

COMMITMENT TO INDUSTRIAL EMPLOYMENT : A CASE STUDY
OF FEMALE PRODUCTION WORKERS IN A MULTI-NATIONAL
ELECTRONIC FIRM IN PENANG

oleh

No. Matrik 33817

Lim Pin Loon

Latihan Untuk Memenuhi Sebahagian Daripada
Syarat-syarat Untuk Ijazah Sarjana Muda

JABATAN ANTROPOLOGI DAN SOSIOLOGI
UNIVERSITI MALAYA
KUALA LUMPUR

SESSI 1980/81

TABLE OF CONTENTS

	Page
List of Tables	iv
List of Figures	vi
List of Chart	vii
Sinopsis	viii
Acknowledgements	xi
 Chapter 1	 1
INTRODUCTION	
1.1 Research Problem	1
1.2 Significance and Purpose of Study	2
1.3 Research Design	3
1.4 Participant-observation	5
1.5 The Questionnaire	6
1.6 Sample and Data Collection	8
1.7 The Interview Guide	9
 Chapter 2	 11
REVIEW OF LITERATURE	
2.1 Definitions of Commitment	11
2.2 Factors Which Influence Commitment	13
2.3 Degrees of Commitment to Industry	17
2.4 Studies Relating to Worker Commitment	18
 Chapter 3	 21
THE SETTING	
3.1 Introduction: A Historical Perspective	21
3.2 Jimat Semiconductor: Ownership, Products and General Growth	22
3.3 Organisation and Work Processes	23
3.4 Structure of Management-labour Relations	24
3.5 Sexual Division of Labour	26
3.6 Physical Environment and Working Conditions	27
3.7 Daily Work Routine	29
3.8 Interpersonal Relationships	30

	Page
Chapter 4	COMMITMENT TO INDUSTRIAL EMPLOYMENT
	34
4.1	Introduction
	34
4.2	Degree of Commitment
	35
4.3	Commitment and Background Variables
	38
4.4	Relationship of Commitment to Attitudes Towards Present Occupation and Level of Job Satisfaction
	51
4.5	Specific Commitment
	53
4.6	Conclusion
	56
Chapter 5	FACTORS RELATED TO WORKER COMMITMENT
	59
5.1	Introduction
	59
5.2	Socio-economic Background and Cultural Values
	60
5.3	Occupational Mobility
	62
5.4	The Nature of the Electronics Industry
	63
5.5	National Economic Policies
	66
Chapter 6	CONCLUSION
	69
Appendices	74 - 80
Bibliography	81

LIST OF TABLES

Table		Page
4.1	Degree of Commitment Among Female Production Workers in Jimat Semiconductor	36
4.2	Degree of Commitment Among Female Production Workers of Different Ethnicity in Jimat Semiconductor	38
4.3	Relationship Between Commitment and Educational Level	39
4.4	Distribution of Sample by Educational Level and Ranking of Factory Work	40
4.5	Distribution of Sample by Educational Level and Ranking of Office Work	41
4.6	Distribution of Sample by Educational Level and Ranking of Secretarial Work	41
4.7	Distribution of Sample by Ethnicity and Educational Level	42
4.8	Relationship Between Commitment and Occupational Background	43
4.9	Distribution of Sample by Occupational Background and Ranking of Factory Work	43
4.10	Distribution of Sample by Ethnicity and Occupational Background	44
4.11	Relationship Between Commitment and Length of Employment	45
4.12	Distribution of Sample by Ethnicity and Length of Employment	47
4.13	Relationship Between Commitment and Parental Attitude Towards Industrial Employment	47
4.14	Distribution of Sample by Ethnicity and Parental Attitude Towards Industrial Employment	48
4.15	Relationship Between Commitment and Migrant Status	49
4.16	Distribution of Sample by Ethnicity and Migrant Status	50

Table		Page
4.17	Relationship Between Commitment and Attitude Towards Present Occupation	52
4.18	Relationship Between Commitment and Level of Job Satisfaction	53

University of Malaya

LIST OF FIGURES

Figure		Page
3.1	Organisation of the Factory	23
3.2	Structure of Management-Labour Relations in the Factory	25

LIST OF CHART

Chart		Page
3.1	Factors Influencing Wife's Future Work Plans	17

SINOPSIS

Kajian "exploratory" dan deskriptif ini tertumpu pada soal penglibatan pekerja. Subjek-subjek adalah pekerja-pekerja wanita di sebuah kilang elektronik "multi-national" di Pulau Pinang, data-data yang terkumpul adalah hasil dari dua bulan penyertaan-pemerhatian (Mac-Mei 1980) dan juga hasil dari satu kajian soalselidik (Ogos 1980). Kajian ini mengukur darjah penglibatan wanita-wanita kilang itu dan meninjau hubungan penglibatan dengan beberapa angkubah latarbelakang. Kajian ini juga mengaitkan soal penglibatan pekerja dengan masaalah-masaalah umum dalam proses industrialisasi.

Bab 1 membentangkan masaalah kajian, kepentingan kajian, isu-isu metodologi yang mempengaruhi rangka kajian dan satu penjelasan tentang bagaimana kajian ini dijalankan.

Bab 2 meninjau secara ringkas penulisan₂, yang berkaitan dengan soal penglibatan pekerja. Pandangan-pandangan dan penemuan-penemuan beberapa orang ilmiahwan dan pengkaji dikemukakan dalam bab ini.

Bab 3 menghuraikan latarbelakang kilang. Ia meliputi aspek-aspek seperti sejarah perkembangan industri elektronik di Bayan Lepas Free Trade Zone, organisasi dan proses-proses pengeluaran di kilang itu, pola pekerjaan seharian dsb.

Bab 4 menganalisis data-data dari penyertaan-pemerhatian dan kajian soalselidik.

Bab 5 membentangkan beberapa faktor yang mempengaruhi penglibatan pekerja. Ia menerangkan bagaimana "unique"nya situasi tenagakerja

dalam industri elektronik dengan menekankan masaalah-masaalah yang mungkin timbul dari penglibatan pekerja.

Bab kesimpulan menunjukkan beberapa persamaan di antara penemuan kajian ini dan penemuan-penemuan dari kajian yang lain. Juga dicadangkan beberapa "trend" untuk masa kelak berhubung dengan soal penglibatan pekerja di industri elektronik.

University of Malaya

ACKNOWLEDGEMENTS

I wish to thank my supervisor, Dr. Raymond Lee, for his invaluable assistance in the preparation of this graduation exercise. I am also grateful to his wife, Dr. Susan Lee, for her helpful advice and suggestions in conducting the research. I acknowledge a special debt to HAWA Project for its generous research grant and kind permission to use the library facilities. My thanks are also due to Ms. Rosalind Lim for her excellent work in typing this graduation exercise. Above all, I wish to thank the workers of Jimat Semiconductor for giving me their cooperation in the questionnaire survey.

20th December 1980

Matric No. 33817

CHAPTER 1

INTRODUCTION

1.1 Research Problem

In the late 1960's and early 1970's, the global expansion of the highly competitive electronics industry led to the creation of a new class of workers - young, predominantly female and of rural background - in the Third World nations. This new class of workers has grown significantly in size. Today, it numbers close to 50,000 in Malaysia (Lim, 1978). In Penang, it numbers 18,817 and constitutes 44.7% of the total industrial labour force (Penang Development Corporation, 1978).

In the very early stages it was generally thought that these female workers were uncommitted to industrial employment. Indeed, this general notion was supported by numerous cases of absenteeism and a high rate of turnover. But 8 years have passed since the beginning of electronic assembly operations in Malaysia. Are high rates of turnover and absenteeism still typical of its female labour force? Does the female production worker view herself as a temporary member of the industrial work force? How does she react to the idea of being laid-off in times of economic recessions? Will she leave her job upon marriage for full-time housewifery or motherhood? Is it not possible that through the years the initially uncommitted worker has been replaced by a fully-committed worker?

In view of increasing inflationary pressures, a possibly growing attachment to western cultural practices propagated in the electronics factories, benefits of working that include personal freedom and earned income, it is expected that the female production worker is now fully committed to industrial employment.¹ Yet the growth of commitment cannot be taken for granted as simple and inevitable. A permanently committed work force is more costly to maintain. Leaders of electronic corporations, being primarily interested in cost cutting and keeping wage rates down (Lim, 1978; Benseman, 1979), are therefore not likely to favour such developments. Moreover, the electronics industry is subject to a cyclical pattern of expansion and downturn (Benseman, 1979). In times of economic recessions, lay-offs are widespread. In the 1974 recession, "some factories in Penang laid off thousands of workers while others cut the work week to three days" (Grossman, 1979). In such a situation, electronic corporation leaders may well prefer their female workers to remain uncommitted.

Given that the workers are aware of the precarious nature of their job situation, would this awareness stifle the growth of commitment? What are the positive measures taken by generally committed workers to ensure their continued participation in the industrial system?

1.2 Significance and Purpose of Study

Building a stable industrial labour force is vital for the success of the industrialisation effort, but there is as yet little knowledge of the processes of labour force development. This empirical study seeks to contribute to an understanding of such processes through its focus on the growth of worker commitment.

The objectives of the study are:

- (i) to evaluate the extent and nature of commitment among female production workers in the electronics industry;
- (ii) to explore the relative influence of environmental (rural-urban) and social (class, race, peer influence) factors on the growth of worker commitment;
- (iii) to relate the growth of worker commitment to broader problems of industrialisation;
- (iv) to identify the responses of committed workers to the perceived instability of their job situation.

1.3 Research Design

The case-study approach was chosen for two reasons. Firstly, available research resources and time limitations preclude a more comprehensive coverage of the population. Secondly, it was felt that an in-depth study of one electronic factory would yield more detailed findings than a superficial study of two or more factories.

Implicit in the use of the case-study approach is the assumption that worker commitment is not an isolated phenomenon, that it has to be understood not only within its immediate context (the factory setting) but also in relation to wider national and international developments (e.g. technological innovations, world-wide economic recession) and against a historical background (e.g. the industrialisation process, migration). This assumption calls for a flexible research design which will enable the researcher to study different aspects of the problem.

Such a research design was expected to incorporate the use of both qualitative and quantitative research methods. However, Fatimah

(1979) had shown that unpleasant consequences may result from using both methods. To carry out a questionnaire survey upon completion of disguised participant-observation, the researcher would have to disclose her true identity. This may undermine the workers' trust in the researcher. Moreover, awareness of having been deceived may generate feelings of anger or resentment among the workers with the result that workers withhold their cooperation. The possibility of this recurring in the present study cast some doubts on the feasibility of using both qualitative and quantitative research methods.

Participant-observation was selected as the primary method of data collection because it suited the exploratory and descriptive objectives of the study. Active participation in the work situation was expected to yield rich insights to the problems and rewards of factory employment. Direct observation was expected to yield detailed data on all aspects of factory employment.

In considering the use of participant-observation, one crucial methodological problem arose. This involved the question of whether the researcher should approach the management and the workers for cooperation or whether the researcher should conceal his/her identity from both. If the researcher received the cooperation of the management, the workers might construe him/her as a management spy and thus react with hostility. There was also the possibility that the management might try, during a researcher's presence, to cover up the factory's limitations so as to create a favourable image. This would invalidate the findings of the study. Revealing the researcher's identity to the workers would create a disparity in status between the latter and former that might lead to problems in establishing rapport as well as problems of reactivity. In

the light of these methodological considerations, concealment was preferred. But it was ethically questionable. For example, is it right to observe the workers without their knowledge? Is it right to hide from the management the researcher's real intentions in working at the factory?

This appeared to be a dilemma but in actual fact, there was very little choice. It was either concealment or abandoning the research. Experience of previous researchers (Fatimah, 1979; Chew, 1979) had demonstrated that even minimal cooperation on the part of the management was not easily obtained. Typically, social researchers' requests to management for permission to undertake research on their employees are turned down despite the researchers' affiliations with important organisations, letters of identification and reassurances of confidentiality regarding the information sought (Bailey, 1978).

The sampling design was influenced by several factors. These include the absence of a sampling frame, time limitations, limited research resources and finally the writer's belief that probability sampling was not necessary to satisfy the exploratory and descriptive objectives of the study. These considerations led to the choice of a small, non-random sample.

1.4 Participant-observation

Participant-observation was carried out between March and early May 1980. For 2 months, the writer worked as a production operator at Jimat Semiconductor², a multinational factory located in Penang. During this period, intensive efforts were made to establish friendships and social relations with the production operators. Rapport was achieved partly through showing a genuine interest in the workers and by

consciously imitating them in certain respects, e.g. speech. Problems were encountered only within the writer's work team. The workers were generally friendly though somewhat inclined to exclude from their activities persons who were not members of their clique. It was relatively easy to draw the workers into casual conversation with the writer. Information obtained through this means include (1) educational qualifications, (2) previous work experience, (3) length of employment in Jimat Semiconductor, (4) job satisfaction, (5) problems and complaints, (6) attitude towards shift work and overtime, (7) opinions of the line leader and supervisor, (8) parental attitude towards factory employment, and (9) future work plans. Information was also gathered by participating in the daily conversations of the workers.

Observation was unstructured. The workers were watched at all times in the factory. Data were collected on work behaviour, social interaction, race relations, division of labour and worker-supervisor relationship. In addition, signboards, posters and other details of the factory setting were noted.

Several problems were encountered. These include physical constraints within the factory, difficulty in taking field notes unobtrusively and problems in maintaining the writer's deception (see Appendix III).

1.5 The Questionnaire

The questionnaire was divided into 3 parts (see Appendix I). The first part dealt with personal and family background. A total of 19 items was listed. These include the respondent's age, race, marital status, home town, educational qualifications, occupation of parents,

occupation of brothers and sisters, monthly income of respondent, monthly income of parents, brothers and sisters, respondent's previous work experience and length of employment in Jimat Semiconductor. In question 11, the respondent was asked to describe the attitude of her parents towards her employment in the factory. It was hoped that information on the characteristics of the workers would throw light on the relative influence of financial and social factors on worker commitment.

Part Two focused on the respondent's attitude towards present work. Questions were asked on favourability towards work, specific complaints, job satisfaction, attachment to factory job and awareness of job instability. To tap job satisfaction, the respondent was asked how she felt about the work she was actually doing and whether she would change her work activity if she had the choice. Question 5 was designed to ascertain the respondent's degree of commitment through information on future work plans. Specifically, the respondent was asked whether she would try to get another factory job if she lost her present job. In question 6, awareness of job instability was tested indirectly by asking the respondent "Do you think that in the future it will be easy as it is now to get jobs in electronics factories? Why?"

Part Three focused on the respondent's occupational aspirations. Questions were asked on frequency of thoughts regarding occupational change, courses taken, skills acquired, interest in job promotion and future work plans. To provide a measure of the respondent's degree of commitment, the respondent was asked whether she would continue to work in the factory after getting married. Finally, the respondent was asked to rank factory work vis-a-vis other occupations. Ten occupations were listed. These were selected arbitrarily by the writer on the basis of suitability to the respondent's educational qualifications.

1.6 Sample and Data Collection

The sample consisted of 50 female production workers, between the ages of 16 and 28, who, in August 1980, worked at Jimat Semiconductor. Eleven respondents were Chinese, 6 were Indians and 33 were Malays. The Malays appear to be slightly over-represented and the Chinese under-represented. No quota control was set for ethnicity, marital status or rural-urban background. Selection of respondents was non-random. The Chinese respondents were secured from Kampung Kuching, a predominantly Chinese neighbourhood, and some parts of Kampung Musang. The Malay respondents were largely drawn from the company hostels, located in Kampung Chempadak. Fifty-five workers were approached. Five declined to be interviewed. Of the remaining 50, 3 were not very cooperative.

Attention was directed primarily towards the establishment of rapport. Cooperation was obtained by explaining the purpose of the research and by showing a genuine interest in the respondent's work experience. The respondents were told that the present study may contribute in some way to their welfare. The respondents were also given assurances that the management would never see the completed questionnaires and that the questionnaires of individual respondents could not be identified once they had been completed.

No fixed procedure was used to administer the questionnaire. In 21 cases, the questionnaire was administered verbally at the respondent's request. Items in the questionnaire were read out to the respondent. The answers given by the respondent were then recorded in the questionnaire by the writer. In 11 cases, the interview was conducted in Hokkien, the major Chinese dialect in Penang. In the case of the hostelites, the questionnaire was administered in groups of less than 10.

Each respondent took 20-30 minutes to complete the questionnaire. For very cooperative and articulate respondents, the length of time was extended by 10-20 minutes during which additional qualitative data were gathered.

1.7 The Interview Guide

To get information on labour turnover, absenteeism, incentives in labour recruitment and labour maintenance, and employment of married women, an interview guide containing 23 questions was prepared (see Appendix II). Unfortunately, the Personnel Manager was not available for an interview (see Appendix III).

Footnotes

1. In most factories, piped music is provided and recreational activities organised as part of the workers' fringe benefits. The activities include dancing classes, make-up classes, picnics and the annual beauty contest. Some factories also offer formal dinners, either as an annual event or as a productivity incentive. The usefulness of these fringe benefits, in particular and of employment in the electronics industry in general have however been questioned by Snow (1978), Lim (1978) and Grossman (1979).
2. The names of the factory and the field sites have been changed to protect the identify of the workers.

CHAPTER 2

REVIEW OF LITERATURE

This chapter presents a brief survey of literature pertaining to the subject of worker commitment. It covers such aspects as definitions, theories and degrees of commitment. A review is also made of empirical studies conducted in the West as well as in the East. Such a review provides some understanding of the subject and also serves as a guideline to the present study.

2.1 Definitions of Commitment

Definitions of worker commitment commonly entail notions of permanency of participation in industry and acceptance or performance of behaviours appropriate to industry. One of the earliest writers to express these notions was C.A. Myers. According to him:

"... a 'committed' industrial labour force has developed when workers no longer look on their industrial employment as temporary, when they understand and accept the requirement of working as part of a group in a factory or other industrial enterprise, and when they find in the industrial environment a more adequate fulfilment of personal satisfactions than they enjoyed in the village or society." (Myers, 1958:36)

The notion of acceptance and performance of behaviours appropriate to industry was later reiterated by Moore and Feldman (1960). Subsequent definitions of commitment by other labour economists and industrial sociologists (Sobol, 1963; Lambert, 1963; Vaid, 1968; Gisbert, 1972; Kerr et. al., 1973; Sharma, 1974) also show remarkable similarities.

Note, for example, the following definitions by P. Gisbert (1972) and Kerr et. al. (1973):

"Commitment means that you accept the situation as something desirable, try to live up to it or at least to make a peaceful adjustment to the situation, accept the consequences, and endeavour to improve it and make a success of it. Such is the case of the person who is wedded to his job and does not think of quitting it." (P. Gisbert, 1972: 193)

"The generally committed worker is one who has completely severed his major connection with the village to become a permanent member of an urban or industrial workforce. This requires an adjustment to all the institutional aspects of urban living and industrial employment."

(C. Kerr et. al., 1973: 178)

In each of these definitions, we are again confronted with notions of a time horizon and acceptance of several aspects of industrial employment.

Notions of a time horizon also prevail widely in operational definitions of commitment. For example, R.D. Lambert in his 1957 study of 821 Indian workers in Poona, operationally defined commitment as the intention of remaining in industrial employment. Similarly, M.G. Sobol, in a study of 2,713 white, married, women workers in the United States, measured commitment in terms of the length of time which a woman plans to work. More recently, M. Darling, in compiling the findings of a 10-nation study of women's role in the economy, asserted:

"Attachment to the labour force or work experience may be described in various ways: with respect to hours worked during the week, weeks worked during the year, or years worked in a lifetime." (M. Darling, 1975: 30)

Perhaps, the only divergent view regarding the term commitment is that held by M.D. Morris (1965). Morris emphatically rejected the term commitment in favour of the word labour discipline. According to him, the use of the term commitment lays stress on the phenomenon of

internationalisation or moral conformity as crucial to the functioning of an industrial system. This psychological element raises two major difficulties:

"First, it is very difficult to measure the degree of psychological 'acceptance' at any moment in time, and it is impossible to measure the phenomenon as it existed historically. Second, it is not clear what psychological commitment to the industrial system means."

(M.D. Morris, 1965: 6)

Being an economist, Morris failed to appreciate the usefulness of questionnaire surveys, attitudinal measures and methods of scaling, in evaluating psychological 'acceptance'. While it is true that psychological 'acceptance' as it existed historically cannot be measured by attitudinal measures, this does not mean that one cannot study it at all. The difficulty may be solved by using alternative methods, e.g. inferences from past turnover and absenteeism rates. To measure changes in degree of psychological commitment over time, one can always conduct longitudinal studies. These are costly but not impossible. Finally, with regard to the meaning of the term psychological commitment, it must be pointed out that difficulties of meaning and interpretation are not unique to the term. Such words as "race", "rural" and "attitude" have even more diverse interpretations. However, the difficulty is easily circumvented in empirical studies if researchers operationally define the term.

2.2 Factors Which Influence Commitment

(a) Cultural Values:

Some writers believe that cultural values play an important part in the process of commitment. E. Hagen (1965), for example, claimed that the Japanese worker's commitment stemmed from his sense of

duty and need to avoid shame. R. Cole (1971) maintained that there was historical evidence to support this view. Cole argued that the commitment of samurai daughters in the silk industry was founded on the traditional duty the samurai father felt towards the government. The dependence of many samurai on government stipends, coupled with economic difficulties, made many samurai very willing to send their daughters into the factories. The daughter entered the factory because she was obliged to obey her father and she worked hard so as not to injure the family honour. In the latter half of his book "Japanese Blue Collar", Cole again stressed the role of reciprocal obligations in committing workers to factory life and making them conform to company discipline. Cole also suggested that the process of commitment was somewhat facilitated by similarities between the requirements of factory work, i.e. mutual interdependence between workers and subordination of individual will to group efforts, and patterns of cooperation and stratification that had been established over the centuries in innumerable Japanese villages.

The influence of personal obligations and custom has also been noted by C. Kerr and his associates (1973) in their discussion of lifetime commitment.

(b) Socio-economic Factors:

Although Cole and Kerr et. al. concede that cultural values influence commitment, they have also pointed to the role of socio-economic factors. Cole pointed out that the Japanese practice of permanent employment was a management response to high labour turnover during World War I, and union and worker response to job scarcity in the post World War II period. The declining importance of this practice in recent years, he noted, is again a function of socio-economic factors:

"... changing socio-economic environment has eroded such inducements and sanctions in recent years. The growing labour shortage, caused by the expanding economy and demographic changes resulting from a declining birth rate, pressures the permanent employment practice and encourages workers to look for alternative employment."

(R. Cole, 1971: 125)

A broad discussion of how socio-economic factors influence commitment is presented in "Industrialism and Industrial Man". In this book, Kerr and his associates posited that the degree of commitment is related to the stage of industrial development. According to these labour economists, the labour force in early stages of industrialisation often consist of uncommitted and semi-committed workers. As industrialisation proceeds, workers become more and more committed so that in advanced industrial societies, workers are fully committed to industrial employment.

Kerr and his associates asserted that the process of commitment is closely related to managements' efforts to build a settled labour force. Whether these efforts are made or not depend on the existing socio-economic conditions. For example, preference for an uncommitted work force often occurs where community facilities are inadequate, where the demand for labour is seasonal, where the managers seek to employ large numbers of unskilled labourers at low wages, where the managers wish an 'unspoiled' labour force, or where the better jobs are reserved for a class or race. When high rates of turnover, absenteeism, and low levels of skill become burdensome, systems of rewards and amenities such as housing may be introduced by enterprises. Such efforts are likely where expensive machinery and processes are used, where highly skilled labour is required and where the work load is distributed fairly evenly throughout the year. In the case of total commitment, the main factors

appear to be economic. These include specialised skills and seniority pensions.

B.R. Sharma (1974), in his article "The Indian Industrial Worker", concluded that it may be more fruitful to study how far the social structure generates mechanisms of integration which facilitate the process of adjustment rather than speculating about the pre-conditions for the development of a committed labour force. He added that it might also be relevant to consider several situational factors such as the social, educational and economic characteristics of the labour force, and characteristics of the labour market e.g. wage differentials, opportunity costs etc. Sharma also believed that it would be fruitful to examine various demands which are made by the industry itself on the labour force in terms of its technological and other requirements.

Other writers (Morris, 1965; Myers, 1958) have argued that employment policies of the management constitute the major factor influencing commitment. These policies include paternalism, welfare activities and seniority-based remunerative and promotion systems.

(c) Other Factors:

A somewhat different approach to work commitment is that taken by M.G. Sobol (1963). Sobol divided influences on future work plans into three major categories. These categories are (i) enabling conditions, (ii) facilitating conditions and (iii) precipitating conditions. Enabling conditions are primarily family status factors which make it easy or difficult to work. Facilitating conditions determine how easy it is to find a job. Precipitating conditions are those factors that push a woman into the labour market. Sobol summarises these factors in the following chart:

CHART 3.1

FACTORS INFLUENCING WIFE'S FUTURE WORK PLANS

Enabling Conditions (family status)	Facilitating Conditions (Ease in obtaining work)	Precipitating Conditions (Relative Dissatisfaction)
Family Status	Previous Experience	Financial Factors
1. Number of children	1. Wife's education	1. Husband's income
2. Age of children	2. Work prior to marriage	2. Wife's income
3. Future child	3. Work since marriage	Attitudinal Factors
4. Current pregnancy		1. Life satisfaction
		2. Needs for accomplishment or time occupation

Source: Sobol (1963), p. 4.

2.3 Degrees of Commitment to Industry

Scholars such as Gisbert (1972) and C. Kerr et. al. (1973) have put forward the view that workers, in moving from a traditional to an industrial way of life, do not experience a sudden change in their attitude towards industry. Both Gisbert and Kerr et. al. viewed commitment as comprising varying degrees in a behavioural or attitudinal continuum. Gisbert identified five types of attitudes: reluctance, resignation, commitment, devotion and consecration. Reluctant workers do not like their jobs but are not necessarily opposed to the industrial system. Resigned workers accept their jobs only insofar as there is no alternative. Committed workers not only view their jobs as desirable but also organise their lifestyle and aspirations around them. Devotion and consecration constitute very high degrees of commitment. These are usually found in

such situations as personal relationships involving blood ties, or in religion, or in patriotism.

Kerr et. al. distinguished four stages of commitment: the uncommitted worker, the semi-committed worker, the generally committed worker and the specifically committed worker. Uncommitted workers enter the industrial sector for an immediate purpose - usually to earn money for various emergencies. When their financial needs have been satisfied, they leave their jobs in industry to return to agriculture. Thus, their periods of employment are short. Semi-committed workers alternate between agriculture and industry. They are different from uncommitted workers in that they have plans to spend the major part of their lives in industrial employment. Generally, committed workers are fully committed to industry. They do not intend to return to agriculture or other means of livelihood in their villages. Specifically, committed workers are tied to particular industries or occupations. This type of commitment occurs as a result of occupational specialisation, seniority and pension systems or personal obligations.

2.4 Studies Relating to Worker Commitment

Studies which focussed on worker commitment are quite rare except in India. Studies which have been carried out include those of Marion G. Sobol in the United States (1963), C.A. Myers (1958), M.D. Morris (1965), R.D. Lambert (1963), K.N. Vaid (1968), and B.R. Sharma in India, and R. Cole (1971) in Japan.

M.G. Sobol's study of 2,713 white, married women workers in the U.S. concluded that worker commitment among employed and unemployed mothers is not significantly influenced by actual level of family income

or presence of children who are 6 years or older or by expectations of additional children, but is influenced by the family's perception of whether its income is sufficient. Sobol also found that current pregnancy was a strong deterrent to working wives' planning to work in the future. The study also showed that women who work as operatives were least likely to plan extensive future work careers.

Studies carried out in India consist of two types. The classical studies such as those by Myers and Morris analysed turnover, absenteeism, and the quality of the labour force in terms of level of discipline. Both studies concluded that employer policies played a major role in developing a committed labour force. Subsequent studies of commitment in India relied heavily on attitudinal measures. Scholars who carried out these studies (Vaid, 1968; Lambert, 1963; B.R. Sharma; Sheth, 1968; Sen Gupta, 1975) sought to find out the degree of commitment among Indian industrial workers and the major factors which influenced commitment. Sharma's study found no relationship between commitment and such ascribed factors as age, rural-urban origin, caste, religion and marital status. Sharma concluded that, perhaps, occupational status was the most important factor related to commitment.

R. Cole's study of Japanese male workers in two factories emphasised the importance of employer policies. He pointed out that these policies were founded on traditional values. In the later part of his study, Cole pointed out the declining importance of permanent employment in Japan and attributed it to changing socio-economic conditions. Shin Ichi Takesawa (1963) also pointed to the increasing incidence of job mobility in Japan. Like Cole, he explained this change in terms of changing labour markets.

Studies of industrial workers in Malaysia have focused on other issues. Linda Lim's study of the women workers in the electronics industry (1978) stressed the major role of economic considerations and unstable market conditions in influencing managements' attitude towards labour turnover in the industry. Lim Kah Cheng's study on women workers in a garment factory (1979) focused on class and ethnic consciousness, but included some mention of turnover and absenteeism rates. Turnover was found to be low among the workers but absenteeism rates were high. Lim explained the high rates of absenteeism as resulting from the heavy responsibilities of women workers in domestic matters. For example, women workers often took leave to tend to their sick children or aged relatives. A. Halim Ali's study of adaptation of rural migrants in urban factory employment (1980) found that absenteeism and turnover rates were higher among migrant workers than non-migrant workers. However, the study suggested that absenteeism and turnover rates were not a function of migrant status but was related to the economic level of workers.

None of the existing studies have attempted to evaluate the degree of commitment systematically through the use of attitudinal measures. Moreover, reference to this question has been brief and those studies have not related worker commitment to other problems of industrialisation. The present study was conducted to fill the gap in the existing knowledge of worker commitment to industrial employment in Malaysia.

CHAPTER 3

THE SETTING

3.1 Introduction: A Historical Perspective

The development of a labour-intensive and export-oriented electronics industry in Penang was centred in the Bayan Lepas Free Trade Zone. This zone is situated in the south-east of the island, 16 kilometres away from the city of Georgetown and half a kilometre from the airport. Its particular attractions to multi-national electronic corporations in the early 1970's lay in its free trade zone status, proximity to airport and availability of cheap female labour. These were supported by State and Federal Government measures, namely, the granting of 10 years tax relief, 100 per cent ownership and control by the investor and the amendment of a labour law to enable 3-shift operations.

In January 1971, Clarion, the first electronics factory in the zone, began production with a workforce of less than 300. In the following year, 5 more electronics factories also began production. The pioneer companies include Litronix, Hewlett Packard, Robert Bosch, NorthemTelecom and National Semiconductor. Development was rapid. By 1973, 14 electronics factories were in full production and employing more than 8,000 workers. Subsequent growth was interrupted by the 1974-75 economic recession which badly affected the industry. Thousands of workers were laid-off while some factories cut the work week to three days (Grossman, 1979). With the upswing of the market in 1976, many of

the electronics factories re-employed their retrenched workers and resumed full production. Today, there is a total of 19 electronics factories in the zone, spread over Phase I, Phase II and Phase III according to their dates of establishment. Employment in the industry stands at 18,817 (Penang Development Corporation, 1978). This comprise largely female workers engaged in assembly work.

Recent developments include the technological expansion of operations from assembling of components to manufacturing of components and testing and designing processes (Penang Development Corporation, 1978). Shortage of local female labour has led to an increasing dependence on female labour from the neighbouring states of Kedah and Perak. Some electronic firms have even begun recruiting female labour from as far as Trengganu and Pahang.

3.2 Jimat Semiconductor: Ownership, Products and General Growth

Jimat Semiconductor, the electronics firm which provides the setting for this study, is a joint-venture between the Penang Development Corporation and a foreign-owned electronics corporation. It was incorporated in November 1972 with an authorised capital of \$8 million (Penang Development Corporation, 1978). The factory began production of silicon transistors, germanium transistors and integrated circuits in July 1973. Production of germanium transistors has, since 1976, stopped because of poor market conditions. The factory now produces mainly silicon transistors and linear integrated circuits (ICs) for use in TV and radio equipment, bipolar digital ICs for use mainly in scientific equipment, power ICs for use mainly in audio equipment, and thyristors for current control. Seventy per cent of these are shipped back to the parent company, while

the rest are exported to customers in Hong Kong, Singapore and Taiwan.

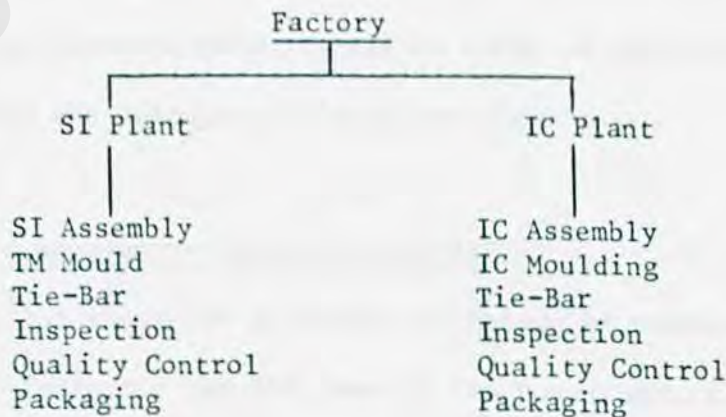
According to a Penang Development News report (1979:6), the company hopes to expand its market to Europe and America. Plans have been made to increase production by $2\frac{1}{2}$ times by 1982. The plans involve a budget of \$15 million, much of which is to be spent on installing automatic and highly sophisticated machinery. Despite the increase in automation, an additional 200 to 300 workers will be recruited. The company currently employs about 1,200 people working on three shifts a day.

3.3 Organisation and Work Processes

The organisation of the factory is largely determined by its products and work processes. The factory is divided into two major divisions, i.e. the Silicon Transistor (SI) Plant and the Integrated Circuit (IC) Plant. Each plant is further divided into several sections as shown in Figure 3.1

FIGURE 3.1

ORGANISATION OF THE FACTORY



Work processes in both the SI and IC Plants are generally similar. In the assembly section, workers bond microscopic chips with gold wires. For some products, the bonding is done in dust-control rooms, where workers are required to wear white cloth masks and an additional layer of white overalls. The bonded chips are then taken to the moulding section, where moulders bake them in huge moulding presses, sealing them in plastic coating. The products are then baked in ovens for 8 to 12 hours. Later, workers in the tie-bar section load jigs of these products on to tie-bar machines. These machines cut each frame into 25 separate units. The products are constantly checked so that defective cuts may be detected. From the tie-bar section, the products are taken to the Inspection Line where workers examine them thoroughly for defective cuts and moulding defects. After inspection, defect-free products are passed on to the quality-control section. Here, testers check their reliability with the use of sophisticated electronic machines. Approved products are passed on to the packaging line, where workers count and seal them in small plastic bags (in the case of silicon transistors) or plastic tubes (in the case of ICs).

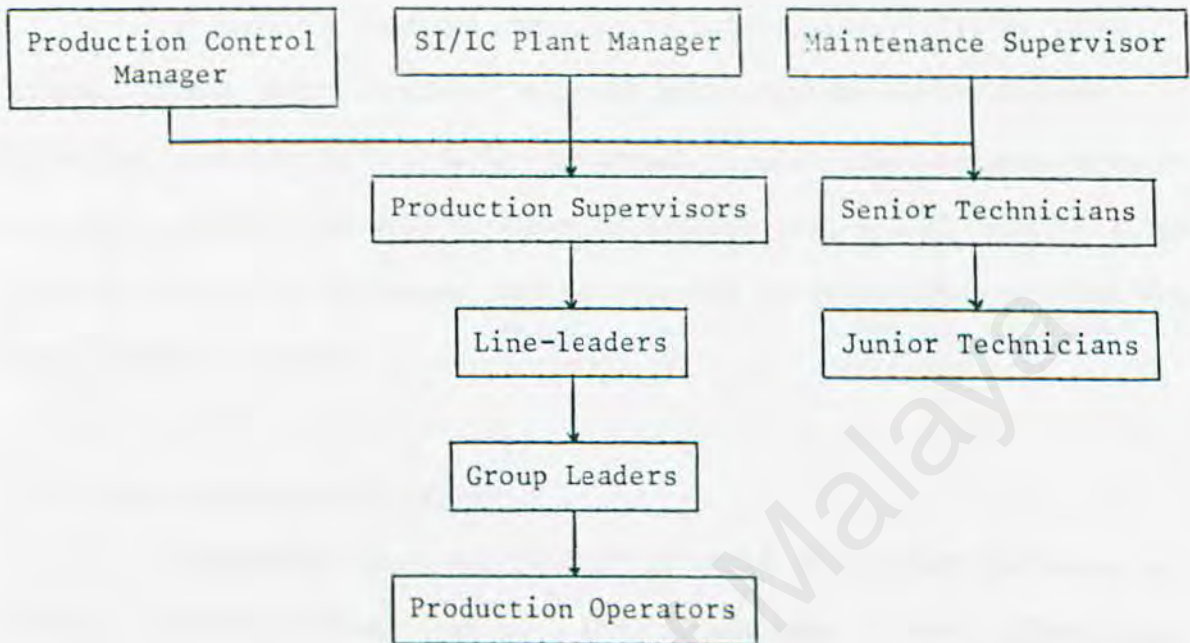
It must be pointed out that variations in the above-mentioned flow of production do exist because of differences in the design of product, e.g. some types of products may be taken to the solder-dip section instead of the Inspection Line after tie-bar.

3.4 Structure of Management-labour Relations

Figure 3.2 shows the hierarchical nature of management-labour relations in the factory. At the base of the power structure are production operators. These are organised into numerous work teams of

FIGURE 3.2

STRUCTURE OF MANAGEMENT-LABOUR RELATIONS IN THE FACTORY



varying size. Some teams may have only 3 workers while others have 10 to 12 workers. Each team is headed by a group leader, whose main responsibility is to motivate the workers under her to higher levels of productivity. On the next level of authority are the line-leaders. The line leaders' main responsibility is to supervise workers and train new recruits in their respective lines. One line may have 40 to 50 workers. On a higher level of authority are the production supervisors. These usually control more than 5 lines, covering 2 or more sections. Besides supervising workers and motivating them to higher productivity, line-leaders and production supervisors are also required to settle minor disputes between workers. Such disputes are seldom dealt with by the Plant Manager, who is more concerned with technical aspects of production. There is close coordination between the Plant Manager and Production

Control Manager and between the Plant Manager and Maintenance Supervisor. Further, each of these executives work in close cooperation with all the Production Supervisors.

It must be stressed that Figure 3.2 is essentially an illustration of the power structure and role relationships in the factory. It is not necessarily indicative of actual relationships between management and labour. As will be shown in Section 3.8, actual relationships between supervisory personnel and workers may be quite close despite the gap in their statuses.

3.5 Sexual Division of Labour

The operation of the factory is based on a sexual division of labour. Female workers form more than 90 per cent of the 1,200-strong labour force and are engaged in such tasks as wire-bonding, moulding, tie-bar, inspection, quality control and packaging. In contrast, male workers number less than 150 and largely comprise engineers, technicians, production supervisors, line-leaders and security guards. There are, however, a small number of male workers working as bonders, material handlers, quality control inspectors and moulders.

In the past, moulders comprise mostly male workers. Perhaps, the management considered that moulding is too heavy and strenuous for female workers and that male workers are able to withstand exposure to resin dust and strong heat from the moulding press. Most female workers are also too short to reach some of the control panels of the huge moulding press. However, the management seems to have changed its opinion. With each recruitment drive, more and more female workers are taken into the moulding section. It is possible that the company found its male workers

difficult to retain because of low wages, or perhaps female workers are preferred because of their docility.

With regard to supervisors and line-leaders, it must be pointed out that not all of them are males. The distribution of supervisory personnel is such that male supervisors and line-leaders are in charge of sections with technically more complex work processes, e.g. moulding, tie-bar, while their female counterparts are in charge of sections with simpler work processes, e.g. assembly, solder dip and quality control. In general, however, male supervisory personnel seems to be preferred. In a recent expansion programme, three male production supervisors were recruited. Further, several male moulders were promoted to the position of line-leaders. It is possible that the promotions were justified by evidences of capability. Nonetheless, one is tempted to interpret, on the basis of observations regarding work relationships between the sexes (see Section 3.8), that the choice of males for promotions is part of the management's strategy of controlling the workers. Management is sensitive to the fact that both male and female workers are more disposed to respect the authority of male supervisors and line-leaders than of female supervisors and line-leaders. The presence of authoritative, yet friendly, male supervisors and line-leaders, moreover, lends credence to the "happy family" ideology propagated by the management.

3.6 Physical Environment and Working Conditions

The physical environment of the factory is generally quite pleasant. Outside the well-painted factory buildings are spacious grounds, beautified by two neatly-planted rows of pine trees and pinang trees, flowery shrubs, a well-kept lawn and a small fountain. To the

right side of the buildings are recreational courts for badminton, net ball and sepak takraw. The interior of the factory is spacious, clean and well-lit, with rows of bonding and other machines. The atmosphere is cool except for the moulding and tie-bar section. Atmosphere in the latter is very warm because of heat emanating from moulding presses and ovens, and workers there often spray themselves with cool air from the air-gun. The air-gun is actually meant for blowing off dust particles from machines. Piped music, consisting mainly of disco hits and "ever-greens", is provided in all sections. It is magnified through loud-speakers in the moulding and tie-bar section because high noise levels produced by tie-bar machines make piped music inaudible.

Items of productivity propaganda abound in the factory. These include productivity graphs and zero-defect charts, and posters and signboards with such catchy slogans as "GOOD, CHEAP and FAST" and "DO IT RIGHT THE FIRST TIME! GIVE THE WORLD ZERO-DEFECT PRODUCTS". Workers show a keen interest in these items. Groups of workers often gather around productivity graphs and charts, making comparisons and passing remarks on them. This is not surprising since the "team of the month" in every section receives certain rewards, such as group performance bonus and the privilege of appearing in photographs in company publications and on the wall in the special section on productivity, captioned "HALL OF FAME".

Working conditions vary from section to section. In the moulding and tie-bar section, workers have to stand most of the time. Work pace is fast because daily production targets are high. Some workers report of being reprimanded by line-leaders when they could not achieve the target. Competition is keen between different work teams.

These teams have fanciful names like Tartans, Spaniards, Easy Riders, Cartwheels, Strange Motivation, New Generation, Touch Me Not, Moonlight, Jaywalkers, Morning Star and others. Discipline is generally quite strict. Workers have to wear overalls and rubber shoes. Lateness to work is recorded by the security guards. Conversation is prohibited, but it goes on quite freely in the moulding sections, tie-bar section and inspection line. It is allowed when teamwork and cooperation make it necessary and when it does not slacken the work pace. Discipline and work pace are more intense for morning and afternoon shifts than for night shifts. During night shifts, sleepiness and absence of supervisors lead to a more relaxed attitude. Most workers take off their overalls while some do not change into their rubber shoes. The workers walk around and visit others at their machines to talk.

3.7 Daily Work Routine

The factory operates on three rotating shifts. Each shift is punctuated by a 20-minute coffee break and a 40-minute lunch/dinner break. Work on the morning, afternoon and night shifts begins at 6.30 a.m., 2.30 p.m. and 10.30 p.m., respectively. Workers come to the factory very early on factory-chartered buses. They dress simply and few wear make-up. When they reach the factory, they go to their respective lockers to change shoes. Next, they go to the mirrors and sinks near the locker room to comb their hair, adjust their collars, etc. The remaining spare-time is spent at the canteen. This is where the workers drink and talk about mundane matters like movies, clothes, boys, work mates, supervisors and others. Politics and sports are rarely discussed. When it is about time to begin work, the workers enter the

the factory building to clock their time-cards. Then, they go to their respective lines. Until the exact time for the beginning of each shift, workers are not allowed to approach their place of work or to talk to workers of the outgoing shift. This is to prevent the work pace from slackening during the last half hour of each shift.

When the shift is over, workers are taken home by the factory-chartered buses. Distances between bus stops and the workers' homes may, in some cases, stretch to more than a mile because the buses do not enter small lanes in the rural areas. Some workers may remain in the factory for another 3-6 hours to work overtime. Overtime is common but not compulsory. Workers are, however, required to work overtime on weekends, at least once a month.

3.8 Interpersonal Relationships

Socially, the conditions in the factory are coloured by a complexity of interpersonal relationships. These are influenced by such factors as sexual identity, level of seniority, status-consciousness, physical separation, identification with different work teams and ethnic consciousness.

Sexual identity colours the relationship between male supervisors/line-leaders/technicians and female workers. Flirtations and favouritism are not uncommon while group dates for shows and dancing are arranged between male line-leaders and Chinese female workers at the factory.¹ Between female workers and male supervisors who already are married, there is sometimes a fraternalistic or paternalistic element in the relationship, e.g. female workers sometimes show photographs of their personal life to their supervisor. Some female workers even refer to the Plant Manager as "my Bapak".

The workers are very status-conscious. Acceptance of work mates, to some extent, depend on the relative status of both parties. Thus, one of the first questions they ask of a new employee is her level of education and previous work experience. Experienced workers legitimise their seniority and higher status by displaying remarkable work performances. They also carry out "initiation rituals" on new employees. The "rituals" include constantly scolding and nagging the new employee until she learns to identify with them. It must be pointed out that the "rituals" are carried out on the new employee only by immediate work mates. Thus, friction is usually limited to only the new employee's relationship with immediate work mates. Nevertheless, it is serious enough to cause distress and emotional depressions to the new employee.

Physical separation limits interaction between workers of different sections and workers of different shift while identification with different work teams produce "in-groups" and "out-groups" in the factory.

Ethnic consciousness is relatively salient in the factory. Although the Malay, Indian and Chinese workers cooperate with each other at work, they do not mix with each other during coffee, lunch and dinner breaks. The Chinese workers will sit with their Chinese friends, the Malays among the Malays and the Indians among the Indians, each group speaking in their own language or dialect. Ethnic consciousness also becomes apparent at dismissal time when there is a rush for seats in the factory-chartered buses. Reservation of seats is a usual phenomenon and seats are offered to workers from the same ethnic group. In other instances, derogatory ethnic names are deliberately used to effect some degree of informal social control. Indian girls who refuse to follow

their Chinese work mates' instructions or fail to agree with them on certain issues may be teased and called by names referring to their skin colour, e.g. one Indian tie-bar operator was called "Or Nya" (black maiden) whenever she dared to deviate.

University of Malaya

Footnote

1. Only workers from the same clique are invited. Since none of the cliques are multi-ethnic, Indians and Malays are not involved.

CHAPTER 4

COMMITMENT TO INDUSTRIAL EMPLOYMENT

4.1 Introduction

This chapter presents an analysis of the observations made in the factory and the results of the questionnaire survey.

Commitment is defined in this analysis as the intention of remaining in industrial employment.¹ As such, it will be measured in terms of attitude towards present occupation, time horizon, i.e. how long the respondent sees herself remaining in industrial employment,² and future work plans. These items have already been tapped in the questionnaire survey by asking the workers the following questions: (1) If you lose your present job, would you try to get another factory job? (2) Would you continue to work in a factory after getting married? (3) Supposing you have enough money as capital, would you set up your own business or would you rather remain working in a factory? (4) Have you ever thought of changing your occupation? These questions obviously measure only the attitudinal dimension of commitment. But as Baldev R. Sharma observes, social scientists are often constrained to use only the attitudinal dimension because behavioural indices of commitment are extremely difficult to locate.³

The responses to the questions will be evaluated in the following manner: a negative response to Question 1, 2 or 3 will be taken to indicate no commitment while an affirmative response will be taken to indicate some degree of commitment. It must be pointed out that each measure presents a different hypothetical situation to the

respondent. In Question 1, the reference to the respondent's present job is taken to indicate that the situation applies to the present time. An affirmative response thus indicates commitment in the immediate future. In Question 2, reference is made to marriage because it has traditionally been a turning point in the individual woman's employment history, i.e. if a woman is not committed to her work, she will take this opportunity to resign. This applies especially to women in low-income occupations and to societies which look upon women's employment in industry as temporary. Thus, working after marriage or planning to work after marriage constitutes a high degree of commitment. In Question 3, the respondent is presented with a profitable alternative to industrial employment. If she chooses to remain in industrial employment, the choice is taken to indicate a high degree of commitment. Finally, a negative response to Question 4 indicates a high degree of commitment. The use of this measure rests on the assumption that committed workers generally do not think of changing their occupations.

4.2 Degree of Commitment

The question of central interest concerns the degree of commitment among female production workers in Jimat Semiconductor. This is shown in Table 4.1 which summarises data from the four measures of commitment. It is evident that commitment is limited to less than half the total number of respondents. The largest percentage is obtained in the first measure. Percentages of commitment steadily decrease in the other measures, specifically to 30 per cent in the second measure, 12 per cent in the third measure and 10 per cent in the fourth measure.

Table 4.1

DEGREE OF COMMITMENT AMONG FEMALE PRODUCTION
WORKERS IN JIMAT SEMICONDUCTOR*

Measures of Commitment			
Attachment 1	Attachment 2	Attachment 3	Attachment 4
44% (22)	30% (15)	12% (6)	10% (5)

Note: Attachment is synonymous to commitment.

Attachment 1: Percentages indicate the proportion of respondents stating that they would get another factory job if they lose their present jobs.

Attachment 2: Percentages indicate the proportion of respondents stating that they would continue to work in a factory after marriage.

Attachment 3: Percentages indicate the proportion of respondents stating that they would remain working in a factory even if they had enough money to set up their own business.

Attachment 4: Percentages indicate the proportion of respondents stating that they had never thought of changing their occupations.

* The figures do not add to 100 per cent because each constitutes the total affirmative response to a different measure.

Findings at the individual level of analysis show that the degree of commitment is even lower than the figures indicated in Table 4.1. Only 2 respondents or 4 per cent of the total number of respondents gave consistent answers in all the four measures of commitment. The remaining 96 per cent gave different combinations of affirmative and negative responses. For example, 22 respondents stated that they would get another factory job if they lost their present jobs. But only 10 of these 22 stated that they would work in a factory after marriage. Also,

out of these 22 respondents, only 5 stated that they preferred working in a factory to setting up their own business, while only 1 respondent stated that she had never thought of changing her occupation.

From these findings, it is reasonable to conclude that many of the workers are either not committed or not totally committed to industrial employment. Thus, they may look for another factory job if they lose their present jobs but this does not necessarily mean that they are prepared to go on working after marriage or that they never think of changing their occupation. Individual remarks of the workers, in fact, show that many of them have not made any definite plans regarding future employment.

The degree of commitment is further explored in Table 4.2 to see if there are variations between different ethnic groups. As noted below, there are marked differences in the degree of commitment between Malay respondents on the one hand and Chinese and Indian respondents on the other. Specifically, only 24 per cent of the Malay respondents as compared to 82 per cent of the Chinese respondents and 83 per cent of the Indian respondents stated that they would get another factory job if they lost their present jobs. For the second question on commitment, only 15 per cent of the Malay respondents as compared to 64 per cent of the Chinese and 50 per cent of the Indians stated that they would continue to work in a factory after marriage. The difference between the Chinese and Indians is not as great as the difference between the Chinese and Malays and between the Indians and Malays. For the third and fourth measures, the degree of commitment is low for all groups. Nevertheless, the pattern of responses to the first and second measures is similar to that for the third and fourth measures.

Table 4.2

DEGREE OF COMMITMENT AMONG FEMALE PRODUCTION
WORKERS OF DIFFERENT ETHNICITY IN JIMAT SEMICONDUCTOR

Ethnicity	Measures of Commitment				Number of Workers in Absolute Figures
	Attachment 1	Attachment 2	Attachment 3	Attachment 4	
Malay	24% (8)	15% (5)	9% (3)	9% (3)	33
Indian	83% (5)	50% (3)	17% (1)	0% (0)	6
Chinese	82% (9)	64% (7)	18% (2)	18% (2)	11

Note: Measures of commitment are similar to those in Table 4.1.

To explain the comparatively low degree of commitment among the Malay respondents and the comparatively high degree of commitment among the Chinese and Indian respondents, it is necessary to explore the relationship of commitment to several background variables in the next section.

4.3 Commitment and Background Variables

(a) Commitment and Educational Level:

Table 4.3 shows a consistent relationship between commitment and the educational level of the respondents. The percentages show that the degree of commitment is inversely related to educational level. Only 27 per cent of respondents with Form 5 education stated that they would get another factory job if they lost their present jobs. This contrasts sharply with 83 per cent of respondents with Standard 6 education and 50 per cent of respondents with Form 3 education. For the second question, only 13 per cent of Form 5 respondents stated that

Table 4.3

RELATIONSHIP BETWEEN COMMITMENT AND EDUCATIONAL LEVEL

Educational Level*	Measures of Commitment				Number of Workers in Absolute Figures
	Attachment 1	Attachment 2	Attachment 3	Attachment 4	
Standard 6	83% (5)	67% (4)	0% (0)	17% (1)	6
Form 3	50% (11)	36% (8)	23% (5)	14% (3)	22
Form 5	27% (6)	13% (3)	5% (1)	5% (1)	22

Note: Measures of commitment are similar to those in Table 4.1.

*These levels were selected because they constitute the dividing line between primary, lower secondary and upper secondary education.

they would work in a factory after marriage. This percentage also differs sharply from 67 per cent of Standard 6 respondents and 36 per cent of Form 3 respondents. For the third and fourth measures, the same pattern of responses is also observed although the percentages for all groups are generally low.

The effects of educational level on commitment must be interpreted according to its effects on chances of occupational mobility, occupational aspirations, and attitude towards factory work. Table 4.4 shows that a larger proportion of workers with Form 5 education rated factory work as low or very low, compared to workers with only Standard 6 or Form 3 education.

With their low opinion of factory work, the more educated workers probably feel that they should be holding jobs with higher pay and status. Also, their comparatively high education means that they

Table 4.3

RELATIONSHIP BETWEEN COMMITMENT AND EDUCATIONAL LEVEL

Educational Level*	Measures of Commitment				Number of Workers in Absolute Figures
	Attachment 1	Attachment 2	Attachment 3	Attachment 4	
Standard 6	83% (5)	67% (4)	0% (0)	17% (1)	6
Form 3	50% (11)	36% (8)	23% (5)	14% (3)	22
Form 5	27% (6)	13% (3)	5% (1)	5% (1)	22

Note: Measures of commitment are similar to those in Table 4.1.

*These levels were selected because they constitute the dividing line between primary, lower secondary and upper secondary education.

they would work in a factory after marriage. This percentage also differs sharply from 67 per cent of Standard 6 respondents and 36 per cent of Form 3 respondents. For the third and fourth measures, the same pattern of responses is also observed although the percentages for all groups are generally low.

The effects of educational level on commitment must be interpreted according to its effects on chances of occupational mobility, occupational aspirations, and attitude towards factory work. Table 4.4 shows that a larger proportion of workers with Form 5 education rated factory work as low or very low, compared to workers with only Standard 6 or Form 3 education.

With their low opinion of factory work, the more educated workers probably feel that they should be holding jobs with higher pay and status. Also, their comparatively high education means that they

Table 4.4

DISTRIBUTION OF SAMPLE BY EDUCATIONAL LEVEL
AND RANKING OF FACTORY WORK

Educational Level	Ranking of Factory Work ^a					Number of Workers in Absolute Figures ^b
	High (1-2)	Medium (3-5)	Low (6-8)	Very Low (9-10)	Not Ranked	
Standard 6	17% (1)	50% (3)	17% (1)	- (0)	17% (1)	6
Form 3	14% (3)	32% (7)	27% (6)	18% (4)	9% (2)	22
Form 5	- (0)	18% (4)	41% (9)	41% (9)	- (0)	22

^aThe actual item was a close-ended question, "Below is a list of occupations. Which of the following occupations do you like or dislike? Please rank the occupations from 1 (job you like best) to 10 (job you least like)."

^bNumber of workers on which the percentage is computed.

are in a better position for occupational mobility. Thus, they retain their occupational aspirations. As shown in Table 4.5 and Table 4.6, a larger proportion of workers with Form 5 education aspire to white-collar jobs than workers with only Standard 6 or Form 3 education.

The lower aspirations of the less-educated workers stem from their awareness of the limited alternatives open to them. This awareness is suggested by their low rankings given to white-collar jobs. Specifically, they said that their limited education precluded these jobs as alternatives. Thus, the result of a lower education has been to curtail chances and hopes of occupational mobility.

The inverse relationship between commitment and educational level may explain the lower degree of commitment among the Malay respondents and the higher degree of commitment among the Chinese and Indian respondents. This is because there is a greater proportion of lower-

Table 4.5

DISTRIBUTION OF SAMPLE BY EDUCATIONAL LEVEL AND RANKING OF OFFICE WORK

Educational Level	Ranking of Office Work ^a					Number of Workers in Absolute Figures ^b
	High (1-2)	Medium (3-5)	Low (6-8)	Very Low (9-10)	Not Ranked	
Standard 6	17% (1)	33% (2)	17% (1)	17% (1)	17% (1)	6
Form 3	55% (12)	14% (3)	5% (1)	5% (1)	5% (1)	22
Form 5	77% (17)	9% (2)	14% (3)	- (0)	- (0)	22

^aThe question is similar to that for ranking of factory work (see Table 4.4).

^bNumber of workers on which the percentage is computed.

Table 4.6

DISTRIBUTION OF SAMPLE BY EDUCATIONAL LEVEL AND RANKING OF SECRETARIAL WORK

Educational Level	Ranking of Secretarial Work ^a					Number of Workers in Absolute Figures ^b
	High (1-2)	Medium (3-5)	Low (6-8)	Very Low (9-10)	Not Ranked	
Standard 6	- (0)	33% (2)	17% (1)	17% (1)	33% (2)	6
Form 3	50% (11)	18% (4)	9% (2)	- (0)	23% (5)	22
Form 5	64% (14)	23% (5)	14% (3)	- (0)	- (0)	22

^aThe question is similar to that for ranking of factory work (see Table 4.4).

^bNumber of workers on which the percentage is computed.

Table 4.7

DISTRIBUTION OF SAMPLE BY ETHNICITY AND EDUCATIONAL LEVEL

Ethnicity	Educational Level			No. of Workers in Absolute Figures*
	Standard 6	Form 3	Form 5	
Malay	-	42% (14)	58% (19)	33
Indian	-	67% (4)	33% (2)	6
Chinese	55% (6)	36% (4)	9% (1)	11

*Number of workers on which the percentage is computed.

educated respondents in the Chinese and Indian samples than in the Malay sample (see Table 4.7).

(b) Commitment and Occupational Background:

Table 4.8 shows commitment to be strongly related to the occupational background of the respondents. Respondents who come from an industrial background are more likely to be committed than respondents who come from a non-industrial background. Seventy-four per cent of respondents with industrial background, as compared to only 23 per cent of respondents with non-industrial background, stated that they would get another factory job if they lost their present jobs. For the second measure, 37 per cent of respondents with industrial background, as compared with 26 per cent of respondents with non-industrial background, stated that they would continue to work in a factory after marriage. This relationship is also observed for the third and fourth measures, although the degree of commitment among both groups is low in these two measures.

Table 4.8

RELATIONSHIP BETWEEN COMMITMENT AND OCCUPATIONAL BACKGROUND

Occupational Background ^a	Measures of Commitment				No. of Workers in Absolute Figures
	Attachment 1	Attachment 2	Attachment 3	Attachment 4	
Blue Collar	74% (14)	37% (7)	16% (3)	16% (3)	19
Non-blue Collar ^b	23% (7)	25% (8)	10% (3)	6% (2)	31

Note: Measures of commitment are similar to those in Table 4.1.

^aOccupational background refer to the occupation of the respondent's parents, brothers or sisters.

^bNon-blue collar occupations include agriculture, construction, white-collar jobs and all, other occupations that do not constitute industrial employment.

Table 4.9

DISTRIBUTION OF SAMPLE BY OCCUPATIONAL BACKGROUND AND RANKING OF FACTORY WORK

Occupational Background	Ranking of Factory Work					No. of Workers in Absolute Figures*
	High (1-2)	Medium (3-5)	Low (6-8)	Very Low (8-10)	Not Ranked	
Industrial	16% (3)	37% (7)	26% (5)	11% (2)	11% (2)	19
Non-industrial	3% (1)	22% (7)	29% (9)	42% (13)	3% (1)	31

*Number of workers on which the percentage is computed.

An industrial background seems to facilitate commitment by increasing the favourability of industrial employment, while a non-industrial background seems to influence the degree of commitment by decreasing the favourability of industrial employment (see Table 4.9).

With regard to this relationship, it must be pointed out that 85 per cent of the Malay respondents come from a non-industrial background, as compared to only 33 per cent of the Indian respondents and 9 per cent of the Chinese respondents (see Table 4.10). Thus, the comparatively low degree of commitment among the Malay respondents may be attributed to their non-industrial background while the comparatively high degree of commitment among the Chinese and Indian respondents may be attributed to their industrial background.

Table 4.10

DISTRIBUTION OF SAMPLE BY ETHNICITY AND OCCUPATIONAL BACKGROUND

Ethnicity	Occupational Background		No. of Workers in Absolute Figures*
	Industrial	Non-industrial	
Malay	15% (5)	85% (28)	33
Indian	67% (4)	33% (2)	6
Chinese	91% (10)	9% (1)	11

*Number of workers on which the percentage is computed.

(c) Commitment and Length of Employment:

Table 4.11 shows the relationship between commitment and length of employment in Jimat Semiconductor. Generally, the longer the length of employment, the higher the degree of commitment. Only 29 per cent

of respondents who worked for less than a year, as compared to 83 per cent of respondents who worked for 1 to 3 years and 70 per cent of respondents who worked 4 to 7 years, stated that they would get another factory job if they lost their present jobs. For the second question on commitment, only 21 per cent of respondents who worked for less than a year, as compared to 50 per cent of respondents who worked 1 to 3 years and 60 per cent of respondents who worked 4 to 7 years, stated that they would continue to work in a factory after marriage. For the third and fourth measures, this same pattern is observed, although the degree of commitment for all groups is low.

Table 4.11

RELATIONSHIP BETWEEN COMMITMENT AND LENGTH OF EMPLOYMENT

Length of Employment	Measures of Commitment				No. of Workers in Absolute Figures
	Attachment 1	Attachment 2	Attachment 3	Attachment 4	
Less than 1 year	29% (10)	21% (7)	12% (4)	6% (2)	34
1-3 year	83% (5)	50% (3)	17% (1)	17% (1)	6
4-7 year	70% (7)	60% (6)	10% (1)	20% (2)	10

Note: Measures of commitment are similar to those in Table 4.1.

The favourable effect of a longer term of employment on commitment may be explained by two factors. Firstly, the factory is a more socially meaningful place to experienced workers than to new workers. This is because experienced workers generally have established close friendships with other workers in the factory. Moreover, they command a higher status by virtue of their seniority in the firm. Secondly, the income of experienced workers is higher than that of new workers. An experienced worker can earn as much as \$400 a month while a new worker usually earns an average of \$150 a month. In other words, the social and economic cost of leaving factory employment is greater for experienced workers than for new workers. Thus, experienced workers are more likely to remain working in the factory than their less experienced work mates.

This relationship may also explain the variations in degree of commitment between different ethnic groups. Thus, the Malay respondents showed a lower degree of commitment because 91 per cent of them were relatively new employees, having worked in the industry for less than a year. The Chinese and Indian respondents, on the other hand, were mostly experienced workers, with 64 per cent of the former and 50 per cent of the latter having worked in the industry for 4 to 7 years (see Table 4.12).

(d) Commitment and Parental Attitude towards Industrial Employment:

Table 4.13 shows the relationship between commitment and parental attitude towards industrial employment. Generally, the degree of commitment among respondents whose parents approved of their occupations is higher than that among respondents whose parents disapproved. Fifty-three per cent of respondents whose parents approved stated that they would get another factory job if they lost their present jobs, as

Table 4.12

DISTRIBUTION OF SAMPLE BY ETHNICITY AND LENGTH OF EMPLOYMENT

Ethnicity	Length of Employment			Number of Workers in Absolute Figures*
	Less Than 1 Year	1-3 Year	4-7 Year	
Malay	91% (30)	9% (3)	-	33
Indian	33% (2)	17% (1)	50% (3)	6
Chinese	18% (2)	18% (2)	64% (7)	11

*Number of workers on which the percentage is computed.

Table 4.13

RELATIONSHIP BETWEEN COMMITMENT AND PARENTAL
ATTITUDE TOWARDS INDUSTRIAL EMPLOYMENT

Parental Attitude	Measures of Commitment				Number of Workers in Absolute Figures
	Attachment 1	Attachment 2	Attachment 3	Attachment 4	
Approved	53% (16)	47% (14)	13% (4)	13% (4)	30
Disapproved	25% (5)	10% (2)	10% (2)	5% (1)	20

Note: Measures of commitment are similar to those in Table 4.1.

compared to the 25 per cent whose parents disapproved. For the second measure, 47 per cent of respondents whose parents approved, as compared to only 10 per cent of respondents whose parents disapproved, stated that they would continue to work in a factory after marriage. A similar relationship is observed for the third and fourth measures.

It must be pointed out that all the Chinese respondents and 83 per cent of the Indian respondents had parental approval while only 36 per cent of the Malay respondents had parental approval (see Table 4.14). Thus, the higher degree of commitment among the Chinese and Indian respondents may also be attributed to the favourable attitude of the parents. Conversely, the lower degree of commitment among the Malay respondents may be attributed to parental disapproval which served to discourage plans of remaining permanently in industrial employment.

Table 4.14

DISTRIBUTION OF SAMPLE BY ETHNICITY AND
PARENTAL ATTITUDE TOWARDS INDUSTRIAL EMPLOYMENT

Ethnicity	Parental Attitude		Number of Workers in Absolute Figures*
	Approved	Disapproved	
Malay	36% (12)	64% (19)	33
Indian	83% (5)	17% (1)	6
Chinese	100% (11)	- -	11

* Number of workers on which the percentage is computed.

Table 4.15

RELATIONSHIP BETWEEN COMMITMENT AND MIGRANT STATUS

Migrant Status	Measures of Commitment				Number of workers In Absolute Figures
	Attachment 1	Attachment 2	Attachment 3	Attachment 4	
Migrant*	29% (10)	21% (7)	12% (4)	9% (3)	34
Non-migrant	75% (12)	50% (8)	13% (2)	13% (2)	16

Note: Measures of commitment are similar to those in Table 4.1.

*Migrant refer to workers who come from states other than Penang.

(e) Commitment and Migrant Status:

Table 4.15 shows differences in the degree of commitment between migrant workers and non-migrants. The migrant workers indicated a low degree of commitment regardless of which measure was used. Only 29 per cent of migrant respondents stated that they would get another factory job if they lost their present jobs, as compared to 75 per cent of non-migrants. For the second question on commitment, only 21 per cent of migrant respondents stated that they would continue to work in a factory after marriage; as compared to 50 per cent of non-migrants. For the third and fourth measures, the degree of commitment among both groups is low. Nevertheless, the degree of commitment indicated by the migrant respondents remains consistently lower than that of the non-migrants.

With regard to this relationship, it must be pointed out that 97 per cent of the Malay respondents are migrants, as compared to only 33 per cent of the Indian respondents and zero per cent of the Chinese respondents (see Table 4.16). Thus, the lower degree of commitment

Table 4.16

DISTRIBUTION OF SAMPLE BY ETHNICITY AND MIGRANT STATUS

Ethnicity	Migrant Status		Number of Workers in Absolute Figures*
	Migrant	Non-migrant	
Malay	97% (32)	3% (1)	33
Indian	33% (2)	67% (4)	6
Chinese	- -	100% (11)	11

*Number of workers on which the percentage is computed.

among Malay respondents may be explained by their position as transient migrants. Transient migrants are usually people from rural areas who migrate to cities to seek jobs but have not severed their ties to the village. The higher degree of commitment among Chinese and Indian respondents may be attributed to their position as non-migrants. As non-migrants, they face less difficulties of adjustment to an industrial and urban way of life.

(f) Summary and Conclusions:

Through the cross-tabulation of measures of commitment with several background variables, the findings presented in this section show that commitment is related to educational level, occupational background, length of employment, parental attitudes and migrant status. Specifically, commitment is stronger and more prevalent among workers with low education, industrial background, a long period of employment, parental approval and non-migrant status. These attributes are more common among the Chinese and Indian female workers than among the Malay

female workers. Thus, can we predict that in the future, senior, female members of the industrial work force will mainly comprise Chinese and Indians? The conclusions arrived at in the next section suggest that any prediction based on such relationships is, at best, only speculative.

4.4 Relationship of Commitment to Attitudes towards Present

Occupation and Level of Job Satisfaction

(a) Commitment and Attitudes towards Present Occupation:

Table 4.17 shows the relationship between commitment and favourable attitudes towards present occupation. Respondents who have favourable attitudes towards their present occupation are more likely to be committed than respondents whose attitudes are not so favourable. For example, 59 per cent of respondents who have moderately favourable attitudes towards their occupation indicated commitment for the first measure, while only 15 per cent of respondents whose attitudes are not so favourable indicated commitment for the same measure.⁴ For the second, third and fourth measures, a comparison between the two groups shows a similar pattern. However, for these measures, the percentages indicated by the moderately favourable group are less than 50 per cent.

Two important conclusions may be drawn from these findings. Firstly, while an unfavourable attitude towards present occupation is generally a good indicator of lack of commitment, it does not necessarily mean that the same attitude precludes any growth of commitment. This is because the depressing effect of an unfavourable attitude may be neutralised by a constant or increasing need for wages. Secondly, it is not correct to treat a moderately favourable attitude towards present occupation as a perfectly sound indicator of commitment simply by virtue

Table 4.17

RELATIONSHIP BETWEEN COMMITMENT AND
ATTITUDE TOWARDS PRESENT OCCUPATION

Favourability*	Measures of Commitment				No. of Workers in Absolute Figures
	Attachment 1	Attachment 2	Attachment 3	Attachment 4	
Low	15% (2)	15% (2)	8% (1)	8% (1)	13
Moderate	50% (22)	35% (13)	14% (5)	11% (4)	37
High	-	-	-	-	-

Note: Measures of commitment are similar to those in Table 4.1.

*The actual item was a close-ended question, "Do you like your present occupation?" The responses "not at all/a little", "average" and "very much" are listed respectively as low, moderate and high in the table.

of its favourable effect on commitment. Rather, one should regard this attitude as only a basis, which may be undermined by other more compelling attractions such as an opportunity to open a lucrative business.

(b) Commitment and Level of Job Satisfaction:

Table 4.18 shows the relationship between commitment and level of job satisfaction. Thirty-nine per cent of the moderately satisfied respondents stated that they would get another factory job if they lost their present jobs, as compared to 56 per cent of the "no satisfaction" respondents. For the second and fourth measures, there is a small difference between the "no satisfaction" respondents and the moderately satisfied respondents. For the third measure, the difference is negligible. Nevertheless, the pattern of responses for the second and fourth measures indicates a weak, positive relationship between commitment and level of job satisfaction.

Table 4.18

RELATIONSHIP BETWEEN COMMITMENT AND LEVEL OF JOB SATISFACTION

Job Satisfaction*	Measures of Commitment				No. of Workers in Absolute Figures
	Attachment 1	Attachment 2	Attachment 3	Attachment 4	
None	56% (5)	22% (2)	11% (1)	0% (0)	9
Moderate	39% (16)	32% (13)	12% (5)	12% (5)	41
High	-	-	-	-	-

Note: Measures of commitment are similar to those in Table 4.1.

*The actual item was a close-ended question, "How do you feel about the work you are actually doing?" The three types of responses "not satisfied at all", "quite satisfied" and "very satisfied" correspond to the categories "low", "moderate" and "high" in the table.

The responses for the first measure are inconsistent with the pattern of responses for the other three measures. This could be due to weaknesses in the measure for job satisfaction. Goldthorpe et al. (1968) have noted that workers are often inclined to say they are satisfied with their jobs when, in actual fact, they are not satisfied. In this case, the large number of moderately satisfied respondents could have included workers who were actually not satisfied.

4.5 Specific Commitment

In previous sections, analysis centered largely on commitment of a general nature. This section focusses on specific commitment; first, by exploring it theoretically and then, within the factory setting. Data on the latter are essentially observations made in the factory.

(a) Factors Conducive to Specific Commitment:

Theoretically, there are a number of factors which should serve to encourage specific commitment in the electronics industry. One such factor is collusion by electronic corporations to discourage job-hopping. This involves the policy of not employing workers who have previously worked in other electronic firms. Another factor is the non-transferable nature of skills acquired in the industry. This reduces the economic advantage that experienced workers might have had from job-hopping because electronic corporations discount any work experience that job applicants might have had in the industry. The attitude of the latter is manifested in the policy of paying basic starting pay to all recruits, regardless of experience. Non-transferable skills also mean that the experienced worker has to be retrained for her new job. It will be several weeks before her performance in the new job improves. In the meantime, the worker is not entitled to performance bonus.

Socially, in moving to a new firm, the experienced worker uproots herself from a familiar setting in which she has established socially meaningful relationships. This loss is further intensified by a lowering of status in the new firm. Specifically, the worker will be subjected to a series of "initiation rituals", i.e. she will be constantly nagged at and scolded by senior work mates for even very small errors.

Thus it appears that continued employment within the same firm is more advantageous to the worker than a change to another firm. However, it must be pointed out that the effects of these advantages on specific commitment may be nullified by opposing pressures. In the next section, we will see how pressures from a distressing work situation far outweighs the disadvantages of moving to a new firm.

(b) Pressure to Resign:

Participant-observation revealed that worker dissatisfaction and intentions to resign prevailed widely in TM Mould.⁵ The source of dissatisfaction is easily detected from individual remarks of workers:

"Doing this job depresses me ... cannot sit ... got to stand all the time."

"Doing this work is terrible. See my hands ... so rough."

"What I got is worse ... see ... (showing extensive burns on both her lower arms). More than a month already and it is still not completely healed."

"Moulding is tough ... without even reaching the target, I feel lifeless, completely drained of energy at the end of each shift. My body aches all over ... Moulding is men's work, not suitable at all for short girls like us."

"My hand hurts."

From the above quoted remarks, it is evident that worker dissatisfaction and the accompanying desire to resign arise largely from the nature of the job. Many believe that it is unsuitable for females. The hazards of operating a hot machine, the strenuous task of lifting a steel mould, and exposure to resin dust, leave upon the workers a host of physical complaints. These include dirty hands and nails, rough hardened skin on the palm and fingers, sore arms, stiff shoulders, tired legs and sometimes burns on the lower arms. The workers in TM Mould, regardless of ethnicity, invariably cite these as reasons for wanting to resign. Employment stability, promotion prospects and loss of seniority seem to be irrelevant to them. Similarly, the issue of wage-rates, subsidies and allowances only arise when discussing which electronic firm to apply to for alternative employment.

These pressures are so intense that they even override parental disapproval. Individual remarks of workers show that their parents do not approve the idea of them changing jobs. Yet, plans to approach another electronics firm are discussed almost everyday between close work mates inside the factory.

Observations also show that pressures to resign are further intensified by support from similarly dissatisfied peers or work mates. Specifically, it was found that sharing the same complaints drew the dissatisfied workers closer to each other, leading to shared plans of resigning together.

4.6 Conclusion

To conclude this chapter, a comparison is made between the results of the questionnaire survey and the findings of participant observation.

Overall, the results of the questionnaire survey showed that the degree of commitment was low among female production workers in Jimat Semiconductor. The results also showed that there were differences in degree of commitment between different ethnic groups and that these differences may be attributed to the effects of educational level, occupational background, length of employment, parental attitudes and migrant status. Further, the results showed that favourable attitudes towards present occupation and a high level of job satisfaction were more conducive to commitment than unfavourable attitudes and low job satisfaction.

The observations made in the factory, on the other hand, showed that many moulders and tie-bar operators strongly objected to their present jobs. This was because their present jobs were dirty and

physically demanding. The observations also showed that many of these workers actively sought alternative employment in other electronics firms. In other words, the observations showed that there was very little specific commitment in certain sections of the factory.

Thus, the observations made in the factory were somewhat consistent with the results of the questionnaire survey.

University of Malaya

Footnotes

1. This definition was used by Richard D. Lambert in his 1957 study of 821 Indian workers in Poona, a city about 120 miles south of Bombay. See Baldev R. Sharma, "The Indian Industrial Worker" in N.F. Dufty, The Sociology of the Blue-Collar Worker (Leiden, 1969), p. 172.
2. This measure of commitment was used by Marion G. Sobol in a study of 2,713 white, married women workers in the United States. See Marion G. Sobol, "Commitment to Work" in F. Ivan Nye and Lois Wladis Hoffman (eds.), The Employed Mother in America (Chicago: Rand McNally, 1963), p. 40.
3. Op. cit., p. 171.
4. In Gisbert's model of commitment, the latter would fall under the category of "resigned" workers.
5. TM Mould is one of the sections in the Silicon Transistor Plant. It is in this section that the silicon transistor clips are sealed in a plastic coating.

CHAPTER 5

FACTORS RELATED TO WORKER COMMITMENT

5.1 Introduction

This chapter attempts to relate worker commitment to broader problems of industrialisation. The analysis starts from the following premise: that it is a gross misconception to think of worker commitment as a product of factors operating only within the factory setting. In the electronics industry, the problem of worker commitment is compounded by a variety of complex factors. These factors range from the personal characteristics of the workers - their socio-economic background and cultural values - to national economic policies and international economic developments. Many of the constraints on commitment stem from the very nature of the industry - the labour-intensive production process, the intense competition between electronic firms, the internationalisation of production and labour, the instability of market conditions and the rapid rate at which technological innovations take place. In pointing out the significance of some of these factors, the writer hopes to illustrate the uniqueness of the employment situation in the electronics industry. The situation is unique not only in the sense that job tenure, terms of employment, work conditions and personnel policies in the electronics industry are radically different from those in other female-dominated industries such as garments and textiles. A more important aspect of its uniqueness is that the total employment situation is opposed to the growth of worker commitment. Whereas worker commitment is

expected and favoured in most industries, worker commitment in the electronics industry raises serious problems to the electronic corporations and to the workers.

5.2 Socio-economic Background and Cultural Values

The influences of some socio-economic variables have been explored in Section 4.3. This section attempts a general interpretation of how these variables influence work commitment. From the questionnaire survey, it appears that most of the female workers in the factory come from a low-income family, have low educational attainment and, generally, no work experience prior to their employment in the electronics industry. Many workers feel that, upon leaving school, they have to seek a job to support themselves. The need for employment is particularly acute since they come from poor families. But workers find that the opportunities open to them are very limited because of their low educational qualifications. The usual jobs available to them include work as a machine operator in a factory, salesgirls in shops and supermarkets, waitresses in restaurants, or petty retail traders. This limited range is further narrowed by other factors. It is important to repeat that many of the workers are migrants from rural areas. For them, the scope of job opportunities is virtually nil if they remain in their villages. In the urban areas, such jobs as salesgirls and waitresses are not favoured because they are considered as lowly and humiliating. Because the opportunities for employment are so limited, except in the case of blue-collar jobs, many of these low-educated females are compelled to seek and accept employment in a factory. Such is the situation with most female production workers when they accept factory work.

Some workers may continue to regard their jobs merely as a means to get earned income despite prolonged employment in the factory. This lack of commitment may be ascribed to cultural values instilled during the process of socialisation. The most important of these values are those connected with sex-typing. Casual remarks of the workers can be quite revealing e.g. one female worker, in response to a work-mate's job complaints, said: "Get married! Then you don't have to work." Another worker, referring to a work-mate whose husband was unemployed, commented: "The world is reversed. In the past, men work while women look after the children. Now it's different. Men look after the children while the women go out to work." These remarks reveal that traditional expectations, with regard to sexual division of labour, are still held by some workers. For female workers who hold such expectations, employment in the factory is only a temporary phase in their lives.

Although many female workers in the factory do not expect to work after marriage, yet a considerable number may find that they have to. The majority of these workers will, most probably, marry into the same socio-economic background, in which case the need for a supplementary income is just as great as before. At this stage, the workers are not necessarily committed to their jobs. Until they reconcile themselves fully to the jobs and view them as desirable and satisfying to some extent, they remain workers who are merely resigned to their jobs. Resignation, as pointed out by Pascuel Gisbert (1972), differs from commitment in that resigned workers accept their jobs only insofar as there is no alternative.

5.3 Occupational Mobility

Occupational mobility and specific commitment are two polarised opposites. One does not expect both to co-exist. Commenting on the fully committed worker in advanced industrial societies, Kerr (1973) says:

"Tied to particular occupations because of specialized skills ... the worker's chance to change his employment is closely circumscribed."

Specialised or non-transferable skills are only one partial explanation for the limited chances of occupational mobility among female production workers in the electronic industry. Low educational qualifications, traditional views of women's role in society and lack of self-confidence present obstacles to occupational mobility. It was found that female workers in the factory showed a distinct lack of interest in job or career development. Many workers said they preferred not to be promoted to the position of line-leaders or supervisors because they did not want the heavier responsibilities it entails. Others said that they were not sure whether they could cope. It may be argued that, in most cases, promotion prospects or aspirations related to the present job serve to bind the worker to her job. Put in another way, aspirations for mobility within the same factory or industry help to foster specific commitment. Since such aspirations are rarely held by the workers in Jimat Semiconductor, it is not surprising that the degree of specific commitment among them is generally quite low.

In the comparative ranking of occupations, a considerable number of workers placed high values on white-collar jobs. Some even said they were interested in such fields as nursing and the police force. Yet, their responses to the question regarding skills acquired, courses taken and general preparations for an occupational change showed that little

positive action had been taken to realise their aspirations. Thus, it appears that a considerable number of workers are not really serious in improving their occupational skills or positions. For the majority, the idea of holding a respectable job and, perhaps, earning more money is attractive. But they are not prepared to accept the reality of the jobs they aspire to.

5.4 The Nature of the Electronics Industry

Inherent in the electronics industry are multiple inter-related factors which deny committed workers from prolonged employment within the industry. Although electronic corporations actively seek to control high turnover among new employees through slogans and propaganda, to inculcate loyalty and promote identification with the company, and to convince workers that they are invaluable to the industry, there is in reality no scope for committed workers. As noted by Grossman (1979:10), "... the work is almost by definition temporary. After three or four years of peering through a microscope, a worker's vision begins to blur, so that she can no longer meet the production quota. The unspoken expectation of the company is that she will marry and "retire" by the time she becomes unfit for the work, but she will be laid-off in any case." This raises serious problems for committed workers. If their jobs are not permanent, where do they go when they are forced to resign? What are the alternative jobs open to them? There are no easy solutions because host countries of foreign electronic assembly plants are almost all industrialising countries. New jobs are not easily created for displaced workers from the electronics industry.

Commitment in the electronics industry is a disaster in more than one sense. For even if committed workers could remain in the industry, they face considerable risks with regard to their health. The dangers of electronics work have been documented by several researchers (Lim, 1978; Grossman, 1979; Sivanandan, 1979). Deteriorating eyesight, conjunctivitis, headaches, dizziness, nausea and serious burns are only some of the immediate effects of scope work and working with caustic and toxic chemicals. An even greater danger lies in the possibility that the chemicals so widely used in the production process is cancer-causing.

Thus, Grossman (1979:15) notes:

"The semi-conductor industry presents its Southeast Asian women workers with short-term dilemmas and long-term contradictions. Jobs which seldom last longer than four years can bring profound changes into their lives for years to come. While the newness of the industry in Southeast Asia means there are relatively few veterans of semi-conductor employment, it is essential to consider what will happen to these workers when their time in the electronics plants is over."

From the electronic corporations' viewpoint, worker commitment in the sense of expectations and intentions to remain permanently in the industry, is definitely not desirable. As quoted by Linda Lim (1978: 324), one local personnel manager of a foreign company said:

"It is good to have turnover because of the uncertainty of the industry, which makes it unwise to keep too much labour. Wage rates may rise, new products may be developed requiring either more or less skills. Turnover helps to change the composition of the labour force ... to higher or lower skills ... as production changes."

Management's attitude towards worker commitment is clearly influenced by economic considerations. A committed work force is not welcomed because it rigidifies the labour force and makes it difficult

for management to lay off workers at will, especially in times of economic recessions. The flexibility of the labour force is highly valued since the electronics industry, more than any other industry, is very vulnerable to changes in the general business cycle. Besides, it is also subject to an "innovation and competition cycle" (Lim: 1978). Ability to lay off workers is also important for another reason: the electronics industry is characterised by a high rate of technological obsolescence and change. New work processes and new products are constantly being created. This leads to obsolete or redundant labour in the industry.

Seniority and annual wage increases put pressures on the wage bill, which electronic corporations are constantly trying to cut down. Cost-cutting is necessary because of the intense competition within the industry. In such a situation, committed workers pose problems to the economics of production - profit maximisation and cost minimisation. At the same time, the highly refined division of labour makes worker commitment an expendable quality; training periods for new workers and learning curves are short. New recruits generally are able to learn the job in a week or two.

Not only is the management's attitude opposed to the growth of worker commitment. The unstable job tenure arising from the relative ease with which the electronics industry may be relocated, makes worker commitment more a potential problem than a desirable attribute. The aim of the electronic corporations in locating their assembly plants in Southeast Asia is precisely to cut costs by taking advantage of the cheap, abundant labour in these countries. However, since the establishment of these off-shore assembly plants, wage rates have been increasing, so that the profitability of using Southeast Asian labour is not as great as

before. This might lead electronic corporations to relocate their plants elsewhere. The threat is further compounded by the possibility that the U.S. government may abolish tariff regulations 806.30 and 807.00.¹ This action would increase costs of sending components abroad and thus reduce the profitability of off-shore sourcing.

5.5 National Economic Policies

The problems posed by a committed work force in the electronics industry are in no way eased by national economic policies. Because the electronics industry is highly labour-intensive, it is treated as a high priority industry by the Malaysian government. Whatever laws the Malaysian government has passed in relation to the electronics industry favours the electronic corporations rather than the workers. The ban on unionisation of electronic production workers heightens the vulnerability of the workers as far as job tenure is concerned. For example, some senior workers said that unreasonably strict discipline in the factory, just before the annual bonus is due, is an attempt by the management to find fault with them. Workers get a warning letter from the management for talking, being in a section other than their usual work place and other relatively minor misconduct. Workers who get three warning letters are dismissed. Without union rights, workers cannot protest against such unfair dismissals which are based on unnecessarily harsh discipline. Lack of legislative restrictions on the electronic corporations' total control over the workers also means that workers may be laid off arbitrarily. The lack of safeguards to protect committed workers contribute to the potential problems of worker commitment.

The Malaysian government is reluctant to institute measures to protect the workers. Probably, it fears that such measures may reduce multi-national investment, and consequently, job creation in the country. This attitude is supported by electronic corporations which have repeatedly put pressure on the Malaysian government to forestall workers' attempts at unionisation.

University of Malaya

Footnote

1. "Item 806.30 provides tariff exemption for certain items manufactured in the U.S. exported for further processing, and imported as finished goods. Item 807.00 affects articles assembled abroad from U.S. made parts. Such articles are dutiable on the full value of the import less than cost of U.S. made materials. 807.00 applies if U.S. made component parts are exported in a condition ready for assembly, and are not improved in condition or enhanced in value-added abroad except by the assembly process." (Lim, 1978)

CHAPTER 6

CONCLUSION

Contrary to the expectations expressed in the research problem, the findings of the present study showed that the majority of the female production workers of a multi-national electronics factory in Bayan Lepas were not committed to industrial employment. This lack of commitment was subsequently found to be related to several background variables, namely, migrant status, parental disapproval, a non-industrial background, a relatively higher educational level, and a short period of employment. These characteristics were found extensively in the Malay sample and accounted for the relatively low degree of commitment among the Malay workers.

The findings of the present study support some of the findings and suggestions of previous researchers. The establishment of a relationship between a low degree of commitment and migrant status accords with A. Halim Ali's finding (1980) that turnover and absenteeism rates are higher among migrant workers than non-migrant workers. Furthermore, the relationship of commitment to background variables, in general, supports B.D. Sharma's suggestion (1974) that such situational factors as social, educational and economic attributes of the labour force be considered in studying commitment at the micro level.

It is important to note that the findings of the present study are based largely on attitudinal measures of commitment. While such findings reveal the degree and nature of commitment among a certain group

of workers at the present time, they are, in themselves, not sufficient to allow predictions regarding future trends. As Kerr et. al. (1973), Cole (1971), Myers (1958), Morris (1965), Takezawa (1974), and other scholars, have tried to show in their studies, commitment is influenced by a variety of complex and inter-related factors. The findings of the present study wholly supports the view of the scholars and researchers. In the previous chapter, the present study has attempted to show how socio-economic variables, occupational mobility, national economic policies and the nature of the electronics industry encourage or militate against the growth of worker commitment.

The present study shows that commitment is not always a desirable quality in the labour force. The implications of worker commitment among female production workers in the electronic industry have already been discussed extensively in Chapter 5. In this concluding chapter, these implications will be stated again. Briefly, commitment in the electronics industry poses problems to both the management and the workers. The management stands to lose because committed workers put pressure on the wage bill, become redundant through technological obsolescence, and are difficult to retrench in times of economic recessions. At the same time, committed workers, especially in the electronics industry, are likely to lose their jobs after a few years of employment because of deteriorating eye sight resulting from scope work. Furthermore, prolonged employment in the industry means prolonged exposure to toxic and possibly cancer-causing chemicals.

Although the findings of the present study showed a low degree of commitment at present, there are signs which suggest changing future trends. Increasing numbers of married women workers in the electronics

industry suggest a growing attachment to industrial employment. At the same time, the recent outbreaks of worker protest in some electronics factories suggest that workers are beginning to place their stakes on industrial employment.

Many women workers continue to work in the electronics industry after marriage although they had not expected to. Thus it appears that traditional expectations and attitudes towards work are not as significant a determinant of commitment as economic pressures. The need for women workers to hold on to their jobs after marriage is largely due to the fact that their husbands' incomes are insufficient to support two or more persons. As noted in Chapter 5, many of these women workers come from a working class background and tended also to marry into the same socio-economic background. The need for a supplementary income is further aggravated by rising costs of living as manifested in price increases of basic needs, and by increasing wants resulting from rising 'consumer fetishism'. Judging the present situation in the light of future inflationary pressures, it is expected that the trend of continued employment of married women in the electronics industry will continue.

The recent outbreak of worker protests (especially in the Free Trade Zone in Penang, September 1980) could be a prelude to the unionisation of electronics production workers. Strikes such as those organised by employees of Atlas Electronics in 1974, and employees of RUF and Hewlett-Packard in 1980, not only indicate worker discontent over terms of employment and work conditions. They also suggest a rising consciousness among electronics production workers that only through unionisation can they effectively fight for their rights. It may be argued that unionisation of these workers could help to raise wage rates, prevent

arbitrary dismissal of workers by electronic corporations, and lobby for labour regulations that make compulsory, monetary compensation in cases of sudden retrenchment. On the other hand, it is not likely that workers in the electronics industry will succeed in realising their objectives. Stiff labour regulations against worker protests form a deterrent to this development. Moreover, the government has promised electronic corporations that union rights would never be granted to their workers.¹ These trends together with the contradictions inherent in them, present more problems and challenges to social planners and private organisations concerned with alleviating the problems of factory workers in Malaysia.

Footnote

1. According to Linda Lim (1978: 343), the Malaysian government has consistently refused to recognise the organisation efforts of workers and unions in electronics factories.

BIBLIOGRAPHY

A. Halim Ali, The Adaptation of Rural Migrants in Urban Factory Employment - A Case Study of a Malaysian Factory, No. 3, March 1980, Universiti Kebangsaan Malaysia.

Bailey, K.D., Methods of Social Research, New York, Free Press, 1978.

Benseman, M.H., Electronics: The International Industry; an examination of U.S. electronic offshore production involving a female workforce in Southeast Asia, Honolulu, Culture Learning Institute, East-West Center, 1979.

Chew Mee Geok, Problems faced by factory girls in Atlas Electronics, Bayan Lepas Free Trade Zone, Penang - A Case Study, Unpublished paper, Department of English, University of Malaya, 1979.

Cole, R., Japanese Blue Collar: the changing tradition, Los Angeles: University of California Press, 1971.

Darling, M., The role of women in the economy, Paris, Organization for Economic Cooperation and Development, 1975.

Fatimah Daud, The Flying Suitcase: A Study of Female Production Workers in a Multinational 'Pioneer' Electronic Firm in Malaysia, Unpublished manuscript, 1979.

Gisbert, P., Fundamentals of Industrial Sociology, Tata McGraw Hill Publishing Co. Ltd., Bombay-New Delhi, 1972.

Grossman, R., "Women's Place in the Integrated Circuit" in "Changing Role of Southeast Asia Women", Southeast Asia Chronicle, No. 66 (January-February), 1979.

Kerr, C., et. al., Industrialism and Industrial Man, Harmondsworth: Penguin Books Ltd., 1973.

Lim Kah Cheng, Class and Ethnic Consciousness Among Women Factory Workers in Penang - A Case Study, M.A. thesis, Universiti Sains Malaysia, 1979.

Lim, Linda, Y.C., Multinational firms and Manufacturing for export in less developed countries: The Case of the electronics industry in Malaysia and Singapore, Ph.D. thesis, University of Michigan, 1978.

_____, Women Workers in Multinational Corporations: The Case of the Electronics Industry in Malaysia and Singapore, Michigan Occasional Paper, No. IX, Fall 1978.

Morris, M.D., The Emergence of An Industrial Labour Force in India, Berkeley and Los Angeles: University of California Press, 1965.

Myers, C.A., Labour Problems in the Industrialization of India, Cambridge, Massachusetts; Harvard University Press, 1958.

Nash, M., Machine Age Maya: the industrialization of a Guatemalan Community, Glencoe: Free Press, 1958.

Sharma, B.D., "The Indian Industrial Worker" in N.F. Dufty (ed.), The Sociology of the Blue Collar Worker, Leiden, 1969.

Sheth, N.R., "Sociological Studies of Indian Industrial Workers", Sociological Bulletin - The Journal of the Indian Sociological Society, Vol. 26, No. 1, March 1977.

Sivanandan, A., "Imperialism and disorganic development in the silicon age", Race and Class, Vol. XXI, 2 (1979).

Sobol, M.G., "Commitment to Work" in F. Ivan Nye and Lois W. Hoffman (eds.), The Employed Mother in America, Chicago: Rand McNally, 1963.

Takezawa, S.I., "The Blue Collar Worker in Japanese Industry" in N.F. Dufty (ed.), The Sociology of the Blue Collar Worker, Leiden, 1969.

Official Publications

Penang Development Corporation, Investment Guide to Penang, 7th edition.

_____, Laporan Tahunan 1978.

_____, Penang Development News, No. 6, 1979.