

UNIVERSITI PUTRA MALAYSIA

THE RELATIONSHIP BETWEEN TRAINERS' PERSONALITY, THEIR WORK ENVIRONMENTS, AND JOB SATISFACTION: A TEST OF HOLLAND'S THEORY OF VOCATIONAL CHOICE.

REBECCA FATIMA STA. MARIA

FPP 1993 1

THE RELATIONSHIP BETWEEN TRAINERS' PERSONALITY, THEIR WORK ENVIRONMENTS, AND JOB SATISFACTION: A TEST OF HOLLAND'S THEORY OF VOCATIONAL CHOICE.

Вy

REBECCA FATIMA STA. MARIA

Thesis Submitted in Partial Fulfilment of the Requirements for the Degree of Master of Science in the Faculty of Educational Studies,
Universiti Pertanian Malaysia.

May, 1993



ACKNOWLEDGEMENT

I would like to take this opportunity to express my gratitute and deep appreciation to the chairman of my supervisory committee, Dr. Othman Mohamed, for his patience, support, guidance and encouragement. Also, my thanks go to the members of the committee, Dr. Rohani Ahmad Tarmizi and Mr. Sidek Mohd. Noah for their guidance and encouragement.

Special thanks must also be accorded to the Director of INTAN, Dr. Mohd. Rais bin Abdul Karim, for allowing me to do my research at INTAN; Mr. Nasir Mat Dam, my colleague at the Kluang branch of INTAN; Mr. Jamaludin Hasan of the Sg. Petani branch of INTAN; Mr. M. Razali Ismail of the Kemaman branch of INTAN; and, Mr. Thiagarajan of INTAN, Bukit Kiara for their invaluable assistance during the course of data collection. Similarly, my appreciation goes to all the INTAN trainers for their cooperation, without which this research study would have come to nought.

I must also make mention of Raisa, my daughter, without whose distractions I would have finished this thesis much sooner.

Last, but not least, thank you Jaya for the much needed encouragement, and, baby-sitting Raisa during those vital final days.



TABLE OF CONTENTS

	Pag
ACKNOWLEDGEMENT	ii
LIST OF TABLES	vi
LIST OF FIGURES	vii
LIST OF ABREVIATIONS	viii
ABSTRACT	ix
ABSTRAK	xii
CHAPTER	
I INTRODUCTION	1
Background of the Study	2
Statement of the Problem	13
Operational Definitions	15
Objectives of the Study	19
Research Questions	20
Hypotheses	21
Significance of the Study	23
Limitations of the Study	25
II REVIEW OF LITERATURE	27
Introduction	27
Studies on Measuring Personality	28
Studies on Measuring Environment	32
Measuring Congruence	35



	Correlations	40
	Studies on Congruence and Job Satisfaction	45
	Conclusion	53
III	METHODOLOGY	54
	Theoretical Framework	54 56 64
	Variables	69
	Research Design	69 70 73
	Location of Study	73
	Subjects	73
	Sampling Design	74
	Sample Size	75
	Instrument for Data Collection The Vocational Preference Inventory (VPI) Scoring the Vocational Preference Inventory (VPI) The Job Descriptive Index (JDI) Scales Scoring the Job Descriptive Index (JDI).	77 78 81 82 83
	Data Collection	85
	Data Analysis	86
ΙV	ANALYSIS AND DISCUSSION OF FINDINGS	91
	Introduction	91
	Measuring the Environment	93
	Measuring Congruence	97



	Person-Environment Congruence and Job Satisfaction	106
	Correlations between Person-Environment Congruence and Job Satisfaction	116
	Summary of Findings	118
v	SUMMARY AND RECOMMENDATIONS	120
	The Problem	120
	The Objectives	121
	Methodology	121
	The Findings	123
	Theoretical Implications	123
	Practical Implications	125
	Recommendations	125 126 129 129
	Implications For Future Research	129
	Conclusion	131
	BIBLIOGRAPHY	132
	ADDITIONAL REFERENCE	138
	APPENDICES	139
	VITA	153



LIST OF TABLES

ľab1e		Page
1	The Environmental Assessment Technique	72
2	Sampling of Subjects	76
3	An Example of VPI Scoring	82
4	An Example of Scoring of a JDI Scale	83
5	Weights for Assessing Agreement Between Two Three-letter Codes	88
6	Matching Configurations and Corresponding Agreement Measures	89
7	Using the EAT to measure INTAN's Environment	94
8	Matching Configurations and Corresponding Measures of Agreement for Environment Code S-A-E	99
9	Calculation of Z Score to Determine Significant M Value	101
10	Details of the Measure of Agreement, M	102
11	Using Holland's Definition to Measure Congruence	104
12	Summary of Mean JDI Facet Scores and Standard Deviation for Congruent and Incongruent Subjects	107
13	ANOVA: Total JDI Score X Congruence	109
14	ANOVA: Work Score of the JDI X Congruence	110
15	ANOVA: Supervision Score of the JDI X Congruence	111
16	ANOVA: Promotion Score of the JDI X Congruence	112
17	ANOVA: Co-worker Score of the JDI X Congruence	113
18	ANOVA: Present Pay Score of the JDI X Congruence	114
19	Correlations Between Congruence and	11



LIST OF FIGURES

Figure		Page
1	Model of Long Term Effects of Person-Organisation/ Work Environment Match	2
2	A Hexagonal Model for Defining the Psychological Resemblances Among Types and Environment and Their Interactions	63
3	A Representation of the Integration of Holland's Theory of Vocational Choice with the Theory of Job Satisfaction	68
4	A Representation of the Research Design Used in this Research Study	69
5	A Representation of the Cycle of Benefits Derived from Person-Environment Congruence	124



LIST OF ABBREVIATIONS

INTAN - National Institute of Public

Administration

PSD - Public Services Department

VPI - Vocational Preference Inventory

- Conventional

JDI - Job Descriptive Index

EAT - Environmental Assessment Technique

Personality/Environment Scales

R - Realistic
I - Investigative
A - Artistic
S - Social
E - Enterprising

 \mathbb{C}



Abstract of thesis presented to the Senate of Universiti Pertanian Malaysia in partial fulfilment of the requirements for the Degree of Master of Science.

THE RELATIONSHIP BETWEEN TRAINERS' PERSONALITY, THEIR WORK ENVIRONMENT, AND JOB SATISFACTION: A TEST OF HOLLAND'S THEORY OF VOCATIONAL CHOICE.

by

REBECCA FATIMA STA. MARIA

MAY, 1993

Chairman: Othman Mohamed, Ph.D.

Faculty: Educational Studies

The assumption that congruence between personality and work environment results in job satisfaction is fundamental to vocational theory. The research study tested the relationship between person-environment congruence and job satisfaction as assessed by Holland's model of vocational preference on a sample of 94 trainers at the National Institute of Public Administration (INTAN).

The research study applied the Environmental Assessment Technique (EAT) to obtain the occupation code for the INTAN work environment. Subsequently, the Vocational Preference Inventory (VPI) was used to obtain the personality profile of the trainers. The relationship between personality and environment was examined. The research study then investigated whether or not

UPM

there was a significant difference in job satisfaction between trainers who are congruent with the work environment and trainers who are incongruent with the work environment. The Job Descriptive Index was used to measure job satisfaction. The research study also sought to examine the correlation between person-environment congruence and job satisfaction.

Using the EAT, the INTAN work environment was found to have the Social-Artistic-Enterprising (S-A-E) profile.

Trainers were classified as having congruent or incongruent person-environment pairings according to their occupation code as derived by using the EAT and their responses to the VPI. Iachan's M-index was used to measure the agreement between personality and environment. It was found that 51.06% of the trainers are congruent with their environment.

The analysis of variance confirmed the hypothesis that congruent subjects would be more satisfied with their jobs than incongruent subjects. The research study found that there was a significant difference in all aspects of job satisfaction, except present pay, between the congruent and incongruent groups. This implies that person-environment congruence does have an effect on job satisfaction in the Malaysian civil service.



Further, the research study found that there was significant correlations between congruence and all facets of job satisfaction, except present pay.

Based on these findings, the concept of person-environment congruence merits consideration in the job placement exercises of the Malaysian civil service.



Abstrak tesis yang di kemukakan kepada Senat Universiti Pertanian Malaysia sebagai memenuhi sebahagian daripada keperluan untuk Ijazah Master Sains.

HUBUNGAN ANTARA PERSONALITI PEGAWAI LATIHAN, PERSEKITARAN PEKERJAAN, DAN KEPUASAN KERJA: SATU UJIAN TEORI PEMILIHAN PEKERJAAN HOLLAND.

01eh

REBECCA FATIMA STA. MARIA

MAY, 1993

Pengerusi: Othman Mohamed, Ph.D.

Fakulti : Pengajian Pendidkan

Asas teori vokasional ialah andaian bahawa kepuasan kerja akan ternyata apabila terdapat keselarasan antara personaliti pekerja dengan persekitaran pekerjaan. Kajian ini telah menguji hubungan personaliti-persekitaran dengan kepuasan kerja, seperti yang dinyatakan dalam model kerjaya Holland, ke atas sejumlah 94 orang pegawai latihan di Institut Tadbiran Awam Negara (INTAN).

Kajian ini menggunakan teknik pengukuran persekitaran, 'Environmental Assessment Technique' (EAT), untuk mendapatkan kod pekerjaan bagi INTAN. Kemudiannya, alat pengujian personaliti, Vocational Preference Inventory (VPI), diguna untuk menentukan personaliti pegawai-pegawai latihan.

Hubungan antara personaliti dan persekitaran pekerjaan diteliti. Kajian ini seterusnya mengkaji sama ada terdapat perbezaan dalam kepuasan kerja di antara kumpulan yang mempunyai

UPM

keselarasan personaliti-persekitaran dengan kumpulan yang tidak ada keselarasan personaliti-persekitaran. Kepuasan kerja diuji dengan menggunakan alat 'Job Descriptive Index' (JDI). Seterusnya, kajian ini meneliti korelasi antara keselarasan personaliti-persekitaran dengan kepuasan kerja.

Dengan menggunakan EAT, INTAN didapati mempunyai kod persekitaran 'Social-Artistic-Enterprising' (S-A-E).

Pegawai latihan dianggap sebagai mempunyai keselarasan personaliti-persekitara dengan memperhatikan respon kod personaliti mereka dengan menggunakan VPI dan kod persekitaran yang ditentukan dengan menggunakan EAT. Iachan M-indeks digunakan untuk menentu keselarasan antara personaliti dan persekitaran. Didapati bahawa 51.06% daripada pegawai latihan mempunyai keselarasan degan persekitaran pekerjaan.

Dengan menggunakan analisis varian, kajian ini menerima hipotesis bahawa terdapat perbezaan kepuasan kerja di antara subjek-subjek yang mempunyai keselarasan personaliti-persekitaran dan subjek-subjek yang tidak mempunyai keselarasan personaliti-persekitaran.

Didapati bahawa subjek-subjek yang mempunyai keselarasan personaliti-persekitaran mendapat markat yang lebih tinggi untuk

semua aspek kepuasan kerja seperti yang terdapat di JDI, kecuali aspek gaji.

Kajian ini juga mendapati bahawa terdapat korelasi antara keselarasan personaliti-persekitaran dan kepuasan kerja bagi semua aspek kepuasan kerja kecuali aspek gaji.

Kesimpulannya, keselarasan personaliti-persekitaran ada kaitan degan kepuasan kerja. Oleh yang demikian, konsep keselarasan personaliti-persekitaran patut diberi perhatian dalam operasi pengambilan kakitangan kerajaan Malaysia.



CHAPTER 1

INTRODUCTION

The Malaysian government is the single largest employer in the country. The management of a labour force totaling 800,000 has bearings not only on the government machinery but also on the country as a whole. The successful interaction of individual and organisational goals could benefit the individual, the organisation and society at large.

People who find joy in their work, translate this joy into learning, growing and contributing. The organisation is successful because work is done effectively. Quality is better, costs are less. Perhaps the greatest beneficiary of this interaction is society itself, because better sevice provided by the government translates into cooperation and progress for society as a whole.

Thus, it is necessary to systematically attempt a job selection and placement plan in order that optimum results are obtained from individual-organisation interaction. Figure 1 provides a conceptual model of long term person-organisation match.



Underlying a prudent job selection and placement plan is the assumption that a good match between the nature of the job and the personal characteristics of the job-holder benefits both the organisation and the individual. From the organisation's standpoint, the job gets done by a competent individual who has the skills and abilities, and finds the job compatible with his interests and needs. Likewise for the individual; if the job is compatible with his interests and skills, he would find the quality of working life higher than in a situation where there is no match between his personality and the work environment.

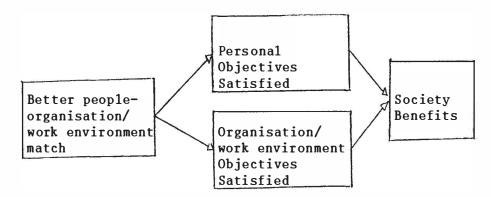


Figure 1. Model of Long Term Effects of Person-Organisation/Work Environment Match.

Background of the Study

Job selection and placement in the Malaysian civil service is carried out by a selection committee based at the Public Services Department (PSD). The selection and placement of staff is based on the needs of the individual departments and ministries, guided by national policies. Nonetheless, due consideration is given to the ability and skills of the staff.



The sheer size of the Malaysian civil service, totalling 800,000, makes it imperative that a job selection and placement system assures consistently high productivity with minimum wasteage that can occur through low productivity, absentism and other related problems.

A prudent long term man-power development plan is thus essential. Such a plan would put the right person in the right job (McCormick and Ilgen, 1985). This task of selection and placement becomes more pertinent and relevant when dealing with trainers in the civil service. Trainers are, as defined in the Oxford English Dictionary (1975), people who act to bring a person to a desired state of efficiency by instruction. thus significant that this research study tests the issue of person-environment match, or congruence, in the training institute for Malaysian civil servants -- the National Institute of Public Administration (INTAN). This is particularly appropriate as INTAN has the responsibility of moulding and affecting positive change among Malaysian civil servants (INTAN, 1991a).

INTAN is the only institute in the country that offers training to all categories of civil servants. Virtually every government department takes advantage of the services provided. The institute maintains that human resource development has been and will remain its primary concern (INTAN, 1991a). From its



launching in 1972 to 1987, the institute had conducted 607 courses and trained 22,403 civil servants. By the end of 1992, INTAN expects to add another 12,000 to this total (INTAN, 1991a). With the ability to reach out to such a number of civil servants, it is all the more relevant that persons assigned as trainers in INTAN have the skills, interests and characteristics suitable for the job. Thus, it might be beneficial for the civil service as a whole if some effort is made to match individuals assigned as INTAN trainers with the INTAN work environment.

The match between personality and work environment is the essence of Holland's (1985a) theory of vocational choice. Holland (1985a) theorised that individuals placed in work environments that are congruent with their personalities and interests will find happiness and job satisfaction. Other proponents of this theory have tested the hypothesis that if a person has the abilities, interests and personal traits that match the requirements, rewards and interpersonal relations in a given work environment, that person will be satisfied and successful (Gottfredson and Holland, 1990). Previn (1968) showed that good matches between people and environments typically result in high performance, high satisfaction and little stress.

Caplan (1973, in Holland and Gottfredson, 1976) illustrated how a lack of match between a person's competencies and a job can result in a decision not to work when "non-work" provides more rewards than incongruent work.



Besides Holland's theory, the question of person-environment match has been dealt with by other career development theorists. Super's (1957, in Osipow, 1983) developmental self-concept theory of vocational behaviour assumes that an individual possesses the potential for success and satisfaction in a variety of occupation settings.

Super (1957, in Osipow, 1983) further elaborated that people are likely to be more satisfied if they are in an occupation that requires a pattern of interests and abilities closely corresponding to their own characteristics. The theory considers self-concept as the driving force which establishes an individual's career pattern. That is, individuals strive to fulfil their self-concept by choosing to enter careers which provide the most efficient means of self-expression (Osipow, 1983).

Roe (1956, in Osipow, 1983) proposed a personality theory of career choice that provides an explanation of the relationship between personality and behaviour. Roe's theory saw the influence of Maslow's theory of hierarchy of needs. According the Roe, the development of an individual's needs influences the general vocational context, or, the direction of choices. Roe maintained that motivation is largely the result of the intensity of needs. In this theory, Roe also stresses that there are distinct personality characteristics of the people in different vocations (Osipow, 1983).



Roe (1956, in Osipow, 1983) traces in detail the features of normal personality development which lead to appropriate vocational selection. The theory suggests that if personality development is misdirected it could result in inappropriate vocational choice.

Both Super (1957, in Osipow, 1983) and Roe (1956, in Osipow, 1983) propounded theories which suggest person-work environment match. Throughout these theories it is implicitly suggested that appropriate person-environment match could lead to positive outcomes such as satisfaction.

Holland (1985a) in his theory of vocational choice, on the other hand, explicitly states that the pairing of persons and environments leads to outcomes that can be predicted and understood from our knowledge of the personality types and environmental models. These outcomes include vocational choice, stability, achievement and satisfaction.

Holland (1985a) theorised that people can be categorized by their resemblance to each of six personality types: Realistic (R), Investigative (I), Artistic (A), Social (S), Enterprising (E), and Conventional (C). The more closely a person resembles a particular type, the more likely he is to exhibit the personal traits and behaviours associated with that type.



Holland (1985a) further adds that the environments in which people live and work can be categorized by their resemblance to six model environments: Realistic, Investigative, Artistic, Social, Enterprising, and Conventional.

To measure the personality of persons, Holland (1985a) devised the Vocational Preference Inventory (VPI) which is an inventory of 160 job titles. On the basis of responses to the VPI, individuals are characterized in terms of the three classifications that are dominant in their interests, using the letter codes that represent the six factors. For example, an individual whose responses indicate highest interest in the Social occupations followed by the Artistic and Enterprising would have a S-A-E personality pattern. Briefly, Holland indicates that such an individual could then be said to be people oriented, is creative and enthusiastic.

An extension and practical application of this theory is the Occupations Finder (Holland, 1985a) which Holland devised to classify all of the most common occupations in the United States of America. In the Occupations Finder (Holland, 1985a) a three-letter code -- for example, S-A-E, representing the Social, Artistic, Enterprising pattern; or A-S-I, representing the Artistic, Social, Investigative pattern -- are assigned to each of the occupations. The codes in the Occupations Finder (Holland, 1985a) describe the characteristics of the different



occupations. Taken in order, the three letters indicate the primary, secondary and tertiary orientation of a job. For example, economists, mathematicians, statisticians and market research analysts are assigned the I-A-S code. These occupations are seen primarily as Investigative, secondly as Artistic, and thirdly, Social.

The Occupations Finder (Holland, 1985a) thus devised has been the impetus for many research studies on person-environment match. In fact, Holland's theory is one of the more empirically studied theories (Spokane, 1985, 1987; Assouline and Meir, 1987; Brown, 1987; Osipow, 1987). Critics of the theory too, conceed that it is the best theory of vocational choice of those currently propounded (Brown, 1987).

Holland's theory and the concept of person-environment match continues to receive attention by researchers and vocational psychologists (Hackett, Lent, and Greenhaus, 1991). Osipow (1987) drew attention to the fact that the concept of person-environment match is acknowledged to be at the heart of vocational psychology and career development. Spokane (1987) indicated that the idea of a good match between people and their work remains at the core of career psychology. This has prompted the American Psychological Association to hold an annual symposium on person-environment fit (Spokane, 1987).



Hackett, et al. (1991) in their review of the major advances in the theory and research on vocational behaviour concluded that research in the career area in the 1990s would see more emphasis on career decision and person-environment fit.

In the practical application of his theory, Holland (1985a) drew attention to its significance in predicting important outcomes such as job satisfaction; facilitating career development; and assisting in the job selection and placement exercise of organisations.

While Holland's theory can be used to predict outcomes such as job satisfaction (Mount and Muchinsky, 1978; Wiener and Vaitenas, 1977; Swaney and Prediger, 1985; Gottfredson and Holland, 1990), the issue of job satisfaction itself has been the subject of a number of theories. McCormick and Ilgen (1985) suggest five general orientations toward job satisfaction—the instrumentality, social, equity, two-theory and comparison orientations.

One view of job satisfaction, the instrumentality theory, is that individuals calculate the degree to which their jobs are satisfying by considering the extent to which the jobs lead to valued outcomes— such as pay, promotion, good working conditions. Exponents of this theory, Pulakos and Schmitt (1983) are of the opinion that each individual estimates the extent to which holding a job leads to these outcomes. Then, by weighting the perceived value or attractiveness of each outcome and by



considering all outcomes, the individual arrives at an estimate of the satisfaction he feels will come from the job (McCormick & Ilgen, 1985).

Another theory of job satisfaction, the social influence theory, as proposed by Salancik and Pfeffer (1977), suggests that perhaps people decide how satisfied they are with their jobs not by processing information about the job but by observing others on similar jobs and making inferences about others' satisfaction.

The equity theory of job satisfaction as constituted by Adams (1965, in McCormick and Ilgen, 1985) states that persons consciously or unconsciously compare their output, what they get from their jobs, and input, what they bring into their jobs, ratio with that of other persons whom they perceive as relevant comparison. Equity is said to exist when an individual perceives that his ratio is equal to that of the next person; inequity exists if the person perceives his output-input ratio to be not the same.

Herzberg's (1966) two-factor theory proposed that job satisfaction stemmed from an entirely different set of causes than job dissatisfaction. He argued that "satisfiers" such as recognition, autonomy, responsibility and the work itself could only affect satisfaction and not dissatifaction, whereas the opposite effect occured for "dissatisfier", such as pay, working conditions and human relations behaviours of supervisors and co-

