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Career Development and Job Satisfaction of Registered Nurses practising in community settings.

A thesis presented in partial fulfilment of the requirements for the degree of Master of Arts in Psychology at Massey University.

Julienne Mary Boddy
1976
A study of aspects of the career development and job satisfaction of registered nurses practising in community settings.

The study surveys the literature on career development and job satisfaction, deriving a new model of career development which allows for patterns of growth and nongrowth in a career; then applies this model to a particular work field - that of registered nurses practising in community settings, postulating that a pattern of nongrowth or occupational role integration (i.e. where the role incumbent ceases to discriminate between her experience of her job and her expectations of it), will be applicable to the majority of nurses in the population studied.

Four research hypotheses, designed to demonstrate career nongrowth, were tested:

(1) that there is no positive linear relationship between level of perceived autonomy and job satisfaction.

(2) that there is no positive linear relationship between level of perceived challenge and job satisfaction.

(3) where subjects report low job satisfaction the length of tenure is short and perceived autonomy and perceived challenge are low.

(4) where subjects report high job satisfaction, the length of tenure is long, age is correspondingly high, but perceived autonomy and perceived challenge approximate the means of the total sample.
The population selected for study was 'all registered nurses practising in community settings (with the exception of nurses in private employment, e.g. attached to nursing bureaus) in the Palmerston North Health District', the target population being located and the co-operation of nurses with the research proposal sought, in an initial letter to all likely employment agencies.

The short form of the Job Diagnostic Survey (Hackman & Oldham, 1974), from which measures of perceived autonomy, perceived challenge and job satisfaction were obtained, and an accompanying biographical data sheet, were administered by reply-paid mail to all nurses in the target population who agreed to participate in the study (not necessarily a representative sample of the target population), with an 88% response rate.

The results of the present study (based on N=63) support the hypotheses outlined above, indicating:

(1) that perceived autonomy does not differ between subjects grouped according to levels of job satisfaction;
(2) that there is a curvilinear relationship between perceived challenge and job satisfaction; and
(3) that age and length of tenure are positively related to job satisfaction where subjects report being highly satisfied.

The majority (75%) of nurses in the respondent sample report being either satisfied or highly satisfied in the absence of high levels of perceived challenge. Suggesting that high challenge in an occupational role is not a relevant job expectation for these nurses, and that little pressure for change in nursing roles may be expected from nurses in the
respondent sample.

The configuration of variables demonstrated in the results is consistent with the postulated pattern of career nongrowth or occupational role integration. A modal pattern of career development is postulated for the respondent sample, in which early occupational role integration occurs where there is perceived threat to a competent role identity, subsequent to career re-entry after a lengthy interval of nonpractice (median 11 years nonpractice for respondent sample).

A brief discussion of the implications of occupational role integration, for the introduction of change in community nursing practice in New Zealand, is included.
Preface.

Registered Nurses who are engaged in active practise as nurses in the community, are employed in a variety of organisational settings, and have differing, although overlapping roles. All have undergone a similar basic work socialisation experience – that of a hospital - based nurse training programme, although with the first intake of nurses graduating from technical institute nurse training programmes late in 1975, alternative basic work socialisation experiences are now available.

The question arises as to what factors influence subsequent career development and job satisfaction of registered nurses; in particular, those nurses who work in community settings? This question is the focus of the present study.

Researchers have examined variables relevant to career development and job satisfaction at two levels - factors within the individual, and job-related or organisational factors. Recent studies have focused on the interaction effects of individual needs with job or organisational characteristics.

Little attention has been paid in the career literature to a third level of analysis – that of the larger system within which the individual and the organisation function: in this case the health care system. Yet organisations, and the roles of individuals within those organisations, are impinged upon by changes or pressure for change occurring within the larger system. Witness the effects of the 1974 Government White Paper 'A Health Service for New Zealand', on individuals and organisations operating within the health care system in New Zealand.
It follows that the roles of community practice nurses will be influenced by pressures for change within the health care system. Three forces for change are evident in the New Zealand situation:

(a) increasing demands for health care, which exceed the available resources; and
(b) a new emphasis on preventive health care rather than curative medicine; and
(c) an alteration in the focus of health care delivery from hospital to community settings.

Expanded or extended roles for nurses practising in community settings, have been introduced as a means of coping with the increasing demand for health care - an example in New Zealand being the introduction of the Government subsidised 'practice nurse' scheme in rural, and later in urban areas. Similar role developments have occurred in the United Kingdom, and there is extensive North American literature on expanded or extended roles for nurses.

Thus the career development and consequent job satisfaction of community practice nurses are directly influenced by changes in the health care system.

It is necessary to limit the scope of the present study, which therefore focuses on individual and organisational variables which may influence the career development and job satisfaction of community practice nurses; but the discussion of the results in Chapter V examines the implications of the research findings for planned changes in the health care system.

1 a term coined by Kinross, Thomson, Pybus & Chick (1975), used in the present study to cover all registered nurses practising in community settings.
ACKNOWLEDGEMENTS:

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CHAPTER I

This chapter will review the literature on career development and job satisfaction (separate, although closely related fields of research), with the aim of deriving a model of career development which allows for patterns of growth or of nongrowth in the process of career development.

As Mansfield (1973) suggests, the concept career draws attention to the processes of change and development. At the same time, the idea of a career forces consideration of the individual and of the social systems through which he moves; and of the interaction between the individual and these social systems. Career, he suggests, is a two-sided concept. One side refers to the succession of more or less institutionalised positions through which the individual passes during his working life - the individual's objective career; the other side of the concept refers to the individual's personal assessment of himself, his job, and his career within the overall context of his working life - that is his subjective career.

Hall (1971) refers to this latter side in his definition of a career as "that particular sequence of experiences and personal changes, both unique and common, which a person goes through during the entire course of his life's work". (p.50).

Career development may be defined as the process of synthesizing some aspect of the individual's self identity with the demands of his career role. Research in this field is concerned with the match between the characteristics of the person (self concept, values, skills) and career role - in particular, the process by which the characteristics of the individual, and the role demands change, and increase in convergence over time.
Examples of the career developmental approach are found in Super's (1957), and Tiedeman and O'Hara's (1963) presentations of the career as a role - self concept synthesizing process; Hall and Nougaim's (1968) longitudinal analysis of successful and less successful managers; and Mansfield's (1973) discussion of career and individual strategies.

Hall (1971), outlines a model of career development utilizing the work of White (1959) on the need for a sense of competence, and Lewin's (1936) work on goal setting and psychological success.

The basic assumption of Hall's model is that an individual strives to increase his sense of self esteem. One important means of achieving a high level of self esteem is through the development of a competent self identity - that is, an identity containing a sense of personal competence (White 1959). The conditions under which personal effectiveness in a task situation can lead to increased self esteem have been discussed by Lewin (1936) and Arygris (1964). If (1) the individual sets a challenging goal for himself, and (2) he determines his own means of attaining that goal, and (3) the goal is relevant to his self concept, then he will experience psychological success upon attainment of that goal. This sense of personal success will lead, in turn, to an increase in self esteem.

Hall incorporates these conditions for psychological success in his model of career development. He postulates that working on an independently chosen, challenging task can lead to career subidentity growth, increased self esteem, increased confidence in, and commitment to the career area relevant to that task, and an increased probability that the person will set additional stretching goals for himself in the future.
A schematic representation is as follows:

initial commitment to career task → choice of task → independent effort → goal attainment → increased self esteem
- challenging goal - goal set independently - goal relevant to identity → increased motivation to choose future career tasks → increased commitment to career work → psychological success → career subidentity growth → self esteem

Figure I - 1. Hall's model of career development through psychological success.

Thus in Hall's model there are five conditions for psychological success: (1) a goal set by the person; (2) the path to the goal is set by the person; (3) the goal is perceived as challenging or difficult but attainable; (4) the goal is central to the person's self identity; and (5) the goal is perceived as being relevant to his career role. Hall suggests that the job characteristics most likely to provide conditions for psychological success are the amount of challenge in the job, and the amount of autonomy it provides.

The model outlined by Hall is essentially one of career growth, and as such, may not be applicable to all individuals. The need for a competent identity leads the individual to seek situations where his self esteem will be enhanced, and to avoid situations where it will be reduced. Indeed a person's orientation toward a particular situation is a function of his present level of self esteem. If it is high, he will
probably be most concerned with seeking success and
developing his competence (as illustrated in Hall's
(1971) model). If his self esteem is low, he may
be more oriented toward avoiding failure and protecting
his sense of competence. (Bennis, Schein, Steele,
and Berlew, 1968, p.214). This idea is supported by
Lewin's (1936) finding that the person most likely
to set a new, higher level of aspiration following a
successfully attained goal was the one with a
history of previous success. The man accustomed to
failure tended to "quit while he was ahead".

Korman's (1970) theory of work behaviour is
consistent with the theories outlined above, when he
postulates that the self concept of an individual in
relation to the task at hand is a determinant of the
outcome which he will seek to attain, and the outcomes
which will satisfy him (p.31). Thus, all other things
being equal, high-self-esteem persons are motivated to
perform well on a task in order to maintain their self
image of competence. Low-self-esteem persons are not
motivated to perform well since poor performance for
them is consistent with their image of relative
incompetence.

Thus it would seem that level of self esteem is
a moderator variable in career development.

Korman postulates three sources of self esteem:
(1) Chronic self esteem : a personality trait that
occurs relatively consistently across a variety
of situations;
(2) Task specific self esteem : the individual's
feelings of competence for a particular task;
(3) Socially influenced self esteem : a function of
others expectations of one's behaviour.

Korman suggests that socially influenced self
esteem is important from an organisational viewpoint.
Motivation to perform, and hence performance, should be a function of the extent to which the organisation provides an ego enhancing atmosphere. In particular, the degree of external control exerted by the organisation (negatively); the amount of decision making responsibility over one's job (positively); the tendency to use influence procedures based on internalisation of a new attitude rather than forced compliance (positively); and the extent to which the organisation has training and development policies which are ego enhancing, and which imply that individuals in the organisation are capable and competent to perform higher level job activities. (p.35).

In this statement, Koorman recognizes the influence of organisational factors on the individual employee, and hence on his career development and job satisfaction. In comparison, Hall's (1971) model of career development does not take account of organisational variables which influence the opportunities for psychological success for the individual. His model has an unstated assumption that organisational variables such as the level of autonomy and degree of challenge inherent in the occupational role, are sufficient to allow independent goal setting and effort toward it.

Thus it would seem that organisational characteristics are moderator variables in Hall's (1971) model of career development.

Organisational characteristics are also the focus of studies of job satisfaction. Most of the research in this area has been done by psychologists interested in work organisations. For example there is a growing body of literature in the field of job design research which examines the effects of job and organisational characteristics on the work motivation, job satisfaction and performance of individuals at work.
This research arose out of work simplification programmes introduced by scientific management in the 1930's, with the expectation that by simplifying jobs work could be carried out more efficiently, less skilled employees would be required, the control of management over production would be increased, and organisational profits enhanced.

In recent years, researchers have documented a number of unintended consequences of the trend toward work simplification (e.g. Argyris, 1964; Blauner, 1964; Davis, 1957; Guest, 1958; Herzberg, Mausner and Snyderman, 1959). These studies have shown that simple, routine, non-challenging jobs often lead to high employee dissatisfaction, to increased absenteeism and turnover, and to substantial difficulties in managing employees who work on simplified jobs. A number of researchers began experimentally enlarging jobs to determine whether or not worker productivity and satisfaction would increase if jobs were designed to be more meaningful and challenging to employees. Most of the job enlargement experiments reported in the literature (e.g. Biganne & Stewart, 1963; Davis & Valfer, 1965; Ford, 1969; Kilbridge, 1960; Pelisser, 1965) have been considered successful. However, most studies reported take the form of casestudies, and often lack experimental controls.

Hulin & Blood (1968) review the research literature on job enlargement extensively, and query the purported relationship between job enlargement and job satisfaction, pointing out the lack of methodological rigor in many of the studies of job enlargement reported in the literature. Hulin & Blood cite studies by Whyte (1955), Kennedy & O'Neill (1958), Katzell, Barrett & Parker (1961), Kendall (1963), Conant & Kilbridge (1965), and Blood & Hulin (1967), which indicate that the general conclusion regarding the effects of job enlargement on job
satisfaction is overstated, and may be applicable only to certain segments of the working population. They conclude that it is necessary to take into account the background of the workers in the study, and Hulin & Blood (1968) postulate a third variable - alienation of the workers from middle class work related values and norms - which moderates the relationship between job size (enlarged or restricted role) and job satisfaction.

A comparison may be made at this point between the job design thesis that job enlargement results in increased job satisfaction, and Hall's (1971) model of career development wherein the job or career role of the individual is enlarged or extended as a consequence of increased work motivation on the part of the individual.

Both models make a linkage between expanded role and job satisfaction, and it seems likely that both models may be applicable only to certain segments of the working population - those individuals who hold middle class work related values and norms (Hulin & Blood, 1968), or those individuals who value growth in career subidentity, and so manage their careers that they stimulate their own development (Hall, 1971).

One important difference between the theories, lies in the source of the change attempt. Job enlargement as a consequence of change introduced by management may have radically different outcomes from job enlargement arising from changes sought by the individual, hence the extensive literature on resistance to change, and the planning of change in organisations (e.g. Bennis, Benne & Chin 1970; Thomas and Bennis 1972; Zaltman, Kotler & Kaufman 1972).
A further criticism of much of the job design literature, is the absence of systematic conceptual or theoretical bases for many of the studies of job enlargement which have been reported.

Several theoretical bases for the study of organisational factors which influence individual motivation and job satisfaction have been developed in recent years, perhaps the most influential being the motivator–hygiene theory of Herzberg (Herzberg, Mausner & Snyderman, 1959; Herzberg, 1966). Herzberg outlined a two factor theory of satisfaction and motivation, in which he proposes that the primary determinants of employee satisfaction are factors intrinsic to the work that is done. He cites recognition, achievement, responsibility, advancement and personal growth in competence as factors he terms 'motivators' because he believes them to be effective in motivating employees to superior effort and performance. Dissatisfaction is seen as being caused by 'hygiene' factors that are extrinsic to the work itself. Thus Herzberg postulates that satisfaction and dissatisfaction are not opposite ends of a continuum, but are caused by different job factors. Herzberg's theory has prompted a great deal of research, including several studies in the field of nursing (e.g. White & Maguire 1973; Hines 1974), and has inspired several successful change projects involving the redesign of work (e.g. Ford 1969; Paul, Robertson and Herzberg 1969); but there are difficulties with the theory which influence its usefulness.

A number of researchers have been unable to provide support for the major tenets of the two-factor theory itself (e.g. Dunnette, Campbell & Hakel, 1967; Hinton 1968; King, 1970), and it has been suggested that the original dichotomization of aspects of the organisation into 'motivators' and 'hygiene' factors may have been largely a function of methodological artifact.
Moreover Herzberg's theory does not take into account individual differences in responsiveness to the motivating factors, the assumption being that the 'motivators' potentially could increase the work motivation of all employees. Lewin's (1936) work on psychological success and Korman's (1970) hypothesis that low-self-esteem persons are not motivated to perform well since poor performance for them is consistent with their image of relative incompetence, would contradict Herzberg's assumption.

Another theoretical approach to the study of work motivation and job satisfaction is the interactive approach, which examines the interaction between job or organisational characteristics and individual differences. This approach is based on the work of Turner and Lawrence (1965) who attempted a comprehensive study of the attitudinal and behavioural responses of employees to different aspects of their jobs. Turner and Lawrence developed measures of six 'Requisite Task Attributes' (variety, autonomy, required interaction, optional interaction, knowledge and skill required and responsibility), which they predicted to be positively related to employee satisfaction and attendance. A summary measure, the Requisite Task Attributes Index, was derived from the six measures and used to test the relationship between the nature of jobs and employee reactions to them. Expected positive relationships between the R.T.A. index and employee satisfaction and attendance, were found only for workers from factories located in small towns. For employees in urban work settings, satisfaction was inversely related to the scores of jobs on the R.T.A. index, and absenteeism unrelated to the index. Turner and Lawrence concluded that reactions to jobs high on the R.T.A. index were moderated by differences in the cultural background of the employees.
Subsequent research by Blood & Hulin (Blood & Hulin 1967; Hulin & Blood 1968) provides support for the idea that subcultural factors moderate individual reactions to job characteristics, and hence to opportunities for career development.

Hackman & Lawler (1971), in a study of employee reactions to job characteristics, suggested that employees should react positively to four 'core' dimensions (variety, task identity, autonomy and feedback) adapted from Turner and Lawrence's (1965) Requisite Task Attributes. Hackman & Lawler predicted and found that when jobs are high on the four 'core' dimensions, employees who desire higher order need satisfaction (i.e. obtaining feelings of accomplishment and personal growth) tend to have high motivation, high job satisfaction, be absent from work infrequently, and be rated by supervisors as doing high quality work.

Thus Hackman & Lawler (1971) postulate 'higher order need strength' as a moderator of the relationship between individual and job characteristics.

Findings similar to those reported by Hackman & Lawler (1971) have been reported by Brief & Aldag (1975), although the role of higher order need strength in moderating the job characteristics - employee reaction relationship was found to be more complex than that reported by Hackman & Lawler.

Wanous (1974) directly compared the usefulness of (a) higher order need strength; (b) endorsement of the Protestant work ethic; and (c) urban versus rural subcultural background as moderators of job effects. All three variables were found to be of some value as moderators, with the need-strength measure strongest and the urban-rural measure weakest.
Thus there is a growing body of evidence that individual variables moderate how people react to the complexity and challenge of their work - and hence how they respond to opportunities for career development.

Hackman & Oldham (1974 (a), 1974 (b), 1975) outline a theoretical model of work motivation, based on the earlier work of Turner & Lawler (1965) and Hackman & Lawler (1971). A diagramatic representation is as follows:

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<th>Core Job Dimensions</th>
<th>Critical Psychological states</th>
<th>Personal and Work outcomes</th>
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</thead>
<tbody>
<tr>
<td>Skill Variety</td>
<td>Experienced</td>
<td>High Internal work motivation.</td>
</tr>
<tr>
<td>Task Identity</td>
<td>Meaningfulness of the work.</td>
<td>High quality work performance.</td>
</tr>
<tr>
<td>Task Significance</td>
<td></td>
<td>High satisfaction with the work.</td>
</tr>
<tr>
<td>Autonomy</td>
<td>Experienced Responsibility for Outcomes of the work.</td>
<td>Low absenteeism and turnover.</td>
</tr>
<tr>
<td>Feedback</td>
<td>Knowledge of the actual results of the work activities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Employee Growth Need Strength.</td>
<td></td>
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**Figure I - 2** Hackman & Oldham's (1974) job characteristics model of work motivation.
Hackman and Oldham's theory proposes that positive personal and work outcomes (high internal work motivation, high job satisfaction, high quality performance and low absenteeism and turnover) are obtained when three 'critical psychological states' are present for a given employee (experienced meaningfulness of the work, experienced responsibility for the outcomes of the work, and knowledge of the results of the work activities). Hackman and Oldham claim that all three 'critical psychological states' must be present for the positive outcomes to be realised. The theory proposes that these 'critical psychological states' are created by the presence of five 'core' job dimensions (skill variety, task identity, task significance, autonomy and feedback) adapted from the work of Turner & Lawrence (1965) and Hackman & Lawler (1971).

Hackman & Oldham developed a Job Diagnostic Survey based on the theory outlined above. This instrument provides measures for each of the concepts outlined in the model, and generates a summary score purported to reflect the overall 'motivating potential' of a job in terms of the 'core' dimensions.

In line with earlier findings (Hackman & Lawler 1971) it is noted that a job high in 'motivating potential' may not affect all individuals in the same way, hence Hackman & Oldham include individual growth need strength in figure 2, as a moderator of the other theory-specified relationships.

What do the theories of Hall (1971), Herzberg (1966), Hackman & Lawler (1971) and Hackman & Oldham (1974, 1975) have in common? All are theories of work (or in the longer perspective 'career',) behaviour
which have an underlying philosophical rationale based on the fulfilment of needs as a source of motivation. Maslow's (1954, 1970) hierarchical classification of needs is perhaps the most widely used need classification system in the organisational and career literature.

Maslow outlines five levels of human needs:

(1) physiological needs; (2) safety needs; (3) belongingness and love needs (social needs); (4) esteem needs; and (5) the need for self actualisation.

According to Maslow, the five need categories exist in a hierarchy of prepotency such that the lower order or deficiency needs are inherently more important (prepotent) than the higher order or growth needs. This means that before any of the higher order needs will become important the lower order needs must be satisfied, and hence decrease in importance. However, Maslow postulates that for self actualisation, increased satisfaction leads to increased need strength rather than satiation.

Porter (1961), in a study of need fulfilment of bottom and middle order management, adapted Maslow's hierarchy of needs by adding the autonomy need and eliminating the physiological need category.

Porter's adapted hierarchy of needs is as follows:

(1) safety needs; (2) social needs; (3) esteem needs; (4) autonomy need; and (5) the need for self actualisation.

Alderfer (1969) outlines an alternative theory of needs when he postulates three levels of needs: existence, relatedness and growth. Alderfer's theory is consistent with that of Maslow, except that he hypothesizes that the lack of satisfaction of higher order or 'growth' needs (i.e. needs for esteem,
autonomy (Porter 1961) and self actualisation), can lead to lower order or 'deficiency' needs (physiological, safety and social needs) becoming more important. Thus the importance of any need is influenced by the satisfaction or frustration of the needs above and below it in the hierarchy. The possibility of lower order needs (e.g. social needs) becoming more important if higher order or 'growth' needs are frustrated, is highly relevant to studies of career development as it accounts for reported job satisfaction despite apparent 'non growth' in a career. All the theories of work or career behaviour outlined earlier, emphasize the role of higher order or 'growth' needs in determining career development and job satisfaction. Yet whilst lower order needs (physiological; safety and social needs) are relatively easily provided for within the organisational context, higher order needs (self esteem, autonomy and self actualisation) are not easily satisfied for the majority of workers. Neither are they necessarily desired, as Turner & Lawrence (1965) and Blood & Hulin (1968) clearly demonstrated. Thus job satisfaction may be reported in the presence or absence of career growth, and the job enlargement/job satisfaction relationship is again questioned.

Career growth or nongrowth.

As indicated earlier, Hall's (1971) model of career development is essentially one of career growth. In studies of career development there is a need also to look at individual and organisational factors which influence nongrowth in a career. Some of the factors which determine career growth or nongrowth have been derived in earlier discussion. For example, level of self esteem (Lewin, 1936; Korman, 1970), subcultural background (Turner & Lawrence, 1965; Blood & Hulin 1968), and higher order or growth need strength (Hackman & Lawler 1971; Hackman & Oldham 1974),
are individual characteristics postulated to moderate in the individual reaction - job characteristics relationship, and hence in career development.

Organisational characteristics such as level of autonomy and degree of challenge (Hall, 1971); the 'core' job dimensions postulated by Hackman and Lawler (1971), Hackman & Oldham (1974) to determine the 'motivating potential' of a job (i.e. skill variety, task identity, task significance, autonomy and feedback); and the 'motivators' postulated by Herzberg (1966), are relevant to studies of career growth or nongrowth, as their availability within an occupational role influences the individual's opportunities for career development.

Career growth as outlined in Hall's (1971) model of 'career development', involves a spiralling combination of career choice (any decision which will affect career outcomes), career subidentity growth and increased commitment to the career area. This process is most easily identified in the early stages of a career, as in Hall and Nougaim's (1968) study of successful and less successful managers after five years of employment.

It seems likely that later in a career, growth may continue to occur only for individuals who are more successful (have high self esteem), for individuals who have recently made transitions into a new career role, or for individuals who value growth (self actualisation) and so manage their careers that they stimulate their own development.

Hall suggests that over time, there is a tendency for career subidentity and the perceived career role to become more congruent, a hypothesis which is consistent with Gowler & Legge's (1972) postulated concept 'occupational role integration' – that is,
when an individual ceases to discriminate between his experience of his job and his expectations of it.

Gowler & Legge (1972) outline four components of an occupational role:

(1) job requirements - those rules and procedures which define the nondiscretionary component in the occupational role (a concept which would include Hall's (1971) autonomy and challenge; and the core job dimensions of Hackman & Lawler (1971), Hackman & Oldham 1974).

(2) job expectations - the set of ideas, feelings, values and beliefs which the employee brings to his occupational role (a concept which would include individual characteristics such as level of self esteem, growth need strength and subcultural background).

(3) job performance - all the activities engaged in by the employee in the space and time defined by his occupational role.

(4) job experience - the employee's retrospective thoughts, feelings and evaluations about his job performance (a concept which would include the satisfaction or frustration of needs, and hence career subidentity growth and commitment).

The individual's experience of his job may or may not be consistent with his job expectations and Gowler & Legge use Festinger's (1962) dissonance theory to explain the individual's behaviour in the situation. They suggest that as the level of occupational role integration (that is when the individual ceases to discriminate between his job experience and his job expectations) increases, the individual's ability to tolerate dissonance diminishes resulting in an unwillingness to modify or change his occupational role, and a diminished ability to perceive job opportunities which lie outside his actual work experience.
Occupational role integration is usually a relatively long term process, the result of physical and attitudinal aging, but may be accelerated by routinisation of job performance.

This process of occupational role integration would seem to be the reverse of Hall's cycle of career choice, subidentity growth and commitment, and to describe nongrowth in a career.

Argyris (1974) in a review of recent literature on job enlargement and job satisfaction, makes proposals consistent with the theory of Gowler and Legge when he comments:
The question arises as to what is the meaning of the response to a question such as "How satisfied would you say you are with your present job?" Relative deprivation theory would tell us that the individual will probably respond relative to other opportunities available to them. Most workers know that few opportunities exist for jobs that are significantly different and pay better and that, if found, would not require the painful experience of leaving one setting for a new one. Under these conditions dissonance theory would predict that one way to resolve the dissonance of deciding to remain on a job that is not what one prefers is to become satisfied with what one has. These two theories help provide explanations for the frequently observed fact that the greatest dissatisfaction on a routine job occurs during the first years. After three to five years, the individual becomes adapted and satisfied. (p.162).

Thus it seems likely that age (Gowler & Legge 1972) and length of tenure of occupational role (Gowler & Legge 1972), Argyris 1974) are additional factors relevant to the study of nongrowth in a career.
Utilising the career literature so far outlined, it is possible to derive an alternative model of career development which allows for the possibilities of growth and nongrowth in a career.

The model is outlined in Figure I-3.

In this model of career development, an individual makes an initial commitment to a career area, then chooses a particular occupational role, both decisions being moderated by individual factors such as the level of self esteem or the growth need strength of that individual.

Job performance within that occupational role is determined by the job expectations the individual holds, moderated by the job requirements or core job dimensions such as the level of autonomy and degree of challenge inherent in the job.

Performance of the job results in a subjective experience of the job, with outcomes being the level of job satisfaction and the growth (or stasis) of the career subidentity. Retrospective experience of the job performance influences the level of work motivation of the individual, which in turn influences his job expectations, although here again individual factors moderate the relationship.

Where the individual experiences dissonance between his experience of his job performance and his job expectations, he may attempt to reduce the dissonance by altering his job performance (e.g. by enlarging his role if the nondiscretionary component of the occupational role allows it), or he may choose to change his occupational role - either choice would lead to subidentity growth and increased commitment, as in the career growth cycle outlined by Hall (1971).
Figure I-3. Model of Career Development.
If neither job expansion nor change of role is perceived by the role incumbent as a viable alternative, then in line with the theories of Gowler & Legge (1972) and Argyris (1974), over time, the individual will modify his job expectations to become congruent with his job experience with resulting 'job satisfaction'.

In this state of occupational role integration (Gowler & Legge 1972), the individual is unable to perceive alternative occupational roles which are open to him, but outside his present work experience, and is resistant to changes in his existing role. This state exemplifies nongrowth in a career.
CHAPTER II

This chapter examines the model of career development in the context of a particular work field - that of Registered Nurses practising in the Community, with the aim of deriving Research Hypotheses to be tested.

Registered Nurses practising in the Community form a relatively homogeneous population for study, in several important aspects:

All have chosen 'Nursing' as a career, as distinct, for example, from 'Social Work' or 'Teaching'. To date, all have undergone a common work socialisation experience - that of a hospital-based nurse training programme, although with nurses graduating from Technical Institute - based nurse training programmes late in 1975, alternative work socialisation experiences are now available.

All the nurses in the population studied are working in the Community rather than a Hospital setting, and whilst they are employed in a variety of organisational settings, and have differing, although overlapping roles, these roles are approximately equivalent in terms of salary and status, and in terms of opportunities for promotion and career growth. It is a feature of Nursing in New Zealand as a whole, that there are relatively few opportunities for promotion and career growth within the field of nursing practice. Promotion is obtained by horizontal mobility into nursing administration or teaching. (Kinross, Chick, Thomson & Pybus, 1975 (a), (b)).

1 See Appendix A, for basic job descriptions.
How does the model of career development outlined in Figure I - 3 apply to Registered Nurses practising in Community settings?

An examination of the model suggests that the career development and job satisfaction of these Nurses would be influenced both by factors within the individual nurse, and by factors pertaining to the job or organisation.

Individual factors such as level of self esteem, subcultural background, and growth need strength are hypothesised to influence the process of career development at several states in the career cycle:

1. in the initial choice of a career area - 'Nursing', (in line with the 'self implementation' theory of Super, 1957); and
2. in the choice of an occupational role within Nursing; and
3. in the job experience / work motivation / job expectations relationship.

Because of the probable homogeneity of the population of Registered Nurses practising in Community settings in terms of (1) and (2) outlined above, it seems likely that individual variables such as level of self esteem, subcultural background and growth need strength, may not show significant differences within the population to be studied.

As it is not feasible within a study of this size to examine all aspects of the model of career development, it is assumed for the purposes of the present study that level of self esteem, subcultural background and growth need strength do not differ significantly within the population of Community practice nurses, and therefore these variables are not examined.

2 A term coined by Kinross et al (1975) to include all nurses practising in community settings.
A comparison of a sample of nurses with a sample of social workers or teachers, would permit an examination of the moderating influence of level of self esteem, subcultural background or growth need strength at site (1) - the selection of a career area (e.g. the study of Davis, 1969); whilst a comparison of a sample of community practice nurses with a sample of hospital based nurses (staff nurse to ward sister levels) may demonstrate the moderating effect of these variables at site (2) above - the selection of an occupational role. The moderating effect of these variables at site (3) above - that is, in the job experience / work motivation / job expectations relationship - assumes importance in the context of any change strategy aimed at expanding or extending the roles of nurses, for level of self esteem, subcultural background and growth need strength are all factors postulated in Chapter I to influence the individual's openness to change, and hence his response to job enlargement.

Age and length of tenure of an occupational role are other individual variables hypothesized in the model of career development (Figure I - 3) to moderate in the job experience / work motivation / job expectations relationship. It is suggested that age and length of tenure are positively related to job satisfaction where there is occupational role integration - that is where the individual nurse ceases to discriminate between her experience of her job and her expectations of it - and that this situation represents nongrowth in a career cycle. The relationships between age and job satisfaction, and length of tenure and job satisfaction of community practice nurses are examined in the present study.
Factors pertaining to the job, or to the employing organisation are also postulated to influence the career development and job satisfaction of community practice nurses. Hall (1971) suggests the level of autonomy and the degree of challenge inherent in an occupational role as factors which influence opportunities for career growth. Hackman and Oldham (1974 (a), (b), 1975) postulate five core job dimensions - task identity, skill variety, task significance, autonomy and feedback - as the components of a job which determine (via their influence on the 'critical psychological states', outlined in Chapter I) personal and work outcomes - level of work motivation, quality of work performance, job satisfaction and rates of absenteeism and turnover.

In the model of career development (Figure I - 3) these job-related factors and 'organisational structure', are postulated to intervene in the job expectations / job performance relationship. That is, the actual job requirements (or non discretionary component of a job) and organisational characteristics such as opportunities for promotion and quality of supervision, to a large degree influence whether the expectations the role incumbent has about her job, are fulfilled in her job performance and subsequent job experience.

How do these factors relate to the work field studied?
As earlier indicated, registered nurses practising in the community are employed in a variety of organisational settings, and have differing, although overlapping roles. Some are traditional roles of nurses in New Zealand, whilst other roles are relatively new in the New Zealand setting. Developments in nursing in New Zealand have in the past tended to follow the trends of nursing in the
United Kingdom and more recently, trends in North America. There is extensive North American literature on expanded roles for nurses using terms such as nurse practitioner (e.g. Brown, 1974) or clinical nurse specialist (e.g. Georgopoulos & Christman, 1970) to denote nurses working in expanded roles. In the last seven years there has been extensive literature on the role of the practice nurse in the United Kingdom (mostly written by doctors), which has served as an impetus for the introduction of 'practice nurses' in New Zealand.

Kinross et al (1975) discuss the implications of these trends for nursing in New Zealand.

Traditional roles of nurses practising in community settings in New Zealand, are those of 'public health nurse' (employed by the Department of Health, and by hospital boards), 'district' or 'domiciliary' nurse (employed by hospital boards), and 'plunket nurse' (employed by the Plunket Society – a voluntary, although Government-subsidised organisation).

Registered nurses have also traditionally been employed in medical practices as 'office nurses' or 'nurse-receptionists' (where the job requirements are primarily receptionist/clerical duties), but the role of 'practice nurse' (where the job requirements are primarily 'nursing' duties and delegated medical tasks) in medical practices, is a recent innovation.

Other less traditional roles fulfilled by nurses in the community are those of 'occupational health nurse' (located in industry, schools and institutions for tertiary education), and 'nurse-receptionists' employed in private medical laboratories.
Nurses also obtain 'private nursing' through Nursing Bureaus, however, these positions differ from the roles outlined above in that the tenure is short, and the line of delegated authority from doctors is less clear. This study is restricted to those occupational roles offering permanent employment, and where the nurse works in association with the medical profession.

Basic job descriptions for these occupational roles are included in Appendix A, however individual job requirements vary, as jobs are tailored to suit the perceived abilities of the role incumbent, or the perceived needs of the organisation. The latter aspect is especially noticeable in newer occupational roles such as the role of 'practice nurse' or the role of 'occupational health nurse', where there are multiple independent employing agencies, each with their own definition of their job requirements.

In this work field, where there are a variety of roles, some of which may be termed 'traditional', others 'innovative'; and where some roles are 'extended' and others 'restricted'; variables such as the level of autonomy and degree of challenge inherent in an occupational role, appear relevant to the study of career development and job satisfaction of community practice nurses. For reasons of research size and availability of data, it is not proposed to examine other personal and work outcomes such as work motivation, quality of job performance, or absenteeism and turnover rates, in the present study.

The variables thus far selected for study include age, length of tenure, level of autonomy, degree of challenge and job satisfaction.
The concept of nursing autonomy (and inherent accountability) is the focus of growing concern in North American nursing literature (e.g. Maas, 1973; Nehls, Hansen, Robertson & Manthey, 1974), and more recently in the New Zealand setting (e.g. Kinross et al 1975 (b)).

Traditionally nurses function with authority delegated from the medical profession both in the community and in hospital settings. However, in the hospital setting nurses work also within the constraints of a hierarchical nursing structure (as earlier indicated, promotion opportunities in nursing are in the fields of nursing administration or teaching), whereas in community settings the hierarchical nursing structure is either reduced (or more distant), or absent, according to the organisational setting. Therefore it seems likely that the majority of nurses practising in community settings perceive their roles as having high autonomy, in contrast to the hospital setting in which all community practice nurses to date have been trained. The question of nursing autonomy versus delegated authority (raised in recent nursing literature) is unlikely to be recognised as an issue for the majority of community practice nurses.

Kinross et al (1975 (b)) comment that it is difficult for most nurses to visualise roles for themselves in health care in which they have both accountability and responsibility; a comment which is substantiated by the finding from Hines (1974) study (outlined in the Board of Health Report No. 23) that for both full-time and part-time nurses, ineffective supervision and lack of recognition for 'doing a good job' rank highly as causes of job dissatisfaction, whereas lack of status and lack of prestige rank seventh and ninth respectively.
Definitions:

For the purposes of this research, Hackman and Oldham's (1974) definition of 'autonomy' is used. Thus autonomy is defined as the degree to which the job provides substantial freedom, independence and discretion of the employee in scheduling the work and in determining the procedures to be used in carrying it out.

Similarly, for the purposes of this research, 'challenge' has three components - skill variety, task identity and task significance (as postulated by Hackman & Oldham, 1974).

Skill variety is defined as the degree to which a job requires a variety of different activities in carrying out the work, which involves the use of a number of different skills and talents of the employee.

Task Identity is defined as the degree to which the job requires completion of a 'whole' and identifiable piece of work - that is, doing a job from beginning to end with a visible outcome.

Task Significance is defined as the degree to which the job has a substantial impact on the lives or work of other people - whether in the immediate organisation or in the external environment.

Thus challenge is the average of the summed scores of Skill Variety, Task Identity and Task Significance.

Enquiry into career development usually requires a longitudinal approach, focusing on career histories, critical experiences and their impact on the individual and her conception of her career role. However, in the time-limited context of this research, only a cross-sectional approach to the study of careers is
feasible.

Therefore, this study of registered nurses practising in community settings:

(a) postulates that nongrowth rather than continuing growth is the pattern of career development applicable to the majority of nurses who practise in community settings; and

(b) attempts to demonstrate nongrowth (or occupational role integration as conceptualised by Gowler & Legge, 1972) in the population of nurses studied.

Career growth or nongrowth:

As indicated above, it seems likely that beyond the early years of a career, nongrowth rather than continuing career growth occurs for the majority of community practise nurses in the study.

There are several reasons for this expectation of nongrowth:

(1) As indicated earlier, there are few opportunities for career growth in terms of promotion or specialisation in the field of nursing practice for the majority of nurses who practise in community settings.

(2) Although the discretionary component of some roles may allow for role expansion (or role restriction) according to the interests or self perceived abilities of the role incumbent, any role expansion beyond the basic job requirements which is initiated by the nurse, is unlikely to be recognised in terms of increased salary or status. Hence the basis of reward (promotion or remuneration) may be unrelated to actual success or failure in a job, but related rather to the 'experience' of the role incumbent (i.e. her years of service).
(3) The population is predominantly female, hence career cycles are likely to be interrupted or terminated by marriage and childrearing for many of the population.

On returning to the career area after a lengthy period of absence from the work force, the nurse may be more interested in protecting her sense of competence (White, 1959) than in setting new and challenging goals, the attainment of which would increase her self esteem (as hypothesized in Hall's (1971) model of career development). Thus social and esteem needs of the individual nurse may take precedence over needs for growth and self actualisation which are inherent in the process of continuing career growth beyond the early years of a career (Hall, 1971).

Because of the predominantly female composition of the population studied, and the expectation that many career cycles are interrupted by marriage and childrearing (an assumption which is investigated in the present study), the measure 'length of tenure' of an occupational role replaces the concepts 'early in a career' and 'late in a career' in any discussion of occupational role integration. For the typical career pattern may prove to be one of early career growth, then an absence from the career area, followed by career re-entry which, depending on the length of career absence, may well be experienced by the nurse as the onset of a 'new' career, with its accompanying dissonance between job expectations and job experience.

Of the variables selected for study, age and length of tenure are individual variables, autonomy and challenge are job characteristics, and job satisfaction is an 'outcome' variable (and an indirect
measure of the dissonance between job experience and job expectations).

For the purposes of this study, a patterning of these variables is postulated as follows:

Job dissatisfaction is reported where the length of tenure of a job is short, and the job is perceived as being low in autonomy and/or low in challenge (i.e., the dissonance between job experience and job expectations is high). Age does not differ significantly from the population mean.

As the length of tenure increases, the dissonance between job experience and job expectations is resolved either by a change of occupational role, or by altering the job experience/job expectations relationship such that job expectations are lowered, and the nurses perception of the job characteristics alters (scores on autonomy and challenge are closer to the mean of the population).

Thus where job satisfaction is high, the length of tenure of a job is long, and perceived challenge and perceived autonomy approximate the population mean for these variables. Age is significantly higher than the mean age for the population.

- this configuration of variables is consistent with a pattern of nongrowth or occupational role integration.
Research Hypotheses:

This study proposes the following hypotheses:

(1) that there is no positive linear relationship between level of perceived autonomy and job satisfaction.

(2) that there is no positive linear relationship between level of perceived challenge and job satisfaction.

(3) where subjects report low job satisfaction, the length of tenure is short and perceived autonomy and perceived challenge are low.

(4) where subjects report high job satisfaction, tenure is long, age is correspondingly high, but perceived autonomy and perceived challenge approximate the means of the total sample.
CHAPTER III

RESEARCH METHODOLOGY.

This Chapter describes the subjects and locale selected for the present study, the measuring instrument used, and the data collection procedure.

(1) Subjects and locale:

The population selected for study was 'all registered nurses (i.e. those nurses having completed a three year training programme) employed in community settings in the Palmerston North Health District' - an area which was defined as 'that area bounded by Waikanae in the South, the Rangitikei River in the North West, Dannevirke in the North East and Pahiatua in the East'.

An area sample was chosen for several reasons:
(a) an area sample is in line with the concept of a 'health region' proposed in the 1974 Government White Paper on Health, the area chosen being roughly comparable with the proposed Rangitikei health region (with the exception of the area between the Rangitikei River and the City of Wanganui).
(b) the choice of an area sample enables an examination of the resources in terms of nursing personnel available in the field of community health care within a health region, and of the diversity of occupational roles and organisational settings within which these nurses function.
(c) the choice of an area sample facilitated data collection.
In order to ascertain where registered nurses were employed within the health district chosen for study, a brief letter was sent to all agencies which might employ registered nurses (including general medical practitioners, medical specialists in private practice, a private medical laboratory, the Department of Health, Hospital Board, Plunket Society and educational institutions and industries),
(a) requesting information as to whether or not the agency employed any registered nurses; and
(b) requesting the co-operation of registered nurses employed in these agencies, with the proposed research.

Of one hundred letters sent, an 85% response rate was received, with only 15 'agencies' (either general practitioners in solo practices, or medical specialists in private practice) failing to acknowledge the letter. Based on the high proportion (80%) of returns received from general practitioners in solo practices and specialists in private practice, which indicated that they did not employ any registered nurses, a decision was made not to systematically follow up the remaining 15 non returns.

On the basis of this initial survey, the population of registered nurses practising (i.e. in active employment as a registered nurse) in community settings within the Palmerston North Health District as at 31st March, 1975, was estimated to be 83. The distribution of these nurses is outlined in Table III -1.

The classification 'office' or 'practice' nurse was made by the role incumbent according to her job designation, and whether she perceived herself as having primarily receptionist/clerical, or primarily 'nursing' duties.
### TABLE III - 1

Distribution of registered nurses by occupational roles and Employing Agencies, in target population.

<table>
<thead>
<tr>
<th>Occupational Role</th>
<th>Employing Agency</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>District Nurse</td>
<td>Hospital Board</td>
<td>12</td>
</tr>
<tr>
<td>Public Health Nurse</td>
<td>Hospital Board</td>
<td>5</td>
</tr>
<tr>
<td>District / Public Health Nurse</td>
<td>Hospital Board</td>
<td>3</td>
</tr>
<tr>
<td>Public Health Nurse</td>
<td>Department of Health</td>
<td>8</td>
</tr>
<tr>
<td>Occupational Health Nurse</td>
<td>Industry</td>
<td>4</td>
</tr>
<tr>
<td>Occupational Health Nurse</td>
<td>Educational Institutions</td>
<td>7</td>
</tr>
<tr>
<td>Plunket Nurse</td>
<td>Plunket Society</td>
<td>10</td>
</tr>
<tr>
<td>Practice Nurse</td>
<td>Group Medical Practice</td>
<td>14</td>
</tr>
<tr>
<td>Practice Nurse</td>
<td>Medical Practice</td>
<td>5</td>
</tr>
<tr>
<td>Office Nurse</td>
<td>Medical Practice</td>
<td>10</td>
</tr>
<tr>
<td>Nurse Receptionist</td>
<td>Medical Laboratory</td>
<td>5</td>
</tr>
</tbody>
</table>

Total N = 83
The occupational role 'district/public health nurse' indicates a small group of nurses employed by Hospital Boards who undertake both public health and domiciliary duties in rural areas.

Of these 83 nurses known to be practising in the Palmerston North Health District (i.e. the target population for the present study), eight practice nurses declined to participate in the study, and one organisation (Post Office) declined permission for its occupational health nurse to participate in the study. The practice nurses who declined to participate were employed in three group medical practices (two other practice nurses from one of these practices did participate in the study), and all gave 'pressure of work' as the reason for non-participation. Thus the present study cannot claim to be fully representative of the subpopulation of practice nurses, as it contains a sampling bias, the effects of which are not known.

One health agency (the Department of Health) withheld permission for its nurses to participate until the district officer of health approved the full research proposal, including the questionnaire to be used - a response which in itself raises questions as to nursing autonomy.

Nurses in private employment (e.g. those attached to Nursing Bureaus) have been excluded from the present study for reasons outlined in Chapter II.
The Survey Instrument:
The instrument used for data collection was the short form of the Job Diagnostic Survey developed by Hackman and Oldham (1974 (a), (b), 1975), accompanied by a biographical data sheet which provided demographic data (e.g., age, marital status, sex), and additional information related to the career development of each individual nurse. 1

The respondent's name was not recorded, nor the actual employing agency, except where there was only one employing agency in the employment category stated (e.g., Department of Health, Hospital Board, Plunket Society, Medical Laboratory).

The Job Diagnostic Survey is described by Hackman and Oldham (1975) as an instrument designed to be used in the diagnosis of the characteristics of jobs prior to their redesign, and in research and evaluation activities aimed at assessing the effects of redesigned jobs on the employees who perform them.

The instrument is based on a specific theory of work motivation which is outlined in Chapter I (Figure I - 2) and provides measures of (a) objective job dimensions,
(b) individual psychological states resulting from these job dimensions,
(c) affective reactions of the employees to the job and organisational setting, and
(d) individual growth need strength.

1 See Appendix B for the questionnaire and biographical data sheet.
The instrument was standardized in the United States, on 658 employees working on 62 different jobs in 7 organisations. The jobs were highly heterogeneous, both industrial and service organisations were included in the sample, and both rural and urban settings. Fifty nine percent of the respondents were male; the median age was 29 years.

Hackman and Oldham (1974 (a), (b)) report extensively on the reliability and validity of the instrument. Their findings are summarized in Hackman and Oldham's (1975) report on the Job Diagnostic Survey.

Overall, the data outlined show that the Job Diagnostic Survey has satisfactory psychometric characteristics, and that the variables it taps relate generally as predicted to external criteria. Internal consistency reliabilities are generally satisfactory, and the items which compose the scales show adequate discriminant validity. Ratings of job characteristics by employees, supervisors and outside observers show a moderate level of convergence for most of the job dimensions. Variances of the scales are generally satisfactory, although some JDS scales show greater sensitivity to between job differences than do others. Relationships among the JDS scales are generally positive, indicating either that the concepts tapped by the instrument, or the methodologies used to gauge these concepts (or both) are not completely independent. In general, theory-specified relationships among JDS scales (and between these scales and behaviourally based dependent measures) were in the predicted direction.

The short form of the Job Diagnostic Survey used in the present study is designed primarily as a follow up instrument. Some scales in the JDS are not included in the short form; others are measured with fewer
items. The scales measuring the job dimensions themselves, however, are measured identically as in the full Job Diagnostic Survey.

For the purposes of the present study, only the measures of four job dimensions - autonomy, task identity, skill variety and task significance, and the measure of general satisfaction, were required from the JDS. Thus the short form of the instrument provided the measures needed, with the advantage that the questionnaire required only ten minutes to complete (compared with twenty five minutes for the full JDS) - an important factor when using a mailed survey technique, and one which probably contributed to the high rate of returns. The whole of the short form of the JDS was used, as the omission of scales not required would have grossly altered the format of the questionnaire, and altered its face validity.

Although the design of the JDS is such that the respondent is asked to separate her affective responses to the job, from her description of the 'objective job dimensions', the measures obtained are nevertheless 'perceived' job dimensions. It can be argued that when the intent is to predict or understand employee attitudes or behaviour at work, employee ratings of the job dimensions should be used, since it is the employee's own perception of the objective job that is causal of her reactions to it. Hackman and Oldham (1974) found that the five core dimensions were most highly intercorrelated for observers, next most for supervisors (both groups using a Job rating form with job dimension measures identical to the JDS), and least intercorrelated for the employees themselves - a finding which suggests that the 'closer' the rater is to the job, the better able she is to differentiate among the different job dimensions - a further justification for using employee ratings
of the job dimensions. Nevertheless, Hackman and Oldham recommend that where job redesign activities are to be planned on the basis of the job dimensions scored, that job descriptions obtained using the JDS be supplemented by independent assessments made by individuals who are not incumbants of the focal job. A Job Rating Form has been designed for this purpose.

In the context of the present study where the aim was to study aspects of career development and job satisfaction of nurses practising in community settings, the ratings of the employees themselves are used, but the measures are designated as 'perceived autonomy', and 'perceived challenge' (skill variety + task identity +task significance) \( \div 3 \).

The items in each measure and the scoring methods, are outlined in the scoring key in Appendix C.

(3) Data Collection Procedure:

Owing to personal circumstances, the data collection process was delayed until November, 1975, when questionnaires, each with an accompanying letter and a stamped addressed return envelope, were forwarded to all those nurses who had agreed in March to participate in the study.

Where relatively large numbers of nurses were employed by one agency (Hospital Board, Department of Health and Plunket Society), the questionnaires were distributed through the agency, although completed questionnaires were returned directly to the researcher. Each of these agencies had increased their staff over the eight month interval between initial contact and actual data collection, hence the numbers of nurses from these agencies in the 'respondent sample' which
forms the basis of the present study, were larger than the numbers from these agencies in the 'target population' outlined in Table III - 1.

Of 78 questionnaires distributed, 65 were returned by mail, of which 60 questionnaires were sufficiently complete for use. Three questionnaires were returned unanswered as the nurses had ceased employment (one practice nurse, one office nurse, one occupational health nurse - industry); and two questionnaires were incomplete (one plunket nurse, one office nurse). The questionnaires from the Medical Laboratory (N=5) were lost in the mail and were readministered in late January (three of five being completed).

One late return (public health nurse) was not used in the present study, as the available data had been coded and results analysed prior to its arrival.

Thus of seventy eight questionnaires distributed, seventy one were returned, of which sixty three are included in the results outlined in Chapter IV. This gives an overall return rate of 83%.

The composition of the respondent sample on which the present study is based, is outlined in Table III - 2.

Problems in the data collection process included:

(a) the delay in actual data collection, which resulted in changes in the 'target population' to be studied, as new nurses were employed and others resigned. It seems likely that the estimate of the target population in March (Table III - 1) was an inaccurate estimate of the target population of registered nurses practising in community settings in the Palmerston North Health District in November.
## Table III - 2

**Distribution of Registered Nurses by Occupational Roles and Employing Agencies, in respondent sample.**

<table>
<thead>
<tr>
<th>Occupational Role</th>
<th>Employing Agency</th>
<th>N</th>
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<tbody>
<tr>
<td>District Nurse</td>
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<td>Public Health / District Nurse</td>
<td>Hospital Board</td>
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</tr>
<tr>
<td>Occupational Health Nurse</td>
<td>Industry</td>
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<td>Occupational Health Nurse</td>
<td>Educational Institutions</td>
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<tr>
<td>Plunket Nurse</td>
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<td>Practice Nurse</td>
<td>Medical Practices</td>
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<tr>
<td>Office Nurse</td>
<td>Medical Practices</td>
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</tr>
<tr>
<td>Nurse Receptionist</td>
<td>Medical Laboratory</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total N = 63**
(b) the non-participation of eight practice nurses employed in group medical practices, resulted in a sample which was not fully representative of that subgroup of registered nurses practising in community settings.

(c) the small numbers of subjects in some occupational groups made statistical analysis of the data in terms of occupational groups inappropriate.

Because of the inherent sampling biases and the small numbers of subjects in some occupational subgroups in the present study, only a descriptive approach to the comparison of occupational groups in the respondent sample is included; statistical analysis of the data being restricted to the examination of the respondent sample as a single sample.
CHAPTER IV

RESULTS.

This chapter initially examines characteristics of the respondent sample of registered nurses practising in community settings, which are relevant to the study of career development and job satisfaction; then tests the hypotheses outlined in Chapter II.

A. Descriptive Analysis of Data:

There are a number of demographic characteristics which are relevant to the study of career development of registered nurses practising in community settings:

(1) **Sex:**
All the respondents in the sample were female, a finding which may not hold for the population of registered nurses practising in community settings.

(2) **Marital Status:**
as outlined in Table IV - 1.

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>43</td>
<td>68.25</td>
</tr>
<tr>
<td>Widowed</td>
<td>5</td>
<td>7.94</td>
</tr>
<tr>
<td>Single</td>
<td>13</td>
<td>20.64</td>
</tr>
<tr>
<td>Unstated</td>
<td>2</td>
<td>3.17</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>63</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Thus 76.19% of the respondent sample are or have been married. Of the 13 'single' nurses, 6 are plunket nurses, 3 are public health and 2 are district nurses, (all traditional roles for nurses), whilst 2 are practice nurses.

(3) **Age:**

The median age of the respondent sample was 46 years. Three respondents did not state their actual ages (one indicated 40+ and two indicated 50+) hence the mean age (based on N=60) was 43.62 years, with a standard deviation 11.81.

The distribution of ages in the respondent sample is outlined in Figure IV - 1.

The minimum age for registration as a nurse is twenty years. The comparatively small numbers of nurses (20% of the respondent sample) practising in community settings in the first ten years following registration may be attributable to a variety of factors - for example, a tendency for newly registered nurses to remain in the hospital setting in which they were trained, or a period of non practice due to overseas travel, or to marriage and family commitments. The present study does not investigate these possibilities. Notable, however, in Figure IV - 1 is the absence of respondents in the 30 - 34 year age group - a finding which is consistent with the postulated interruption of career cycles in nursing due to marriage and child rearing.

Of those married nurses aged 35 years and over in the respondent sample (N=37), 30 nurses (81%) reported lengthy periods away from nursing practice. The periods of nonpractice ranged from 3 years to 24 years, with the median interval of nonpractice being 11 years.
Figure IV - 1. Distribution of Ages in the respondent sample.

Figure IV - 2. Distribution of Length of Tenure in the respondent sample.
(mean period of nonpractice 12.14 years) - a finding which again reflects the influence of marriage and childrearing on career development.

(4) **Length of Tenure:**
The median length of tenure of an occupational role in the respondent sample was 3 years (mean length of tenure 5.68 years). The frequency distribution of length of tenure in the respondent sample is outlined in Figure IV - 2.

The comparatively short median tenure for the respondent sample may reflect a trend toward frequent job changes (high lateral mobility) amongst community practice nurses, or it may be a function of the lengthy periods of nonpractice experienced by the majority of nurses (81% of those married nurses, aged 35 years and over) in the study.

An examination of the biographical data, in particular the previous work history and the periods of nonpractice, for each nurse in the respondent sample, suggests that whilst lateral mobility associated with short tenure is a feature in the first ten years post registration, nurses in the respondent sample who returned to the career area after a lengthy period of nonpractice exhibit relative job stability - a finding which is consistent with the idea that a nurse, on returning to the career area after a period of nonpractice, may be more interested in protecting her sense of competence than in setting new and challenging goals, the attainment of which would increase her self esteem, (as in Hall's 1971, model of career development).
Part-Time or Full-time employment:
Of 63 nurses in the respondent sample, 40 nurses worked full-time (63.5%) whilst 23 nurses worked part-time (36.5%). The relatively high percentage of part-time employment reflects the predominantly female population in the field of nursing practice.

However, an examination of part-time employment in the context of occupational groups suggests that some occupational roles in the field of community nursing practice are more open to part-time employment than others. For example, in the respondent sample on which the present study is based, the ratio of part-time to full-time nurses in each occupational role is outlined in Table IV - 2.

**TABLE IV - 2.**
Ratio part-time to full-time Employment by Occupational Role.

<table>
<thead>
<tr>
<th>Occupational Role</th>
<th>Part-time</th>
<th>Full-time</th>
</tr>
</thead>
<tbody>
<tr>
<td>District Nurse a</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Public Health Nurse</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>Occupational Health Nurse</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Plunket Nurse</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Practice Nurse</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Office Nurse</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Nurse Receptionist / Laboratory</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

| Total                             | N = 23    | N = 40    |

a includes nurses with dual district/public health roles.
Thus the availability of part-time work may also influence the choice of an occupational role, as may the availability of daytime employment rather than shift work, common in the hospital setting.

Job Satisfaction:

How satisfied are the respondent sample of nurses with their jobs? A frequency distribution of levels of reported job satisfaction in the respondent sample, is outlined in Figure IV - 3.

Figure IV - 3 clearly illustrates that the majority of nurses in the respondent sample report being satisfied (47.52%) or highly satisfied (27%) with their jobs, hence a low rate of staff turnover, and little pressure for change in nursing roles in the overall system of community health care may be expected from nurses practising in community settings.
Figure IV - 3. Distribution of job satisfaction scores in the respondent sample.
Perceived Job Characteristics:

How do the nurses in the respondent sample perceive their jobs?

As predicted in Chapter II, the majority of nurses in the respondent sample perceive their jobs as having a high degree of autonomy - 50.79% score 6 and 25.4% score 7 on a 1 to 7 scale.

The frequency distribution of levels of perceived autonomy in the respondent sample is outlined in Figure IV - 4.

In contrast, only one nurse (a public health nurse employed by the Hospital Board) perceives her job as highly challenging (i.e. score 7 on a 1 - 7 scale), whilst 27 nurses (42.9%) perceive their jobs as challenging (score 6 on a 1 - 7 scale), and 25 nurses (39.68%) perceive their jobs as slightly challenging (score 5 on a 1 - 7 scale).

The frequency distribution of levels of perceived challenge in the respondent sample is outlined in Figure IV - 5.

The finding that the majority (75%) of the respondent sample are either satisfied or highly satisfied with their occupational roles, in the absence of high levels of perceived challenge in those roles, suggests that 'challenge' is not experienced as an important variable in determining job satisfaction, at least for the respondent sample of community practice nurses; this finding raises questions as to the validity of the job enlargement thesis that expanding or extending a job (to make it more meaningful or challenging to employees) results in increased job satisfaction; but the finding is consistent with the postulated state of nongrowth in career cycles for the majority of nurses in the present study.
Figure IV - 4. Distribution of perceived autonomy scores in the respondent sample.

Figure IV - 5. Distribution of perceived challenge scores in the respondent sample.
The means, medians and standard deviations of the respondent sample with respect to the characteristics examined in the present study (age, length of tenure perceived autonomy, perceived challenge and job satisfaction) are outlined in Table IV-3.

**TABLE IV-3.**
Summary of mean, median and standard deviations of characteristics of respondent sample.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Respondent Sample (N=63)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mean</td>
</tr>
<tr>
<td>Age (in years)</td>
<td>43.62(a)</td>
</tr>
<tr>
<td>Length of tenure (in years)</td>
<td>5.68</td>
</tr>
<tr>
<td>Perceived autonomy</td>
<td>5.92</td>
</tr>
<tr>
<td>Perceived challenge</td>
<td>5.24</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>5.76</td>
</tr>
</tbody>
</table>

\(a\) based on N=60 (3 ages unstated - 40+ , 50+, 50+)

\(b\) S.D. not calculated as data grossly skewed.

Table IV-4. compares the mean (or median) scores on the variables selected for study across occupational groups; and between occupational groups and the total respondent sample.

The median, rather than the mean age is included, as not all subjects accurately stated their ages, hence the 'average' age is under-estimated when three subjects are not included (1 at 40+ and 2 at 50+).

The median, rather than the mean, length of tenure, is used, as the data is grossly skewed, as illustrated in Figure IV-2.
<table>
<thead>
<tr>
<th>Occupational Role</th>
<th>N</th>
<th>age mean</th>
<th>age median</th>
<th>tenure mean</th>
<th>tenure median</th>
<th>perceived autonomy mean</th>
<th>perceived challenge mean</th>
<th>job satisfaction mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondent Sample</td>
<td>63</td>
<td>46</td>
<td>3</td>
<td>5.92</td>
<td>5.24</td>
<td>5.76</td>
<td></td>
<td></td>
</tr>
<tr>
<td>District Nurse</td>
<td>10</td>
<td>47</td>
<td>3.5</td>
<td>6.40</td>
<td>5.20</td>
<td>6.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DN/PH Nurse</td>
<td>3</td>
<td>47</td>
<td>6.5</td>
<td>6.33</td>
<td>6.0</td>
<td>6.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Health Nurse</td>
<td>12</td>
<td>42</td>
<td>2.5</td>
<td>5.83</td>
<td>5.25</td>
<td>5.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupational Health Nurse</td>
<td>6</td>
<td>45</td>
<td>2.75</td>
<td>6.17</td>
<td>4.67</td>
<td>5.33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office Nurse</td>
<td>7</td>
<td>46</td>
<td>4.0</td>
<td>5.43</td>
<td>5.29</td>
<td>6.29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Practice Nurse</td>
<td>10</td>
<td>37</td>
<td>1.5</td>
<td>6.10</td>
<td>5.20</td>
<td>5.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plunket Nurse</td>
<td>12</td>
<td>54.5</td>
<td>6.5</td>
<td>6.08</td>
<td>5.75</td>
<td>6.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse Receptionist (Medical Laboratory)</td>
<td>3</td>
<td>42</td>
<td>0.5</td>
<td>3.67</td>
<td>3.67</td>
<td>4.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
An examination of the data outlined in Table IV - 4 shows that the median ages of two occupational groups (practice nurses and plunket nurses) differ significantly from the median age of the respondent sample.

The subgroup of practice nurses in the present study is a biased sample, in that eight practice nurses known to be practising in the Palmerston North Health District, declined to participate in the study, thus differences between the practice nurse subgroup and the respondent sample as a whole, must be interpreted with caution as they may be attributable primarily to sampling bias.

However, the higher median age of the plunket nurses (54.5 years as compared with 46 years for the respondent sample), accompanied by a median tenure longer than the median tenure of the respondent sample as a whole (6.5 years as compared with 3 years), suggests that this subgroup of nurses is qualitatively different from the respondent sample of nurses practising in community settings.

An examination of the biographical data sheets for the respondent sample reveals that 7 of the 12 plunket nurses included in the study have completed a postbasic training in midwifery, and all have completed a one year postbasic training course for plunket nurses. Hence in terms of postbasic education, these nurses differ from the majority of the respondent sample (only 23% of the respondent sample, excluding plunket nurses, having undertaken any study beyond the three year basic training course which leads to registration as a nurse). Approximately half of the plunket nurses in the respondent sample are unmarried (5 of 12, with 1 marital status unstated), and these plunket nurses form the largest subgrouping of 'single' nurses in the study (i.e. 5 of 13 single nurses in the present study are plunket nurses.)
The combination of high median age with median length of tenure greater than 6 years, and mean job satisfaction greater than 6 on a 1 - 7 scale, is a configuration of variables suggestive of occupational role integration - a likely outcome where the nurses have a clear role identity, having undergone a specific post basic work socialisation experience to become a 'Plunket Nurse'.

By comparison, no other subgroup of nurses in the respondent sample undergoes a comparable postbasic work socialisation experience. Whilst district and public health nurses have 'basic job descriptions' (as outlined in Appendix A), and 'in-service' or other short 'training' experiences from which to develop a role identity, occupational health nurses, office and practice nurses, tend to work in relative isolation from other nursing personnel, as they are employed in a multiplicity of organisational settings, each organisation having its own perception of the nurse's role.

This relative isolation from other nursing personnel (in sharp contrast to the hierarchical nursing structure in the hospital setting in which all nurses in the present study were trained), may account for the patterning of variables evidenced by occupational health nurses in the respondent sample. These nurses reported high perceived autonomy (mean greater than 6 on a 1 - 7 scale), yet relatively low perceived challenge (mean 4.67) and consequent mean reported job satisfaction in the 'slightly satisfied' range (mean 5.33).
Indeed 3 of the 6 occupational health nurses in the respondent sample perceived their role to be that of an office nurse (i.e. primarily receptionist/clerical duties). Similarly 3 of the 10 practice nurses in the respondent sample indicated a high receptionist/clerical component in their duties by circling office and practice nurse job designations on the biographical data sheets. This raises the question as to whether or not there are significant differences between the office and practice nurse subgroups in the respondent sample, as would be expected from the basic job description for these roles (included in Appendix A).

The role of an office nurse is a 'restricted' role with primarily receptionist/clerical duties, while the role of a practice nurse theoretically entails a high component of 'nursing' duties and/or delegated medical tasks. A comparison of the means of the response data for office and practice nurses outlined in Table IV - 4 provides an interesting configuration of variable means.

The office nurse subgroup, with a median tenure longer than that of the practice nurse subgroup, reports mean levels of perceived autonomy and perceived challenge approximating those of the respondent sample means, but reports relatively high job satisfaction (greater than score 6 on a 1 - 7 scale). In comparison, the practice nurse subgroup, with short tenure (the role of practice nurse was introduced in New Zealand in 1969), report a mean level of perceived autonomy higher than the mean reported by office nurses with perceived challenge approximating the mean of the respondent sample. Yet the reported mean level of job satisfaction of the practice nurses subgroup is less than the mean of the respondent sample (and less than the mean of the office nurse subgroup).
Thus while the groups appear qualitatively different, the difference in mean job satisfaction between the two groups is not in the expected direction if the job enlargement thesis, that expanded roles result in increased challenge and consequent increased job satisfaction for the role incumbent, is accepted. However, the obtained results are consistent with the hypothesis of occupational role integration, where in the higher mean job satisfaction score of office nurses is explained in terms of the longer median tenure of that subgroup, whilst the lower mean job satisfaction score reported by practice nurses is attributed to the dissonance between job experience and job expectations, which occurs when the length of tenure of an occupational role is short. However, this interpretation of the obtained data is moderated by the presence of a sampling bias in the respondent subgroup of practice nurses.

Would the 8 practice nurses known to be practising in the Palmerston North Health district, but who declined to participate in the study because of 'pressure of work', have perceived their jobs as more challenging and hence more satisfying than the respondent subgroup of practice nurses? This question cannot be answered in the present study, but qualifies the interpretation of the obtained results.

Another extended role within the field of community nursing practice is that of the nurse who undertakes both public health and district nursing duties - usually in a rural area. Within the respondent sample there are 3 DN/PH nurses whose median tenure was 6.5 years and who report relatively high levels of perceived autonomy and perceived challenge (mean scores 6 or greater on a 1 - 7 scale) and high job satisfaction (mean 6.67 on a 1 - 7 scale); - a configuration of variables consistent with the job enlargement/job satisfaction thesis.
A contrasting group in the respondent sample is that of the 3 'nurse receptionists' employed in a Medical Laboratory who perform a very 'restricted' role (as outlined in Appendix A), the experience of which is reflected in the low mean scores on perceived autonomy (3.67) and perceived challenge (3.67) and low job satisfaction (mean score 4). The short median tenure (6 months) may reflect a high turnover of staff owing to job dissatisfaction; however, the present study did not investigate this aspect.

Of the remaining 2 subgroups of nurses in the respondent sample - district and public health nurses - both are traditional roles which are similar in terms of perceived job dimensions, yet district nurses (employed by Hospital Boards) report higher job satisfaction (mean 6.4) than do public health nurses (mean 5.25) in the respondent sample. Division of the public health nurse subgroup according to employing agency, results in a mean job satisfaction score of 4.85 for public health nurses employed by the Department of Health (N=7 in the respondent sample), and 5.80 for public health nurses employed by the Hospital Board (N=5); - a finding which points to the influence of organisational characteristics (e.g. organisational structure) on job satisfaction.
B. **Statistical Analysis of the Data:**

In order to test hypothesis (1) - that there is no positive linear relationship between level of perceived autonomy and reported job satisfaction, in the respondent sample, a Pearson Product Moment Correlation between perceived autonomy and job satisfaction data was performed, although the scores for both variables were negatively skewed (as illustrated in Figures IV - 3 and IV - 4), such that it was not possible to determine the degree of linear relationship between the variables by inspection of a scattergram. The large number of subjects (N=63) precluded the use of Spearman rank order correlation technique (the method of first choice).

The conclusion drawn from the obtained Pearson Product moment correlation was that there is a significant (p < .01) but small magnitude, positive correlation (r = +.38) between perceived autonomy and job satisfaction. However, a correlation of this size may be an artifact of the statistical method, as a spuriously high correlation may be obtained when using this correlation technique where the two variables are skewed in the same direction.

In order to test Hypothesis (2) - that there is no positive linear relationship between level of perceived challenge and reported job satisfaction, in the respondent sample, a Pearson Product moment correlation was performed, after inspection of a scattergram suggested the relationship may be linear, although again the scores of both variables were negatively skewed (Figures IV - 3 and IV - 5).

The conclusion drawn from the obtained Pearson Product moment correlation was that there is a significant (p < .001) moderate positive correlation (r = +.48) between perceived challenge and job satisfaction,
although again the correlation may be spuriously high as a result of applying this technique where the two variables are skewed in the same direction.

In order to test Hypotheses (3) and (4), a series of tests of the differences between means for age, perceived autonomy and perceived challenge of subjects in the first quarter compared with subjects in the fourth quarter on reported job satisfaction, were made using $t$-tests for independent samples. A White test was used to compare mean tenures for the first and fourth quarters on reported job satisfaction, as the distribution of the length of tenure data was grossly skewed (Figure IV - 2).

Owing to the presence of tied scores, $N = 16$ for the first quarter (those nurses who report being 'less than satisfied' with their jobs), and $N = 17$ for the fourth quarter (those nurses who report being 'highly satisfied' with their jobs, leaving a middle group of 'satisfied' nurses ($N = 30$).

Table IV - 5 summarises the means of these three groups on the variables - age, perceived autonomy, perceived challenge and length of tenure.
### TABLE IV - 5.

Summary table of mean scores of subjects grouped according to level of job satisfaction.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=16</td>
</tr>
<tr>
<td></td>
<td>1st Quarter</td>
</tr>
<tr>
<td>Perceived Autonomy</td>
<td>5.88</td>
</tr>
<tr>
<td>Perceived Challenge</td>
<td>4.56</td>
</tr>
<tr>
<td>Age</td>
<td>38.27&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Length of Tenure</td>
<td>3.17&lt;sup&gt;d&lt;/sup&gt;</td>
</tr>
<tr>
<td>(Medians)</td>
<td>1.6</td>
</tr>
</tbody>
</table>

**Notes:**
- a based on N=15 (1 subject 40+)
- b based on N=29 (1 subject 50+)
- c based on N=16 (1 subject 50+)
- d mean spuriously high - (1 subject tenure 25 yrs)
- e mean spuriously high - (1 subject tenure 30 yrs)
Table IV - 6 summarises the results of the tests for significance of differences between means of subjects grouped according to job satisfaction.

**TABLE IV - 6.**

Summary table of tests of differences between means of respondents in first and fourth quarters on Job Satisfaction.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>t</th>
<th>$r_m$</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived autonomy</td>
<td>1.67</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>Perceived challenge</td>
<td>13.12</td>
<td>&gt;.80</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Age</td>
<td>13.64</td>
<td>&gt;.80</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Length of Tenure</td>
<td>(White test)</td>
<td>&gt;.45</td>
<td>&lt;.01</td>
</tr>
<tr>
<td></td>
<td>T 171</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table IV - 6 indicates that the measure 'perceived autonomy' does not discriminate between subjects reporting high job satisfaction and subjects reporting low job satisfaction, a finding which suggests that there is no positive linear relationship between perceived autonomy and job satisfaction in the respondent sample.

Mean perceived challenge, mean age and length of tenure all differ significantly between groups high and low on job satisfaction.

The smaller magnitude of the correlation for length of tenure (> .45) may in part reflect the statistical method used, although the group of nurses who reported being 'less than satisfied' with their jobs (first quarter) contained one subject with a tenure of 25 years, which spuriously inflated the mean tenure of that group (3.17 years compared with a mean tenure of 1.6 years.
had that subject been omitted from the group).

A further series of tests of differences between means was performed to compare subjects in the first quarter (less than satisfied with their jobs) with subjects in the middle (satisfied) group; followed by a comparison of means of subjects in the middle (satisfied) group with subjects in the fourth quarter (nurses highly satisfied with their jobs).

The results are summarized in Table IV - 7.

**TABLE IV - 7.**

Summary table of tests of differences between means of subjects grouped according to levels of job satisfaction.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>t</th>
<th>( r_m )</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) first quarter: middle group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Challenge</td>
<td>2.92</td>
<td>&gt; .40</td>
<td>&lt; .01</td>
</tr>
<tr>
<td>Age</td>
<td>1.5</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>Length of Tenure (White test)</td>
<td></td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>( T_{304.5} )</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2) middle group: fourth quarter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Challenge</td>
<td>1.26</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>1.7</td>
<td>&gt; .25</td>
<td>&lt; .10</td>
</tr>
<tr>
<td>Length of Tenure (White test)</td>
<td></td>
<td>&gt; .40</td>
<td>&lt; .01</td>
</tr>
<tr>
<td>( T_{286.5} )</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results outlined in Table IV - 7 suggest:
(a) that the relationship between perceived challenge and job satisfaction in the respondent sample, is a curvilinear relationship. That is, where the level of perceived challenge in an occupational role is low, job satisfaction is correspondingly low, but high perceived
challenge is not a prerequisite for high job satisfaction, as the mean perceived challenge for highly satisfied nurses does not differ significantly from the mean perceived challenge of satisfied nurses.

(b) that increasing age and longer tenure of an occupational role are associated with high job satisfaction in the respondent sample.

These findings support hypotheses (3) and (4), and are consistent with the pattern of nongrowth or occupational role integration postulated to occur for the majority of registered nurses practising in community settings, beyond the early years of their careers.
CHAPTER V

DISCUSSION OF THE RESULTS.

This chapter briefly summarizes the results outlined in Chapter IV and discusses the implications of these results for the development of nursing practice within the community health care system.

The results of the present study outlined in Chapter IV, may be summarised in terms of a modal pattern of career development - that is, a pattern of career development to which the majority of the subjects in the respondent sample (all of whom are female) conform.

Four phases may be distinguished within this pattern:

1. early career growth - the completion of a basic nurse training programme followed by a variety of nursing experiences, usually in hospital settings;
2. marriage (for 76% of the respondent sample) and a subsequent period of nonpractice which, for the married nurses in the respondent sample, ranged from 3 to 24 years (median length of nonpractice was 11 years);
3. career reentry, followed by
4. occupational role integration, with subsequent nongrowth in career cycles.

This latter phase is demonstrated in the present study by a configuration of variables postulated to represent the state of occupational role integration. This patterning of variables included:

(a) the relatively high levels of reported job satisfaction amongst subjects in the respondent sample (75% report being either satisfied or highly satisfied with their jobs);
(b) the absence of high levels of perceived challenge (only 1 nurse perceived her job as highly challenging);
(c) the failure of perceived autonomy to differ significantly between subjects reporting low job satisfaction and those reporting high satisfaction; and
(d) the positive relationships of age and length of tenure with job satisfaction where nurses report being highly satisfied with their jobs.

Gowler & Legge (1972) suggest that occupational role integration is usually a relatively long term process - the result of physical and attitudinal aging, although it may be accelerated by routinisation of job performance. Similarly, Argyris (1974), suggests that within 3 to 5 years individuals performing a routine job (the experience of which is dissonant with their job expectations) become adapted and satisfied.

Thus the question arises as to why, when the median length of tenure of nurses in the respondent sample is only 3 years, the research findings in the present study support the postulated state of career nongrowth or occupational role integration for the majority of the respondent sample of nurses practising in community settings?

It seems likely that other factors may accelerate the process of occupational role integration in the population studied. As earlier indicated, there are few opportunities for career growth and promotion within the field of nursing practice, hence there are organisational constraints to individual career growth; but more importantly, the modal pattern of career development outlined earlier, might be expected to result in early occupational role integration rather
than continuing career growth.
In particular the career re-entry phase, might be expected to result in a concern, on the part of the nurse, with protecting her sense of competence as a nurse, and with establishing a competent role identity for the particular occupational role she chooses on her return to nursing practice.

Several research findings in the present study support this predicted outcome of career re-entry:

(1) the mean age of the respondent sample is 43.62 years (median age 46 years), and 65% of the respondent sample are aged 40 years or more. Hence an interval of 20 years (or more) has elapsed since 65% of the nurses in the respondent sample are likely to have completed their basic work socialisation experience.

(2) The median length of nonpractice is 11 years for the respondent sample; an important factor, in the face of rapid changes in the field of health care.

(3) only 38% of the respondent sample (23% of the sample excluding plunket nurses) have undertaken any form of postbasic training beyond the basic 3 year general and maternity nurse training common to all nurses in the present study.

(4) There is a marked lack of retraining or work resocialisation programmes known to be available to nurses re-entering the career area after a lengthy period of nonpractice. In particular, nurses undertaking 'innovative' roles, such as the roles of occupational health nurse or practice nurse, where there is relative isolation from other nursing personnel and only on-the-job training, seem likely to experience dissonance with respect to their sense of a competent identity as a nurse.
Where these nurses work in close association with the medical profession, as in the case of the practice nurse, the lack of a competent role identity as a nurse, may reinforce the nurse's dependent stance in relation to the doctor (an issue discussed by Bates, 1970).

(5) Only the Plunket Society in the present study, is known to provide a postbasic work socialisation experience common to all its nurses which seems likely to provide these nurses with a clear role identity and a sense of competence in that role, although again the problem of updating knowledge and skills following a lengthy interval of nonpractice, arises.

If, as predicted, the nurse's return to the career area after a lengthy period of nonpractice results in dissonance with respect to her sense of a competent role identity, the likely outcome is the acceptance of a 'restricted' role performance (rather than the initiation of role expansion inherent in a pattern of continuing career growth) and early occupational role integration, with subsequent nongrowth in her career. The postulated relationship between level of occupational role integration and perceived competence in role identity, appears to warrant further investigation, but is beyond the scope of the present study.

Thus far, no attempt has been made to generalise from the results obtained from the respondent sample of community practice nurses to the population of community practice nurses in New Zealand, as the extent to which the respondent sample may be considered a representative sample of the total population of registered nurses practising in community settings in New Zealand, is not known.
However, certain general implications for the development of nursing practice in the community health care system in New Zealand may be derived from the results of the present study.

In particular, the finding that the majority of nurses in the respondent sample (75%) are satisfied or highly satisfied with their jobs in the absence of high levels of 'perceived challenge' in those jobs (i.e., high challenge in an occupational role may be assumed not to be a relevant job expectation for the majority of nurses in the present study), and the failure of 'perceived autonomy' to influence reported job satisfaction of nurses in the respondent sample, raises the question as to the validity, for the population of registered nurses practising in community settings, of the job enlargement thesis that expanding or extending a job to make it more meaningful or more challenging to an employee will result in increased job satisfaction.

It seems likely that for the population studied, there are optimum levels of challenge and autonomy in an occupational role. The curvilinear relationship of perceived challenge with job satisfaction obtained in the present study, suggests that whilst low levels of challenge may be experienced as aversive (low perceived challenge was positively related to low job satisfaction in the present study), high levels of challenge may equally be experienced as unpleasantly 'stretching' (i.e. a threat to the nurse's sense of a competent role identity), - a suggestion which has implications for the introduction of expanded or extended roles for nurses in community settings, as conceptualised in North American nursing literature (e.g. Nehls et al 1974; Maas 1973, Brown 1974, Lysaught 1970) and in the New Zealand setting (Kinross et al 1976).
Thus, generalising from the respondent sample to the population of community practice nurses, if 75% of the respondent sample are satisfied or highly satisfied with their jobs in the absence of high levels of perceived challenge in those jobs, then attempts to alter established patterns of nursing practice in community settings either by attempting to 'integrate' the diversity of nursing services and roles within the community (as mooted in the Board of Health report No. 23) or by attempting to introduce expanded or extended roles for nurses practising in community settings, are likely to meet with strong resistance.

Neither, in the presence of the high levels of reported job satisfaction in the present study, is it likely that there will be much pressure for change in nursing roles emanating from the nurses practising within the community health care system.

These predictions are consistent with the theory of Gowler & Legge (1972) who suggest that as the level of occupational role integration increases, the individual's ability to tolerate dissonance diminishes, resulting in an unwillingness to modify or change his occupational role, and a diminished ability to perceive job opportunities which lie outside his actual work experience.

Occupational role integration, and the introduction of change in nursing practice:

If, as has been predicted in the present discussion of the results, the level of occupational role integration demonstrated in the respondent sample is in part attributable to the nurse's need to protect her sense of competence as a nurse, then it follows that any change strategy aimed at either integrating or expanding roles for nurses practising in community settings, must
intervene initially at the level of the individual nurse to reinforce her sense of a competent role identity.

This suggestion is consistent with proposals made in Chapter II suggesting:

(a) that the individual variables level of self esteem, subcultural background and growth need strength moderate in the job experience / work motivation / job expectations relationship in the model of career development outlined in Figure I - 3; and

(b) that these variables assume importance for study in the context of any change strategy aimed at expanding or extending the roles of nurses, for level of self esteem, subcultural background and growth need strength are factors postulated in Chapter I to influence the individual's openness to change, and hence her response to job enlargement.

Consistent with the above proposals, is Korman's (1970) hypothesis that low self esteem persons are not motivated to perform well, since poor performance is consistent with their image of relative incompetence.

Increasing the nurse's level of self esteem (by increasing her sense of competence as a nurse) may result in the impetus for change arising from the nurse herself, in line with the career growth cycle postulated by Hall (1971), where in role expansion is the consequence of increased work motivation on the part of the role incumbent.

It is suggested that the perceived source of the change attempt may be an important factor in determining the outcome of a change strategy, thus role expansion or role innovation initiated by management may have differing outcomes from role expansion or role
innovation initiated by the role incumbent, both in terms of the degree of resistance to change (as postulated where there is occupational role integration) and in terms of the role incumbent's experience of the job, (i.e. as one which may or may not meet her needs and be consistent with her job expectations) and her consequent job satisfaction.

Lewin (1936) and Hall (1971) suggest that unless a goal (new role) is perceived as challenging, is independently set by the role incumbent and is relevant to the self concept of that individual, then the conditions for psychological success (and career growth) are not met;
- a suggestion which has implications for the management of change in nursing practice.
CHAPTER VI

SUMMARY AND CONCLUSIONS.

The present study of career development and job satisfaction of registered nurses practising in community settings has reviewed the literature on career development and job satisfaction, deriving a new model of career development (Figure I - 3) which allows for the possibilities of growth and nongrowth in a career cycle, then applied that model to a particular work field - that of registered nurses practising in community settings.

For the purposes of the present study it was postulated that nongrowth rather than continuing career growth beyond the early years of a career would be the pattern of career development applicable to the majority of registered nurses practising in community settings, and the aim of the present study was to demonstrate nongrowth in career cycles (or occupational role integration) for the majority of the respondent sample.

Four research hypotheses were proposed:

1. that there is no positive linear relationship between level of perceived autonomy and job satisfaction.

2. that there is no positive linear relationship between level of perceived challenge and job satisfaction.

3. where subjects report low job satisfaction, the length of tenure is short and perceived autonomy and perceived challenge are low.

4. where subjects report high job satisfaction, tenure is long, age is correspondingly high, but perceived autonomy and perceived challenge approximate the means of the total sample.
The results obtained from the present study tend to support the hypotheses outlined above, and thus to demonstrate the postulated state of career nongrowth or occupational role integration for the majority of nurses in the respondent sample.

A modal pattern of career development (i.e. a pattern of career development to which the majority of the subjects in the respondent sample conform) is proposed and a relationship is postulated between occupational role integration and perceived competence in role identity, the suggestion being that the early onset of occupational role integration in the respondent sample may in part be attributable to a need on the part of the nurse to protect her sense of competence as a nurse, following career re-entry subsequent to a lengthy period of nonpractice; and in the absence of adequate retraining or work resocialisation programmes.

General implications of the research findings for the introduction of change in nursing practice in community settings are briefly discussed, although the proviso is made that the respondent sample may not be a representative sample of the population of registered nurses practising in community settings in New Zealand.

In the absence of a comparable sample of hospital based nurses, no conclusions are drawn regarding the relevance of the research findings of the present study to the total population of registered nurses in the field of nursing practice (as distinct from nursing administration and teaching) in New Zealand.
APPENDIX A

BASIC JOB DESCRIPTIONS

A.1 District Nurse
A.2 Occupational Health Nurse
A.3 Office Nurse
A.4 Plunket Nurse
A.5 Practice Nurse
A.6 Public Health Nurse
A.7 Nurse Receptionist/Medical Laboratory.
Appendix A.1

BASIC JOB DESCRIPTION - DISTRICT NURSE

1. District Nursing Functions:

1.1 To give skilled bedside nursing care to patients referred by :-
   (a) Hospitals within the Board's area
   (b) General practitioners
   (c) Other health and social agencies, and
   (d) Relatives or interested persons.

1.2 To teach relatives and patients what is needful in good patient care so that they may provide this when the District Nurse is not there, and to ensure that they understand the principles underlying aseptic techniques and the prevention of spread of infection.

1.3 To assist in the rehabilitation of the patient so that he obtains the maximum degree of independence possible in the circumstances.

1.4 To supervise nursing care provided by relatives or friends.

1.5 To provide health education to individuals, families and community groups so that they may all realise the importance of health promotion and assume some measure of responsibility in this field.

1.6 To assess the social conditions of the patient and to arrange for the provision of other social services where this is applicable and to use channels of referral as laid down by the Hospital Board's policy.

1.7 To maintain regular communications with the District Nursing Supervisor and the General Practitioners so that instructions may be interpreted correctly and patients receive prompt treatment.

1.8 To maintain accurate and up to date records according to the Board's policy and to furnish clear and concise reports promptly when required.

1 source: District Nurse Supervisor, Palmerston North Hospital Board.
1.9 Efficient management of:

(a) Surgery and the maintainence of supplies and equipment
(b) Residential accommodation and motor vehicle where supplied and proper maintainence of these
(c) The check system in relation to the borrowing or hiring of Hospital Board equipment by patients or families.

1.10 Maintaining a close liaison with hospital departments, wards and other health and social welfare agencies and providing assistance when this is necessary in the patient's or families interests.

1.11 In the field of Nursing Education, assisting with the integration of Public Health and Social Aspects of Nursing.

(a) In the basic nursing curriculum
(b) In the programme for Post-Graduate students
(c) In programmes for other persons as arranged through the District Nurse Supervisor.

1.12 Participating in Inservice Education programmes for District Nurses and assisting with the orientation of new staff members.
Appendix A.2

BASIC JOB DESCRIPTION - OCCUPATIONAL HEALTH NURSE

2. Occupational Health Nursing Functions:

2.1 Diagnosis and treatment of work and non-work injuries.

2.2 Diagnosis and treatment of illnesses.

2.3 Treatment of medical emergencies occurring at work.

2.4 The provision of immunisation.

2.5 Health interviews of apparently well people.

2.6 Selective screening tests on workers exposed to specific hazards.

2.7 Provision of a counselling service.

2.8 Rehabilitation of people following injury, illness or operation.

2.9 Home and hospital visiting of injured or ill workers.

2.10 Assistance with family problems where they are affecting the work situation.

2.11 Participation on committees planning new developments, new processes or new plants.

2.12 Concern with the cleanliness of amenities and eating facilities.

2.13 Provision of health education in relation to work hazards and general living.

2.14 Participation on safety committees at work.

2.15 Training of first aiders.

2.16 Knowledge of environmental hazards at work.

1 This job description is slanted toward the industrial rather than the educational setting.

Source - Frische (1975)
Appendix A.3

BASIC JOB DESCRIPTION - OFFICE NURSE

3. Office Nurse Functions.
3.1 Measurement and Investigations
3.1.1. Instructions to patients re the collection of specimens for the laboratory.
3.1.2. Bacteriological sampling (e.g. taking throat, ear and wound swab) for transmission to the laboratory.
3.1.3. Height and weight measurements.
3.1.4. Temperature, pulse, respiration rate.
3.1.5. Blood pressure recording.
3.1.6. Chemical tests on urine.
3.1.7. Chemical tests on faeces.

3.2. Assessment
3.2.1. Reception and preliminary assessment of casual attenders and emergencies.
3.2.2. Answering telephone enquiries - assessing importance of calls, requests for advice (e.g. management of babies) emergencies - and scheduling appointments.

3.3. Treatment
3.3.1. Surgical dressings.
3.3.2. Therapeutic injections, immunisations.
3.3.3. Syringing ears.

3.4. Reception/Clerical Housekeeping duties
3.4.1. Answering telephone, making appointments etc.
3.4.2. Filing of patients charts and retrieving these as necessary for Doctor.

1 adapted from Reedy 1972, with the assistance of an office nurse in the respondent sample.
3.4.3. Filing of laboratory and x-ray reports.
3.4.4. Co-ordinating visits to Doctor, and accounting.
3.4.5. Chaperoning where required.
3.4.6. Preparing for and assisting at examination by the Doctor.
3.4.7. General liaison with Medical Laboratory, Hospital, x-ray etc.
3.4.8. Maintenance and care of equipment, dressings, drugs, linen.
3.4.9. Supervision of sterilisation and antisepsis procedures.
Appendix A.4

BASIC JOB DESCRIPTION - PLUNKET NURSE

4. Plunket Nursing Functions:

4.1 Teaching parentcraft to all sectors of the community requiring and requesting same.

4.2 Maintaining contact with Maternity Hospital Ante-natal Departments and undertaking teaching in their own speciality as part of the teaching team.

4.3 Where insufficient or no teaching is undertaken by other Services, to undertake a full course of lectures themselves.

4.4 Undertaking mothercraft and/or liberal studies in Secondary Schools when requested by Head teachers or Home Science teachers. (Those subjects are part of the curriculum for School Certificate at the present time.)

4.5 Undertaking Parentcraft and Child Care classes for youth groups, such as Girls' Brigade, Guides, St. John Ambulance and Red Cross groups.

4.6 Undertaking parentcraft classes for Parent Centre groups where established.

4.7 Visiting mothers in Obstetrical Units after the birth of their babies and offering the services of the Plunket Society's Nurses, and providing service to all those who accept.

4.8 Following up families who have accepted service and subsequently fall out of supervision.

4.9 Checking birth notifications received from the Department of Justice and conferring with Health Department Nurses and Social Welfare Workers regarding services for mothers not accepting Plunket supervision.

4.10 Being responsible for early detection of abnormalities and subsequent referral to family doctors.

1 source: Plunket Society.
4.11 Keeping in contact with family doctors, obstetrical units, Social Welfare Officers, Public Health Nurses, Dental Nurses, and other agencies to ensure appropriate referral and action is taken in cases of need.

4.12 Arranging Pre-School clinics for Medical Officers in areas where a Medical Officer is available.

4.13 Advising on immunization programmes and conferring with local Committees, General Practitioners, and Department of Health Nurses in areas where the level of safety is found to be unsatisfactory, and taking part in organising arrangements for extra facilities where appropriate.

4.14 Routine testing for hearing defects at 7 - 9 months of age, and referring to Advisors for Deaf for further testing and referral to General Practitioners for final assessment and appropriate action.

4.15 Routine vision testing between 3 - 4 years and referring to General Practitioner for appropriate action.

4.16 Teaching on a one to one basis in the homes and clinics, in group teaching in Plunket Mothers' Clubs and other organisations regarding accident prevention, nutrition, pre-school education, immunization and other matters relevant to the environment and family health and welfare.

4.17 Providing infant welfare experience for Student Nurses in areas where there are Training Schools for Nurses.

4.18 Providing infant welfare experience for Medical Students in areas where there are Medical Schools or Clinical Schools for Medical students.

4.19 Teaching Home Science Students in University Centres where such Courses are held.

4.20 Providing clinical experience and orientating Student Plunket Nurses in Auckland and Dunedin and Wellington.
4.21 Teaching and examining Karitane Nurses in six centres where Hospitals situated, preparing them for "case work".

4.22 Assisting Karitane Nurses with problems associated with "case work".

4.23 Preparing and presenting reports of their work to local Committees and professional reports to Area Supervisors and Head Office.

4.24 Planning and organising their work to meet the needs of the community (This is implemented with the assistance of area supervisors).

4.25 Preparing and presenting annual reports to local committees and Head Office.

4.26 Reporting special problems, incidence of accidents, health problems, cot deaths, admissions to Hospital etc. Seeking advice on appropriate action where possible.
Appendix A.5

BASIC JOB DESCRIPTION - PRACTICE NURSE

5. Practice Nurse Functions:
   5.1 Measurement and investigation.
   5.1.1 Height and weight.
   5.1.2 Temperature, pulse respirations.
   5.1.3 Blood pressure recording.
   5.1.4 Chemical tests on urine / faeces within the practice.
   5.1.5 Instructing patients re the collection of urine and faeces for the laboratory.
   5.1.6 Bacteriological sampling (e.g. ear, throat, wound swabs) for transmission to the laboratory.
   5.1.7 Venepunctures.
   5.1.8 Performance of cervical smears.
   5.1.9 Electrocardiography.
   5.1.10 Audiometry.

5.2 Assessment and Diagnosis.
   5.2.1 Reception and preliminary assessment of casual attenders and emergencies.
   5.2.2 Home visits.
   5.2.2.1 Initial visits: Infections
         Specific infectious Diseases
         Tonsillitis
         Influenza
         Gastroenteritis
         Emergencies
         Vague calls
         Advice (e.g. management of babies)

   5.2.2.2 Follow up visits as required.
   5.2.2.3 Routine visiting: Chronic sick of all ages.

1 Adapted from Reedy (1972).
5.3 Treatment.
5.3.1 Surgical dressings, minor surgical procedures.
5.3.2 Therapeutic injections.
5.3.3 Ear syringing and other aural treatments and dressings.
5.3.4 Application of plasters.
5.3.5 Listening.
5.3.6 Advice and counselling.
5.3.7 Supervision of patients with chronic illness including:
    - Obesity
    - Diabetes
    - Hypertension
    - Stabilised cardiac arrhythmies
    - Chronic schizophrenia
    - Chronic endogenous depression
    - Puerperal psychosis
    - Epilepsy.

5.4 Faultitation and housekeeping.
5.4.1 Advice to reception staff concerning assessment of patient needs.
5.4.2 Preparing for and assisting at examination or treatments by the Doctor.
5.4.3 General liaison with hospital inpatients and laboratory.
5.4.4 Maintenance and care of equipment, dressings etc.
5.4.5 Administrative / clerical duties as necessary.

5.5 Illness prevention and Health Education.
5.5.1 Preventive immunisations and vaccination against smallpox.
5.5.2 Courses of desensitising injections for allergies.
5.5.3 Teaching patients illness management and hygiene.
5.5.4 Supervision of well-woman clinic (including antenatal patients), well-baby clinic.
5.5.5 Assessment of family health needs - documenting family health history.
Appendix A.6

BASIC JOB DESCRIPTION - PUBLIC HEALTH NURSE

6. Public Health Nursing Functions
6.1.1. Co-ordination with Plunket Society to ensure all infants are offered supervision.
6.1.2. Ensuring all infants on observation and handicapped children registers are receiving medical supervision.
6.1.3. Testing from infancy through preschool age groups using Denver developmental scale.

6.2. Health of School Children.
6.2.1. Assessment and supervision of children referred by schools and other sources. Family counselling where children have special physical mental or social needs.
6.2.2. Immunization programmes checked at school entry.
6.2.3. Follow up any audio/visual abnormalities in children reported by audio vision testers.

6.3. Communicable disease control.
6.3.1. Tuberculosis control - tracing of tuberculosis contacts.
6.3.2. Tuberculin testing and B.C.G. vaccination new entrants.

6.4.1. Industrial health - checking lead, chrome, and nickel workers.
6.4.2. Checking noise hazards.
6.4.3. Assisting with any other aspects of occupational health care.

1 Compiled from information supplied by District office, Department of Health.
6.5 Mental Health
6.5.1 Referring patients for medical advice.
6.5.2 Follow up supervision of patients discharged or on leave from psychiatric institutions or referred by doctors.
6.5.3 Liaison with general practitioners.
6.5.4 Assisting alcoholics and their families in conjunction with other health professionals.

6.6 Care of the Aged.
6.6.1 Assists in selection of people for pensioner housing.
6.6.2 Help aged to live in existing environment.
6.6.3 General supportive care of the aged particularly after bereavement - medical referrals if required.

6.7 Liaison with other health agencies.

6.8 Surveys - participation in health surveys.

6.9 Education programmes.
6.9.1 Assistance with health education programmes in schools and other groups.
6.9.2 Basic and postbasic nursing education programmes.
6.9.3 Health education in Kindergartens, Teachers Colleges etc.

6.10 Maintaining records, forward planning and reporting to principal public health nurse and district officer of health.
Appendix A.7

BASIC JOB DESCRIPTION - NURSE RECEPTIONIST / MEDICAL LABORATORY

7. Nursing Functions.

7.1 Collection of specimens for laboratory analysis.

7.1.1 Instructing clients re the collection of urine, faeces and sputum specimens.

7.1.2 Bacteriological sampling e.g. the taking of throat, ear or wound swabs.

7.1.3 Venepunctures.

7.1.4 Skin testing for allergies.

7.1.5 Outcalls to clients homes to collect blood or other specimens for the laboratory.

7.2 Reception/Clerical tasks.

7.2.1 Receiving specimens brought to the laboratory.

7.2.2 Answering telephone queries, making appointments.

7.2.3 Typing client record cards.

7.2.4 Filing, photocopying, preparing mail.

7.2.5 Delivering results and collecting specimens from Doctors in the local area.

7.3 Checking equipment, renewing stock used for collection of specimens.

1 Compiled with assistance of nurse receptionist in respondent sample.
APPENDIX B

JOB DIAGNOSTIC SURVEY

Short Form
November 1975

JOB DIAGNOSTIC SURVEY:

SHORT FORM

This questionnaire was developed as part of a Yale University study of jobs and how people react to them. The questionnaire helps to determine how jobs can be better designed, by obtaining information about how people react to different kinds of jobs.

On the following pages you will find several different kinds of questions about your job. Specific instructions are given at the start of each section. Please read them carefully. It should take no more than 10 minutes to complete the entire questionnaire. Please move through it quickly.

The questions are designed to obtain your perceptions of your job and your reactions to it.

There are no "trick" questions. Your individual answers will be kept completely confidential. Please answer each item as honestly and frankly as possible.

Thank you for your cooperation.
SECTION ONE

This part of the questionnaire asks you to describe your job, as objectively as you can.

Please do not use this part of the questionnaire to show how much you like or dislike your job. Questions about that will come later. Instead, try to make your descriptions as accurate and as objective as you possibly can.

A sample question is given below.

A. To what extent does your job require you to work with mechanical equipment?

1------2------3------4------5------6------7
Very little; Moderately Very much; the job requires almost no contact with work with mechanical mechanical equipment of any equipment of any kind.

You are to circle the number which is the most accurate description of your job.

If, for example, your job requires you to work with mechanical equipment a good deal of the time—but also requires some paperwork—you might circle the number six, as was done in the example above.

Please turn the page and begin.
1. To what extent does your job require you to work closely with other people (either "clients", or people in related jobs in your own organization)?

1--------2--------3--------4--------5--------6--------7
Very little; dealing with other people is not at all necessary in doing the job.

Moderately; some dealing with others is necessary.

Very much; dealing with other people is an absolutely essential and crucial part of doing the job.

2. How much autonomy is there in your job? That is, to what extent does your job permit you to decide on your own how to go about doing the work?

1--------2--------3--------4--------5--------6--------7
Very little; the job gives me almost no personal "say" about how and when the work is done.

Moderate autonomy; many things are standardized and not under my control, but I can make some decisions about the work.

Very much; the job gives me almost complete responsibility for deciding how and when the work is done.

3. To what extent does your job involve doing a "whole and identifiable piece of work? That is, is the job a complete piece of work that has an obvious beginning and end? Or is it only a small part of the overall piece of work, which is finished by other people or by automatic machines?

1--------2--------3--------4--------5--------6--------7
My job is only a tiny part of the overall piece of work; the results of my activities cannot be seen in the final product or service.

My job is a moderate-sized "chunk" of the overall piece of work; my own contribution can be seen in the final outcome.

My job involves doing the whole piece of work, from start to finish; the results of my activities are easily seen in the final product or service.
4. How much variety is there in your job? That is, to what extent does the job require you to do many different things at work, using a variety of your skills and talents?

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Very little; the job requires me to do the same routine things over and over again.</td>
</tr>
<tr>
<td>2</td>
<td>Moderate Variety.</td>
</tr>
<tr>
<td>3</td>
<td>Very much; the job requires me to do many different things, using a number of difficult skills and talents.</td>
</tr>
</tbody>
</table>

5. In general, how significant or important is your job? That is, are the results of your work likely to significantly affect the lives or well being of other people?

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not very significant; the outcome of my work are not likely to have important effects on other people.</td>
</tr>
<tr>
<td>2</td>
<td>Moderately significant.</td>
</tr>
<tr>
<td>3</td>
<td>Highly significant; the outcomes of my work can affect other people in very important ways.</td>
</tr>
</tbody>
</table>

6. To what extent do supervisors or co-workers let you know how well you are doing on your job?

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Very little; people almost never let me know how well I am doing.</td>
</tr>
<tr>
<td>2</td>
<td>Moderately; sometimes people may give me &quot;feedback&quot;; other times they may not.</td>
</tr>
<tr>
<td>3</td>
<td>Very much; Supervisors or co-workers provide me with almost constant &quot;feedback&quot; about how well I am doing.</td>
</tr>
</tbody>
</table>
7. To what extent does doing the job itself provide you with information about your work performance? That is, does the actual work itself provide clues about how well you are doing - aside from any "feedback" co-workers or supervisors may provide?

| 1 | Very little; the job itself is set up so I could work forever without finding out how well I am doing. |
| 2 | Moderately; sometimes doing the job provides "feedback" to me; sometimes it does not. |
| 3 | Very much; the job is set up almost constantly "feedback" as I work about how well I am doing. |
SECTION TWO

Listed below are a number of statements which could be used to describe a job.

You are to indicate whether each statement is an accurate or an inaccurate description of your job.

Once again, please try to be as objective as you can in deciding how accurately each statement describes your job – regardless of whether you like or dislike your job.

Write a number in the blank beside each statement, based on the following scale:

How accurate is the statement in describing your job?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very</td>
<td>Mostly</td>
<td>Slightly</td>
<td>Uncertain</td>
<td>Slightly</td>
<td>Inaccurate</td>
</tr>
<tr>
<td>Inaccurate</td>
<td>Inaccurate</td>
<td>Inaccurate</td>
<td>accurate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Mostly</td>
<td>Very</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accurate</td>
<td>Accurate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

1. The job requires me to use a number of complex or high-level skills.

2. The job requires a lot of cooperative work with other people.

3. The job is arranged so that I do not have the chance to do an entire piece of work from beginning to end.

4. Just doing the work required by the job provides many chances for me to figure out how well I am doing.

5. The job is quite simple and repetitive.

6. The job can be done adequately by a person working alone - without talking or checking with other people.

7. The supervisors and co-workers on this job almost never give me any "feedback" about how well I am doing in my work.

8. This job is one where a lot of other people can be affected by how well the work gets done.
9. The job denies me any chance to use my personal initiative or judgment in carrying out the work.

10. Supervisors often let me know how well they think I am performing the job.

11. The job provides me the chance to completely finish the pieces of work I begin.

12. The job itself provides very few clues about whether or not I am performing well.

13. The job gives me considerable opportunity for independence and freedom in how I do the work.

14. The job itself is not very significant or important in the broader scheme of things.
SECTION THREE

Now please indicate how you personally feel about your job.

Each of the statements below is something that a person might say about his or her job. You are to indicate your own, personal feelings about your job by marking how much you agree with each of the statements.

Write a number in the blank for each statement, based on this scale:

<table>
<thead>
<tr>
<th>How much do you agree with the statement?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>Disagree</td>
</tr>
<tr>
<td>strongly</td>
</tr>
</tbody>
</table>

Agree
Strongly.

1. My opinion of myself goes up when I do this job well.

2. Generally speaking, I am very satisfied with this job.

3. I feel a great sense of personal satisfaction when I do this job well.

4. I frequently think of quitting this job.

5. I feel bad and unhappy when I discover that I have performed poorly on this job.

6. I am generally satisfied with the kind of work I do in this job.

7. My own feelings generally are not affected much one way or the other by how well I do on this job.
SECTION FOUR

Now please indicate how satisfied you are with each aspect of your job listed below. Once again, write the appropriate number in the blank beside each statement.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely Dissatisfied</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dissatisfied</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slightly Satisfied</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neutral</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slightly Satisfied</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfied</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. The amount of job security I have.
2. The amount of pay and fringe benefits I receive.
3. The amount of personal growth and development I get in doing my job.
4. The people I talk to and work with on my job.
5. The degree of respect and fair treatment I receive from my boss.
6. The feeling of worthwhile accomplishment I get from doing my job.
7. The chance to get to know other people while on the job.
8. The amount of support and guidance I receive from my supervisor.
9. The degree to which I am fairly paid for what I contribute to this organisation.
10. The amount of independent thought and action I can exercise in my job.
11. How secure things look for me in the future in this organisation.

12. The chance to help other people while at work.

13. The amount of challenge in my job.

14. The overall quality of the supervision I receive in my work.
SECTION FIVE

Listed below are a number of characteristics which could be present on any job. People differ about how much they would like to have each one present in their own jobs. We are interested in learning how much you personally would like to have each one present in your job.

Using the scale below, please indicate the degree to which you would like to have each characteristic present in your job.

NOTE: The numbers on this scale are different from those used in previous scales.

4-------5-------6-------7-------8-------9-------10

Would like having this Would like having this Would like having this
only a very much extremely
moderate much
amount much
(or less).

___ 1. High respect and fair treatment from my supervisor.
___ 2. Stimulating and challenging work.
___ 3. Chances to exercise independent thought and action in my job.
___ 4. Great job security.
___ 5. Very friendly co-workers.
___ 6. Opportunities to learn new things from my work.
___ 7. High salary and good fringe benefits.
___ 8. Opportunities to be creative and imaginative in my work.
9. Quick promotions.

10. Opportunities for personal growth and development in my job.

11. A sense of worthwhile accomplishment in my work.
SECTION SIX

We are interested to learn how personal and organisational factors influence the development of an individual's career. We would appreciate your completing the following biographical information. Your name is not required.

1. **Sex:** Male _____ Female _____

2. **Age:**

3. **Marital Status:**

4. **Occupation (circle one):**
   - Public Health Nurse;
   - District Nurse;
   - Office Nurse;
   - Practice Nurse;
   - Occupational Health Nurse;
   - Plunket Nurse;

5. **Employer (circle one):**
   - School;
   - Industry;
   - Student Health Service;
   - Medical Laboratory;
   - Medical Practitioner;
   - Group Medical Practice;
   - Hospital Board;
   - Plunket Society;
   - Department of Health.

6. **Occupational Status of Immediate Supervisor:**
   - e.g. Nurse; Doctor; Other.
   - Please State:

7. **Basic Nursing Qualification and Year of Registration**

8. **Post Basic Qualifications & Years obtained**
   1. 
   2. 
   3. 
   4.

9. **Is your employment in a rural or urban area?**

10. **Are you employed in a fulltime or part time capacity?**
11. If part time, how many hours per week do you work?

12. How long have you been employed in your current position?

13. Briefly outline your previous work experience (job titles and years).

14. Has your nursing practice been continuous or not? Yes No

If not, how recently did you return to nursing practice?
and after what time period away?

Thank you for your co-operation in completing this questionnaire.

Julie M. Boddy
APPENDIX C

SCORING KEY FOR THE SHORT FORM OF THE JDS
November, 1975

SCORING KEY FOR THE SHORT FORM OF THE JOB DIAGNOSTIC SURVEY

The Short Form of the Job Diagnostic Survey (JDS) measures several characteristics of jobs, the reactions of the respondents to their jobs, and the growth need strength of the respondents. Some of the scales tapped by the JDS are not included in the Short Form; others are measured with fewer items. The scales measuring the objective job dimensions are, however, identical with those in the JDS.

Each variable measured by the JDS Short Form is listed below, along with (a) a one or two sentence description of the variable, and (b) a list of the questionnaire items which are averaged to yield a summary score for the variable.

For further information about the instrument and its uses, contact:

Prof. J. Richard Hackman or Prof. Greg R. Oldham
56 Hillhouse Avenue                        Department of Business Administration
Yale University                              University of Illinois
New Haven, Ct. 06520                        Urbana, Ill. 61801

I. JOB DIMENSIONS: Objective characteristics of the job itself.

A. Skill Variety: The degree to which a job requires a variety of different activities in carrying out the work, which involve the use of a number of different skills and talents of the employee.

Average the following items:

Section One  4
Section Two  5 (reversed scoring—i.e., subtract the number entered by the respondent from 8)
B. Task Identity: The degree to which the job requires the completion of a "whole" and identifiable piece of work—i.e., doing a job from beginning to end with a visible outcome.

Average the following items:

<table>
<thead>
<tr>
<th></th>
<th>Section One</th>
<th>Section Two</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>(reversed scoring)</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

C. Task Significance: The degree to which the job has a substantial impact on the lives or work of other people—whether in the immediate organisation or in the external environment.

Average the following items:

<table>
<thead>
<tr>
<th></th>
<th>Section One</th>
<th>Section Two</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>(reversed scoring)</td>
<td></td>
<td>14</td>
</tr>
</tbody>
</table>

D. Autonomy: The degree to which the job provides substantial freedom, independence, and discretion to the employee in scheduling his work and in determining the procedures to be used in carrying it out.

Average the following items:

<table>
<thead>
<tr>
<th></th>
<th>Section One</th>
<th>Section Two</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>(reversed scoring)</td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

E. Feedback from the Job Itself: The degree to which carrying out the work activities required by the job results in the employee obtaining information about the effectiveness of his or her performance.

Average the following items:

<table>
<thead>
<tr>
<th></th>
<th>Section One</th>
<th>Section Two</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>(reversed scoring)</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>
F. Feedback from Agents: The degree to which
the employee receives information about his or her
performance effectiveness from supervisors or from
coworkers. (This construct is not a job
characteristic per se, and is included only to provide
information supplementary to construct (E) above.)

Average the following items:

<table>
<thead>
<tr>
<th>Section One</th>
<th>Section Two</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>7 (reversed scoring)</td>
<td></td>
</tr>
</tbody>
</table>

G. Dealing with Others: The degree to which the
job requires the employee to work closely with other
people (whether other organisation members or
organisational "clients").

Average the following items:

<table>
<thead>
<tr>
<th>Section One</th>
<th>Section Two</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>6 (reversed scoring)</td>
<td></td>
</tr>
</tbody>
</table>

II. AFFECTIVE RESPONSES TO THE JOB: The private,
affective reactions or feelings an employee gets
from working on his job.

A. General Satisfaction: An overall measure of
the degree to which the employee is satisfied and
happy in his or her work.

Average the following items from Section Three:

| 2 |
| 6 |
| 4 (reversed scoring) |

B. Internal Work Motivation: The degree to which
the employee is self-motivated to perform effectively
on the job.

Average the following items from Section Three:

| 1 |
| 3 |
| 5 |
| 7 (reversed scoring) |
C. Specific Satisfactions: These short scales tap several specific aspects of the employee's job satisfaction.

C1. "Pay" satisfaction. Average items 2 and 9 of Section Four.
C2. "Security" satisfaction. Average items 1 and 11 of Section Four.
C3. "Social" satisfaction. Average items 4, 7, and 12 of Section Four.
C4. "Supervisory" satisfaction. Average items 5, 8, and 14 of Section Four.
C5. "Growth" satisfaction. Average items 3, 6, 10, and 13 of Section Four.

III. INDIVIDUAL GROWTH NEED STRENGTH: This scale taps the degree to which an employee has strong vs. weak desire to obtain "growth" satisfactions from his or her work.

Average the six items from Section Five listed below. Before averaging, subtract 3 from each item score; this will result in a summary scale ranging from one to seven. The items are: 2, 3, 6, 8, 10, 11

IV. MOTIVATING POTENTIAL SCORE: A score reflecting the potential of a job for eliciting positive internal work motivation on the part of employees (especially those with high desire for growth need satisfaction) is given below.

Motivating Potential Score (MPS) = Skill + Task + Task Variety + Identity + Significance + Autonomy X Feedback from the job
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