by following the directions given below:

1. Show on your answer sheet the occupations which underline interest or appeal to you by circling Y for "Yes".

2. Show the occupations which you underline dislike or find uninteresting by circling N for "No".

3. Make no marks when you are undecided about an occupation.

1. Criminologist	51. Power Shovel Operator	101. Tree Surgeon
2. Private Investigator	52. Anthropologist	102. Editor of a Scientific Journal
3. Restaurant Worker	53. Marriage Counselor	103. Director of Welfare Agency
4. Detective	54. Credit Investigator	104. Accounting Machine Operator
5. Photoengraver	55. Television Producer	105. Salesperson
6. Market Gardener	56. Commercial Artist	106. Concert Singer
7. Physical Education Teacher	57. Wild Animal Trainer	107. F.B.I Agent
8. Humorist	58. Administrative Assistant	108. Probation Agent
9. Photographer	59. Physical Therapist	109. Astronaut
10. Diplomat	60. Cashier	110. College Professor
11. Airplane Mechanic	61. Surveyor	111. Long Distance Bus Driver
12. Meteorologist	62. Zoologist	112. Geologist
13. Sociologist	63. School Principal	113. Youth Camp Director
14. Bookkeeper	64. Court Shorthand Typist	114. Financial Analyst
15. Speculator	65. Hotel Manager	115. Real Estate Salesperson
16. Poet	66. Free-Lance Writer	116. Composer
17. Deep Sea Diver	67. Stunt Man/Stunt Woman(Movies)	117. Mountain Climber
18. Stock Clerk	68. Travelling Salesperson	118. Cook/Chef
19. Drama Coach	69. Professional Athlete	119. Stage Director
20. Lawyer	70. Flight Attendant	120. Ticket Agent
21. Fish and Wildlife Specialist	71. Construction Inspector	121. Locomotive Engineer
22. Biologist	72. Chemist	122. Botanist
23. High School Teacher	73. Playgroung Supervisor	123. Personal Counselor
24. Business Teacher	74. Bank Teller	124. Cost Estimator
25. Buyer	75. Business Executive	125. Publicity Director
26. Symphony conductor	76. Musical Arranger	126. Sculptor/Sculptress
27. Wrecker (Building)	77. Jockey	127. Explorer
28. Veterinarian	78. Interior Decorator	128. Kindergarten Teacher
29. Primary School Teacher	79. Airplane Pilot	129. Quality Control Expert
30. Physician	80. Banker	130. Judge
31. Auto Mechanic	81. Radio Operator	131. Machinist
32 Astonomer	82. Independent Research Scientist	132. Scientific Research Worker
33. Juvenile Delinquency	83. Clinical Psychologist	133. Psychiatric Case Worker
34. Budget Reviewer	84. Tax Expert	134. Payroll Clerk
35. Advertising Executive	85. Restaurant Manager	135. Sports Promoter
36. Musician	86. Journalist	136. Playwright
37. Prizefighter	87. Motorcycle Driver	137. Test Pilot
38. Post Office Clerk	88. Department Store Manager	138. Computer Programmer
39. Experimental Laboratory Engineer	89. Referee (Sporting Events)	139. Clothing Designer
40. Bartender	90. Postman/Postwoman	140. Truck Driver
41. Carpenter	91. Filling Station Worker	141. Electrician
42. Medical Laboratory Technician	92. Writer of Scientific Articles	142. Physicist
43. Speech Therapist	93. Social Science Teacher	143. Vocational Counselor
44. Certified Public Accountant	94. Inventory Controller	144. Auditor
45. Manufacturer's Representative	95. Master of Ceremonies	145. Sales Manager
46. Author	96. Portrait Artist	146. Cartoonist
47. Firefighter	97. Blaster (Dynamiter)	147. Racing Car Driver
48. Airline	98. Police Officer	148. Forester
49. Entertainer	99. English Teacher	149. Social Worker
50. Novelist	100. U.N. Official	150. Sales Clerk
		151. Funeral Director
		152. Mind Reader
		153. Architect
		154. Shipping and Receiving Clerk
		155. Criminal Psychologist
		156. Insurance Clerk
		157. Barber
		158. Debt Collector
		159. Ward Attendant
		160. Masseur/Masseuse

APPENDIX C

Table C1: VPI norms (in percentile ranks) for airforce and navy
officer applicants (Bryson, 1985).

REAL	INT	SOC	CONV	ENT	ART	CO	MF	ST	INF	AC
58	56	67	69	56	63	53	54	60	63	55