A PSYCHOLOGICAL INVESTIGATION OF THE INCIDENCE OF ABSENTEEISM AMONGST CAPE FACTORY WORKERS AND THE REASONS THEREFOR.

A THESIS SUBMITTED TO THE DEPARTMENT OF PSYCHOLOGY OF THE UNIVERSITY OF CAPE TOWN FOR THE DEGREE OF

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by:-

DAVID B. NAUDE B.Sc.

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C O N T E N T S.

CHAPTER		PAGE
I.	INTRODUCTION.	1.
	PART ONE.	
	PRELIMINARY STAGES IN COLLECTING THE DATA.	
II.	AN OUTLINE OF THE PURPOSE AND METHODS OF THE SURVEY.	6.
	PART TWO.	
	ANALYSIS OF DATA.	
III.	AN ANALYSIS OF TIME LOST FOR DIFFERENT GROUPS AND THE REASONS FOR ABSENCES.	15.
IV.	DETAILED ANALYSIS OF GROUPS AND THEIR REASONS FOR ABSENCES.	25.
V.	SUMMARISED CONCLUSIONS AND RECOMMENDATIONS.	33.
BIBLIOGRAPHY:		38.
APPENDIX "A".		
APPENDIX "B".		
APPENDIX "C".		

GRAPHIC ILLUSTRATIONS.

Page.

1. HISTOGRAMS ILLUSTRATING THE ABSENTEEISM DISTRIBUTION FOR DIFFERENT REASONS FOR ABSENCE: 18a.

   (i) European & Non-European Males.

   (ii) European & Non-European Females.

2. HISTOGRAM ILLUSTRATING THE PERCENTAGE DISTRIBUTION FOR DIFFERENT REASONS FOR ABSENCE: 18b.

   European & Non-European Males & Females.

3. HISTOGRAMS ILLUSTRATING THE DURATION OF ABSENCES FOR THE DIFFERENT GROUPS OF WORKERS AND THE NUMBERS AFFECTED THEREBY DURING 1950: 22.

   (i) European Males.

   (ii) Non-European Males.

4. HISTOGRAMS ILLUSTRATING THE DURATION OF ABSENCES FOR THE DIFFERENT GROUPS OF WORKERS AND THE NUMBERS AFFECTED THEREBY DURING 1950: 23.

   (iii) European Females.

   (iv) Non-European Females.

CHAPTER I.

INTRODUCTION.

With the dawn of 1952 great possibilities face South African industrialists. The natural impetus the war gave to industry has passed over to a more gradual expansion, and we are able to look around us and take stock of the situation.

The wise industrialist, by every available means at his disposal, with the assistance of the Industrial Psychologist, Sociologist and Engineer, is consolidating his position.

In the active field of competition, his team of workers are strengthened by the utilization of improved work methods and the resultant greater efficiency, obtaining improved human relationship and morale and the efficiency of operatives.

An improving production process takes into account anything to disrupt the normal steady flow of production.

Quantity and quality are regarded as synonymous and any variation of this and the failure of operatives to work continuously is taken seriously into account. Stability and regular attendance are of prime importance as any time lost on the job, due to absenteeism, will impede the normal flow of work.

Substitution in the industrial production set-up, due to casual unfamiliarity with the work required to be performed by an individual specialist, will cause a drop in the quantity production schedule; and also affect the standards wished for by management and desired in the quality control department.

Unnecessary absenteeism has caused lowered industrial production in the past and its pernicious influence is felt throughout the industrial world. Without a doubt absenteeism as a factor in modern industry is the cause of greater loss than any other known factor.

Bad management is, to a great extent, one of the contributory causes of the present state of affairs.

1. Figures obtained from the Commonwealth of Australia 1943 Department of Labour Bulletin 2, show the following:-

TABLE 1.

COUNTRY	YEAR	NUMBER OF FACTORIES	ABSENTEE RATE	
			MALE	FEMALE
U.S.A.	1943	3,600	6.2%	22%
NEW ZEALAND	1942	34	6.5%	11.5%
AUSTRALIA	1942	26	7.0%	13%

It is evident from the above, even when allowing for different methods of measurement and in definition, the amount of absenteeism is variable.

2. The Canadian Labour Gazette, 1943, quotes:- "In two war plants employing approximately 5,000 men each in 1943, the average absentee rates were 3.8 per cent and 18.7 per cent respectively. "

3. Absentee rates ranging from 1.35% to 5.1% have recently been recorded in several shoe factories in South Africa.*

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* "A detailed investigation of Absenteeism in 14 Factories" by I.H.B. White; Personnel Research in South Africa; Results of Investigations carried out by the Personnel Research Section of the Leather Industries Research Institution, Grahamstown.

Facts drawn from the foregoing prove the great variations which are evident in figures quoted on absenteeism throughout the world. In a Canadian Report of 1942, the average absentee rate quoted was 7%; with a rate of 2.8% in one of the best, and 18.7% in one of the worst.

The harmful results of absenteeism cannot be measured in figures. When twelve to fifteen employees fail to report for work, the loss is greater than their collective working time. Apart from the additional loss due to dislocation in the flow of production, a disintegrating force is set into motion affecting the morale of the entire factory.

Nothing can be more discouraging for management than to be plagued daily with the incessant worry whether one production line or another is going to be affected more adversely than the other on any one particular day.

For the employee, a like situation arises, taking the drive and enthusiasm out of the individual when absenteeism causes changes in the production set-up, causing management to shuffle the operators around out of their normal group of social contacts and moving them from one environment to another.

In evaluating the efficiency of any industrial organization a sure guide is reflected in the absentee figures, if available, and the actual causes of absenteeism. The reasons are as numerous as an ingenious brain can invent.

Most articles on absenteeism have been unscientific in their approach to the subject - broad generalizations used in a most rampant manner, omitting for the most statistical methods.

Reports of a statistical nature vary greatly from writings on the general extent of absenteeism in the war industries, quoting rates and giving the general characteristics as, e.g., the rates for females are higher than those for males.

Very little has been done in the field of the causes of certain variables upon the total field of absences and absenteeism, and to the writer's knowledge this is the first study of its kind.

The data for this investigations was collected from the male and female workers of a large factory concerned in the manufacturing business of the Cape Clothing Industry. The firm is situated in Salt River, Cape Town, ranked as one of the most ideal situations from the labour market point of view.

PART ONE.

PRELIMINARY STAGES IN COLLECTING THE DATA.

CHAPTER II.

AN OUTLINE OF THE PURPOSE AND METHODS OF THE SURVEY.

The general hypothesis on which this investigation is based is that absenteeism, like many other problems of industrial relations, can largely be nullified by careful preliminary selection of the prospective employee.

Taking into account the general causes of absenteeism, the reasons for absences from work, and the excuses of a varying nature given - if these are analysed, a clear picture will be shaped from which a general type of worker, most desirous from the management's point of view, will emerge.

Likewise, the investigation will be able to clarify statistically the group of most unsatisfactory types of workers engaged at present, from the point of view of irregular attendance and instability of work, - the type of operative management must be cautious in employing; and if they do employ them, must be prepared and plan accordingly for the disappointments which are bound to be forthcoming.

With this information to hand, and utilizing it to its best advantage, management will be able to forecast and plan ahead with a certain amount of accuracy.

A definition of absenteeism is generally accepted as denoting time lost from the job in commercial or industrial establishments by unavoidable, or avoidable, absences by employees.

This definition in itself is rather rigid and unless the research worker has access to time cards, and an elaborate system of checking and collating individually all clock cards over the period of the survey, it will soon be found that he has embarked on a most costly project, where time can be no object.

For convenience sake, the majority of research workers evolve a definition to suit their own purpose and, therefore, they sometimes differ in minor respects.

The writer is no exception and, in this investigation, absenteeism has been defined as all time lost by the worker for whatever reason excluding:

1. Time lost through lateness of up to 2 hours;
2. Time lost through indefinite absences of two months or more;
3. Time lost through vacations and any other officially granted holidays.

From a preliminary survey, the writer found that although an employee's absence of 10 or 20 minutes late was recorded, the actual time was often more - or in some cases less - depending on a plus or minus five minutes' accuracy, dependent upon the person assessing the lateness.

Time lost through indefinite periods of two months or more was not assessed in cases where the writer knew the operative had been put off, and the doctor's certificate tendered was unable to state specifically when the employee would be considered well enough to start work again. The effect of this provision was that, where a worker was away for a period of two months or more within the period of the survey, time lost was not taken into account, since management had been notified and were in the position to plan accordingly.

THE SOURCE OF THE DATA:

The absentee data analysed in the following chapter was obtained from the firm's Personnel Absentee Record cards.

The firm has for many years kept a record of each worker's absences on an Absentee Record card, which has been maintained accurately by a very active Personnel staff. The information was, in the first instance, passed on by the Foreman in charge of each production line, who is responsible for the reasons for absences of the workers being concisely recorded on a preliminary absentee report, which is passed on to the Personnel Department and there scrutinised, and if found that the excuse given was not considered adequate, the employee was further interviewed to arrive at the fundamental reason for the absence.

The information gathered in this way was, on analysis, found to fall into the following main categories:-

A. REASONS FOR ABSENCES.

1. Certified absences ..... where an employee has been put off by a doctor and given a doctor's certificate stating the number of days.

2. Uncertified absences ..... where employees have been absent generally for a day or two and on their return, report that they were sick, but did not consult a doctor.

Many of these cases of one days's absence are factual and, especially among the female employees, follow a distinct pattern which is easily predictable with familiarity of a group over a period of time. Others again are sick but, although subscribing to a Sick Fund, refuse the attention of a doctor. Finally there are those who say they were sick and this excuse is accepted with a certain measure of doubt and, since the group as a whole lack documentary proof, they are placed in the same category, namely "Uncertified Absences".

3. PERSONAL: Absences generally granted by management to allow employees to attend Court or other pressing business matters, to which it was found impossible to attend on a Saturday morning. This category of absences was usually for half day periods of absence for personal reasons.

4. FUNERALS: Amongst the non-European element of the Cape, especially the Malay workers, management is frequently approached to grant time off due to the death of a member of the family, or a distant relative.

The Islamic religion decrees that the deceased must be buried before sunset on the day of death. This frequently is the cause of absence of a day, or half day, to attend a funeral.

5. MISCELLANEOUS: In this group of absences fall the many reasons of a varying nature engendered by an active and fertile brain. Transporation difficulties figure prominently as an excuse and often are quite genuine. "Got wet and had to go home and change again" is another rather frequent excuse for a half day's absence; and other ingenious reasons too numerous to mention.

6. FAMILY: Absences rated due to the illness of a child or of a parent necessitating the presence of the employee at home. Many of these cases are followed up by a trained Welfare Officer and found to require the presence of the employee to assist in the running of the home and the care of the patient.

B. TOTAL ABSENCES:

This figure was a summation of the above groups 1 to 6 and was the total over the full period of the survey.

C. AGE OF EMPLOYEE:

The date of birth of the worker at the time of engagement was computed in whole numbers, taking the 2nd of July 1950 as the mid-point of the survey. For example, (i) an employee born on the 24th March, 1934, would be 16 years 3 months 8 days; (ii) an employee born on the 15th August, 1934, would be 15 years 10 months 17 days, respectively on the 2nd July, 1950, and for the writer's purpose would both be listed as 16 years of age.

D. MARITAL STATUS:

Analysis based on whether the worker was single or married. - The finer classification of divorcee or widower was not used, but for the purpose of the survey, if an employee had the responsibilities of a family and a home, and though widowed or divorced, or in the possession of an illegitimate child, he/she was classified in the married group.

Finally, the workers were classified in their groups on the basis of Sex and Race.

To simplify the statistics of the investigation, it is convenient to classify the employees in their broader groups, utilizing the following method of allocating distinct numbers to each group.

TABLE II.

GROUP I.	EUROPEAN MALES	651 - 750
GROUP II.	NON-EUROPEAN MALES	751 - 1050
GROUP III.	EUROPEAN FEMALES	1 - 200
GROUP IV.	NON-EUROPEAN FEMALES	201 - 650

The above information was analysed on to Master Cards, which, in turn, were sorted to give any required information conveniently and with the minimum wastage of labour, to be transferred finally to the Absentee Analysis Schedule. (Specimen copy as shown in the Appendix.)

A copy of a Master Card is reproduced herewith for guidance and assistance.

NUMBER	432
A. REASONS FOR ABSENCES:	
(i) Certified	16
(ii) Uncertified	5
(iii) Personal	2½
(iv) Funerals	Nil
(v) Miscellaneous	2
(vi) Family	5
B. TOTAL ABSENCE IN DAYS:	30½
C. AGE IN YEARS:	27
D. MARITAL STATUS (M. Married) (S. Single)	M.

SPECIMEN OF MASTER CARD.

The Master Cards were found to be very useful in a survey of this nature and could be sorted out into varying variables and easily collated. The card itself is largely self-explanatory, e.g. NUMBER 432 ..... as previously referred to, signifies that the subject is a Non-European female, married, 27 years of age with a gross absence of 30½ out of a possible 234 working days. Further, that a classification of the reasons tendered for absences shows that the subject had 16 days' absence certified by a doctor; 5 days where she contended that she was sick; 2 days for personal reasons requiring her attention to personal business matters. No absences were recorded due to bereavements; two days for varying reasons classified as miscellaneous and five days for family reasons, where her children required her attention at home due to illness, or she had nobody to look after them.

In the analysis of Absenteeism recorded in the next chapter, the workers were selected on the basis that they had completed their stay of employment with the firm for the full period of 234 working days. This rather rigid provision was made to ensure standardised treatment of the data which would be obtained from the survey.

There are several methods of measuring absenteeism in common use. Some measure the percentage of workers absent over a given period, while others, the percentage time lost of the total possible working time. The latter is universally used by Departments of Labour in quoting their figures and is useful as a basis of comparison; whilst the former is most useful for domestic requirements, in the assessment of a daily rate.

The measures adopted in this survey are as follows:-

1. ABSENTEE RATES: calculated on the basis of the total number of days lost expressed as a percentage of the total number of days it was possible to have worked.

$$\text{i.e. } \frac{\text{total no. of days lost over a given period}}{\text{total no. of possible working days over the given period}} \times 100$$

On this principle the gross and group absentee rates were calculated.

2. ABSENTEE PERCENTAGES: were calculated as the number of workers who lost time over a specific period expressed as a percentage of the total number of workers.

$$\text{i.e. } \frac{\text{number of workers absent}}{\text{total number of workers in employment}} \times 100$$

3. SEVERITY RATE: The severity rates calculated express the percentage absence of a particular group of absences to the total absences recorded for the group as a whole.

$$\text{i.e. } \frac{\text{number of days lost by group}}{\text{number of days lost by all groups}} \times 100$$

This is helpful in assessing the degree of expectancy of any particular group of absences occurring.

PART TWO.

ANALYSIS OF DATA.

CHAPTER III.

AN ANALYSIS OF THE TIME LOST FOR DIFFERENT GROUPS AND THE REASONS FOR ABSENCES.

The analysis which follows aims to show the amount of time lost for different groups of workers, and the reasons put forward for these absences by the workers, which are accepted, or generally tolerated, by management.

The group under survey is a fairly homogeneous group of average Cape factory workers. The classification into European and Non-European is purely arbitrary, and is accepted on the recognizance of the individual's association with one or the other racial group.

TABLE III.

THE SIZE OF THE GROUPS WHICH HAVE BEEN STUDIED

GROUP	RACE	SEX	NUMBERS OF WORKERS = n
1.	EUROPEAN	MALE	97
2.	NON-EUROPEAN	MALE	219
3.	EUROPEAN	FEMALE	96
4.	NON-EUROPEAN	FEMALE	341

The items which were fully analysed are listed in the previous Chapter.

The principle on which they were chosen was that the salient reasons for absences of each group should be included; and each item should be meaningful in itself.

PROCESS OF ANALYSIS.

In general, the analysis of the data is the standard process of coding the information collected to facilitate easier handling and to enable the reader to view the picture as a whole by means of statistical characteristics.

The processes varied according to the nature of the data.

Distribution of variables were analysed for their means and their standard deviations. Information of a variable nature which did not require fuller explanation and was merely used as a comparison, was analysed for its percentages and the standard error of those percentages.

AN EXAMINATION OF THE DATA follows in Table IV.

TABLE IV.

GROSS ABSENTEE RATES

GROUP	n	POSSIBLE WORKING DAYS	DAYS ABSENT	%
1.	97	23,698	430½	1.89
2.	319	51,246	943½	1.84
3.	96	22,464	607½	2.70
4.	341	79,794	1,848	2.31
	753	176,202	3,829½	2.17%

The interpretation of Table IV. reveals that the European employees (Groups 1 and 3), in comparison with the Non-European factory workers (Groups 2 and 4), are the worst offenders. Further, that the incidence of absenteeism bears out the findings of numerous other surveys* that female employees as a whole have a greater absentee rate than males. The respective rates are:-

A. EUROPEAN & NON-EUROPEAN MALE ABSENTEE RATE : $\frac{1374 \times 100}{234 \times 316} = 1.85\%$

B. EUROPEAN & NON-EUROPEAN FEMALE ABSENTEE RATE : $\frac{2455.5 \times 100}{234 \times 437} = 2.4\%$

The absentee rate for the groups as a whole of 2.17 per cent is very low in comparison with figures as listed previously in Table I., and it augurs well for the methods adopted in this particular group of factory workers to combat the incidence of absenteeism, being proof statistically that the organization is following basically the correct methods. The writer is familiar with the procedure adopted in this organization and others, and will later in this survey put forward certain salient points, which will assist in the control of and minimise unnecessary absenteeism.

The REASONS FOR ABSENCES were classified under the following Sections:

1. Certified
2. Uncertified
3. Personal
4. Funerals
5. Miscellaneous
6. Family.

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* ref. Journal of Applied Psychology, Vol. 29, 1945, page 27. "The Nature & Extent of Absenteeism, the Collective Effect of Age & Sex".

Analysed for the group as a whole, with the concurrent percentages of the group absentee rate, the findings were:-

TABLE V.

GROUP	n	1	2	3	4	5	6	t.
1 & 2	316	871	337	15	32½	51	67½	1,374
3 & 4	437	1,242	737½	53½	41	70	311½	2,455½
TOTAL DAYS:		2,113	1,074½	68½	73½	121	379	3,829½
PERCENTAGE:		55.2	28.1	1.8	1.9	3.2	9.8	100

On examination of Table V., certified absences (Section 1) are found to be in the majority, constituting 55.2% of absences in contrast to uncertified absences (Section 2) of 28.1%.

It is apparent that the group under survey comprises a fairly responsible class of worker, and is well disciplined, quite contrary to the belief that factory workers in the Cape area are irresponsible. These figures gain prominence when it is remembered that 87.6% of the workers are Non-Europeans.

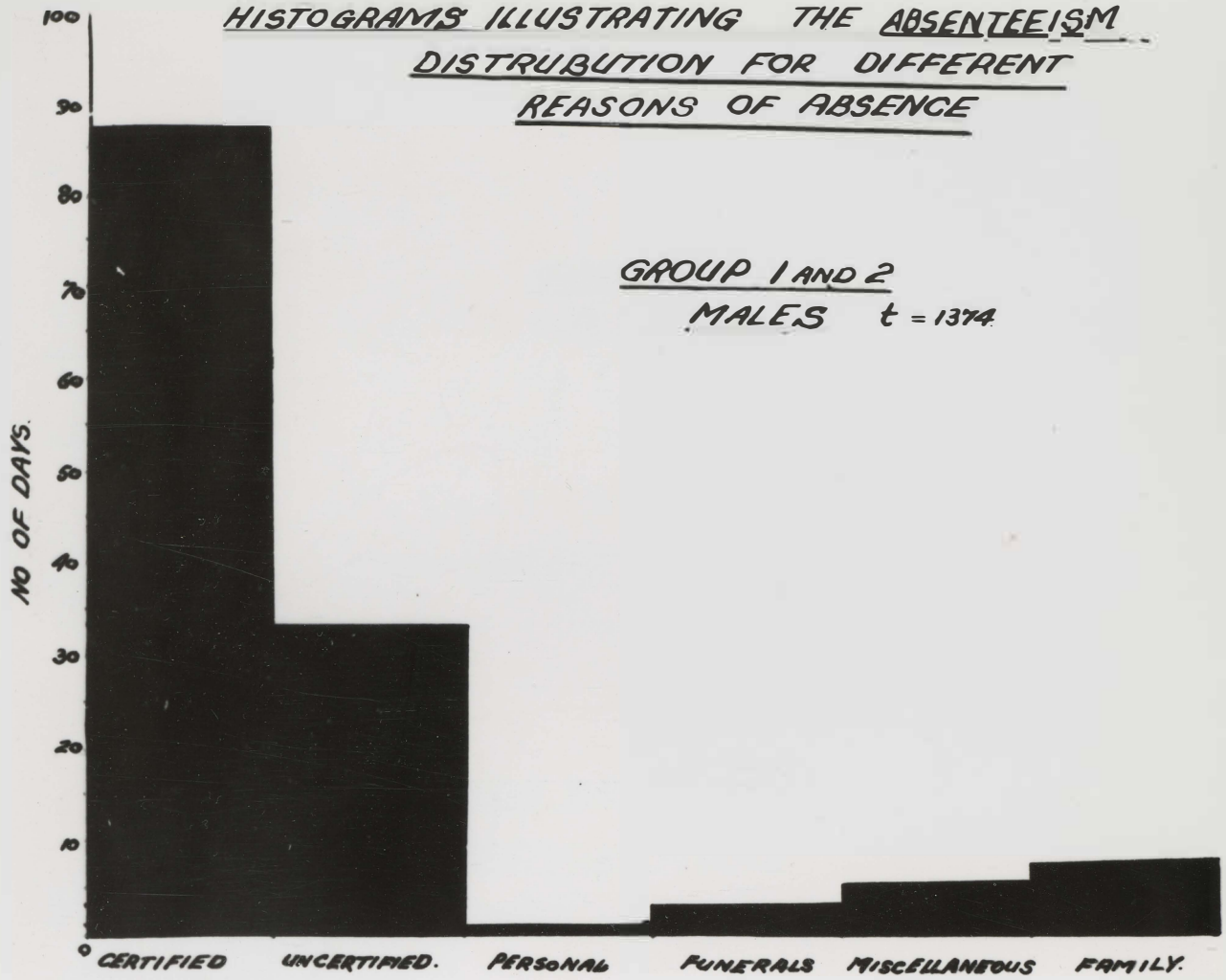
The figure of 1.9% (Section 4) is, on inspection, very high and would be misleading but for the fact that of the Non-European workers 30.5% constituted Malays, whose religion makes it incumbent upon them to attend funerals on the actual day of bereavement.

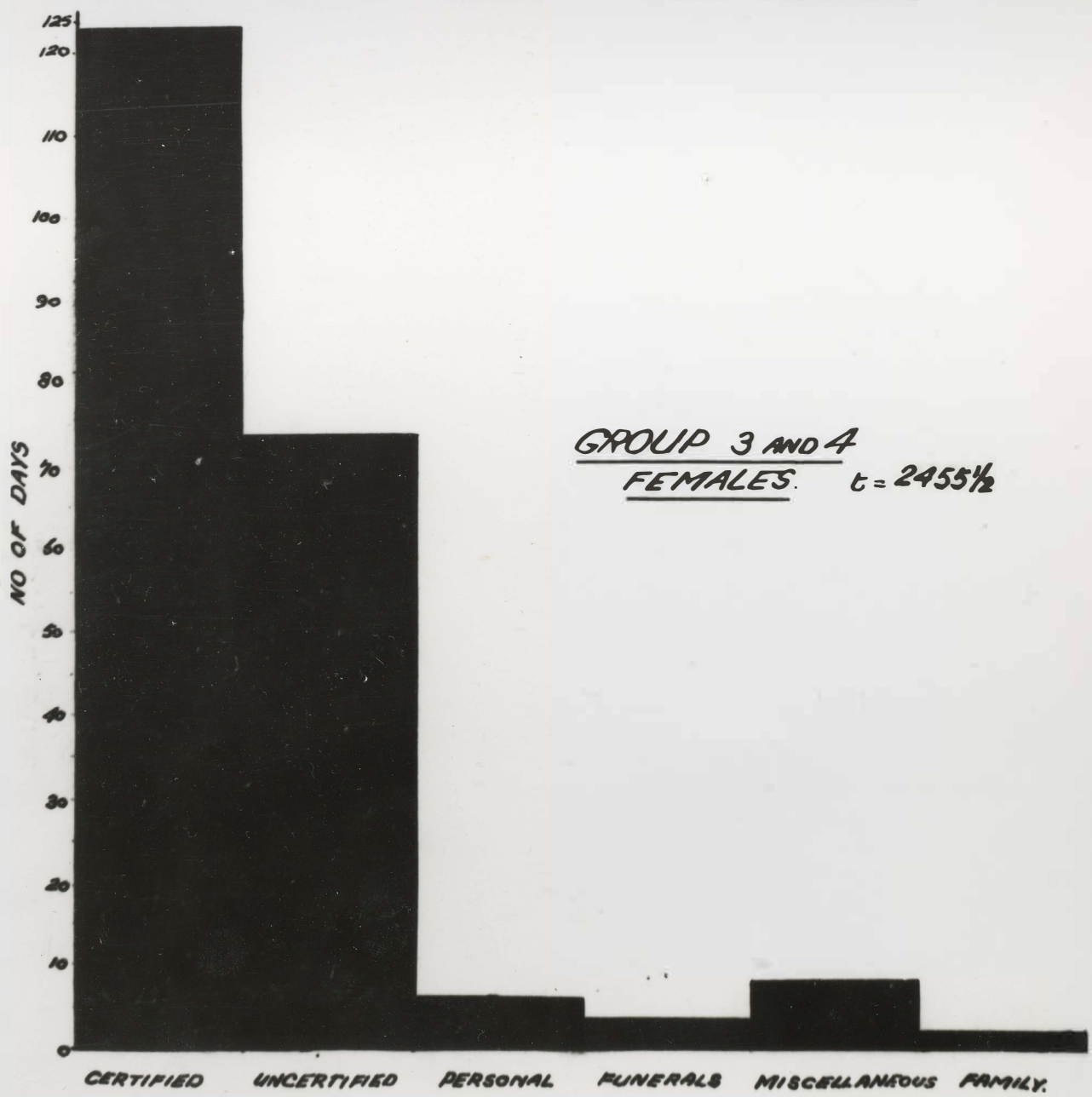
HISTOGRAMS ILLUSTRATING THE ABSENTEEISM DISTRIBUTION FOR DIFFERENT REASONS FOR ABSENCE.

(i) EUROPEAN and NON-EUROPEAN MALES

(ii) EUROPEAN and NON-EUROPEAN FEMALES

HISTOGRAMS ILLUSTRATING THE ABSENTEEISM DISTRUBUTION FOR DIFFERENT REASONS OF ABSENCE



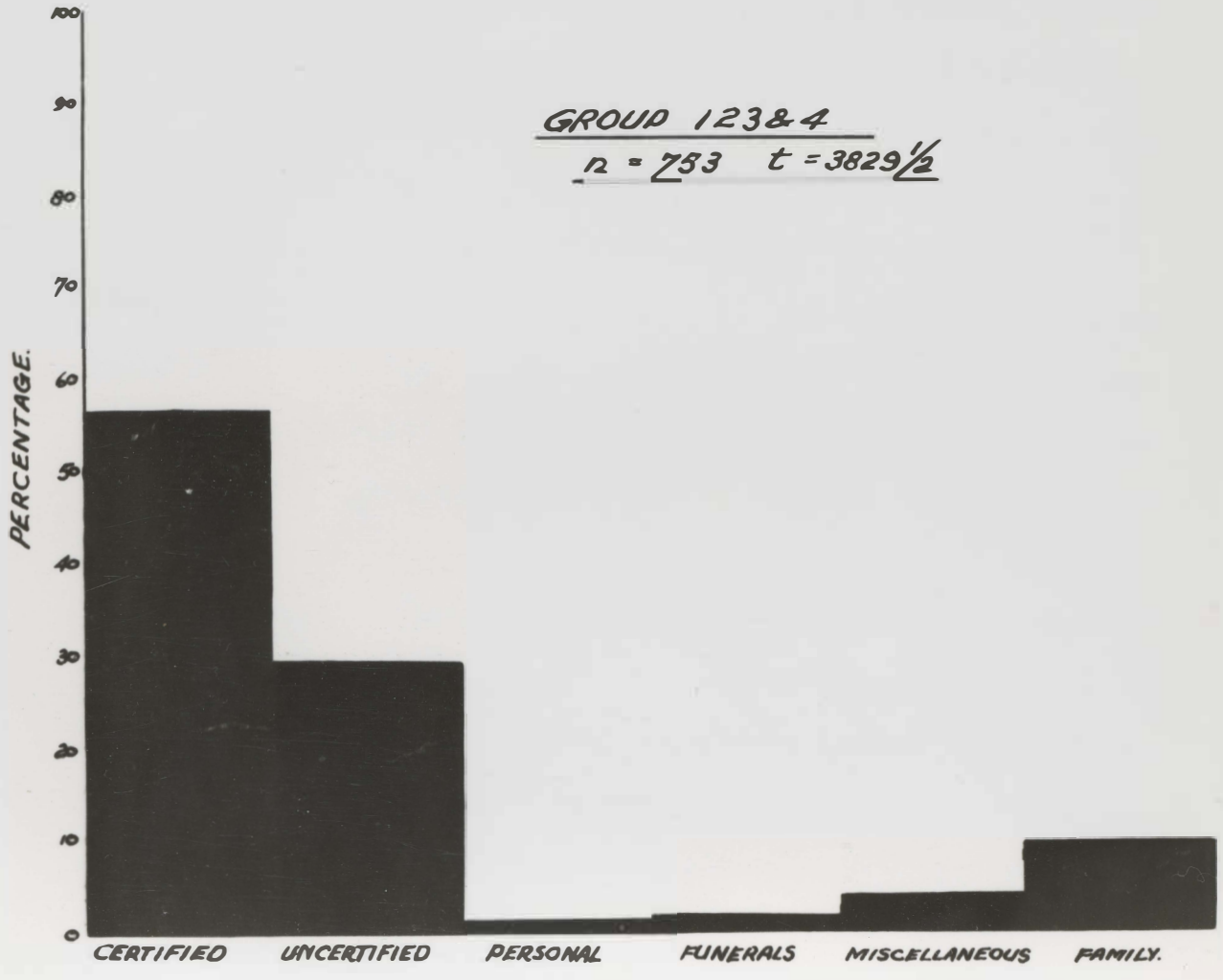


SCALE 10-100.

HISTOGRAM ILLUSTRATING THE PERCENTAGE DISTRIBUTION FOR DIFFERENT REASONS FOR ABSENCE.

EUROPEAN and NON-EUROPEAN

MALES AND FEMALES.



HISTOGRAM ILLUSTRATING THE PERCENTAGE DISTRUBUTION FOR DIFFERENT REASONS OF ABSENCE

The absentee percentage for Family reasons is 9.8%, and is proportionately higher on the overall figure for female workers (Groups 3 and 4) and this is generally to be expected, as it is usual for the female members of the family to take the responsibility of caring for the sick and looking after the requirements of the younger members of the family. Further, in the lower income group, factory workers find it very difficult to hire nursemaids to look after their children, or a qualified nurse to care for the sick, generally lacking the finance to pay for these services.

Personal reasons account for an absentee rate of 1.8% of the total absences, and this is a very low rate. This may in part be due to the writer's inclusion of Court proceedings and private business under the classification of Personal reasons, of which management were generally notified. Out of a certain sense of pride, however, workers are apt to be secretive and feel it is to their detriment if they admit to Court proceedings necessitating their absence, with the result that the residue of factual Personal absences are reflected in the category of Miscellaneous reasons, which is a contributing cause why the percentage rate of the latter is as high as 3.2%.

The foregoing analyses of gross and specific absentee rates, and of absentee percentages for different groups of workers, and their reasons for absence, provide the details of some aspects of the absentee pattern of the workers investigated. But, they tend to obscure an important fact, namely, that a comparatively small proportion of the workers usually account for a large proportion of the total time lost. This fact is well illustrated by the analysis of an extraction of the principal absentees with 20 days or more to their credit.

TABLE VI.

GROUP	n	1	2	3	4	5	6	TOTAL
1 & 2	11	280	54½	1	½	3½	14½	354
3 & 4	27	418	136	10½	6	6½	47½	624½
	38	698	190½	11½	6½	10	62	978½

On examination, it will readily be seen that 38 workers are responsible for 978½ days' absence, i.e., that approximately 5% of the workers are credited with 25% of the total absences, which is proportionately very high. But, in all fairness, certified absences (Section 1), Table VI., show that of this, 72% is for what is recognised as a legitimate reason for absence by management.

The DISTRIBUTION OF ABSENTEEISM amongst the workers for specific periods of absence, is as follows:-

TABLE VII.

THE FREQUENCY DISTRIBUTION FOR VARYING GROUPS FOR SPECIFIC PERIODS OF ABSENCE.

PERIOD OF ABSENCE IN DAYS	G R O U P				TOTAL FREQUENCY
	1.	2.	3.	4.	
NIL	34	56	20	64	174
½ to 3½	31	88	27	131	277
4 " 5½	15	22	13	33	83
6 " 10½	5	28	20	57	110
11 " 20½	7	19	11	43	80
21 " 40½	4	6	5	12	27
41 " 60	1	-	-	1	2
	97	219	96	341	753

The specific periods of absence as tabulated in Table VII were chosen as, on inspection of the data, it was found to be the basic trend for workers to remain off work for a half-day period; one-day period or three-day period; otherwise, for a five-day period, due no doubt to the preponderance of doctors who casually put a worker off for a week; likewise, the two-week period (i.e. ten working days) and the three-week period (15 working days).

For illustrative purposes the writer has drawn up the following Table to simplify this contention.

TABLE VIII.

PERIOD OF ABSENCE IN DAYS	AVERAGE MEAN STATISTICALLY	AVERAGE MEAN IN PRACTICE
NIL	NIL	NIL
½ to 3½	2	1 or 3
4 to 5½	4¾	5
6 to 10½	8¼	10
11 to 20½	15¾	15
21 to 40½	30¾	30
41 to 60	50¾	50

The average mean in practice is quoted as, for the purpose of simplification, the influence of a casual absence, which is unpredictable, tends to obscure the establishment of a true pattern of absenteeism.

A feature of the pattern of absenteeism, which may have been obscured by the arbitrary groupings of absences for different durations, is depicted for the various groups by the histograms on pages 22 and 23.

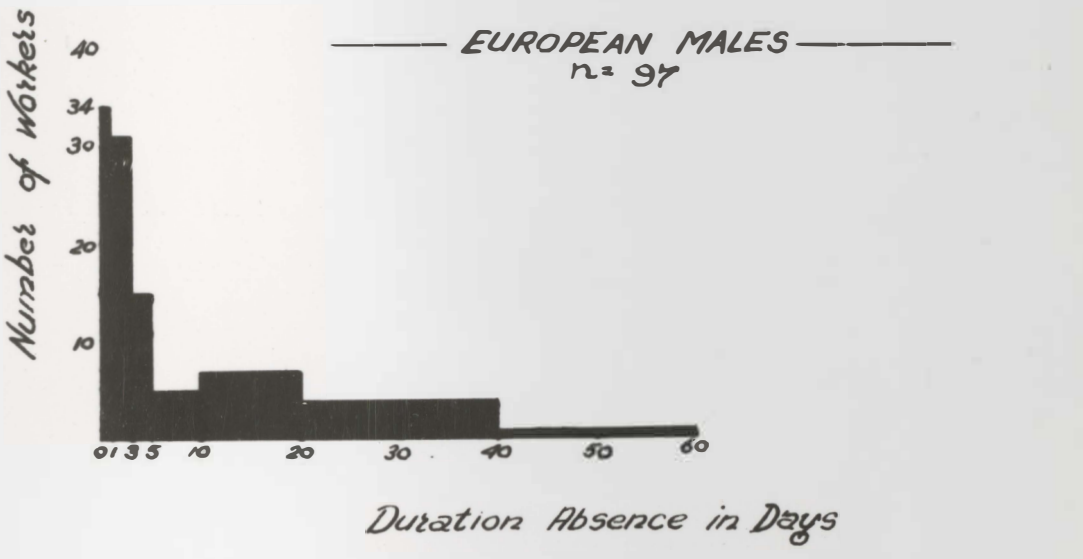
HISTOGRAMS ILLUSTRATING THE DURATION OF ABSENCES FOR THE DIFFERENT GROUPS OF WORKERS AND THE NUMBERS AFFECTED THEREBY DURING 1950.

(i) EUROPEAN MALES

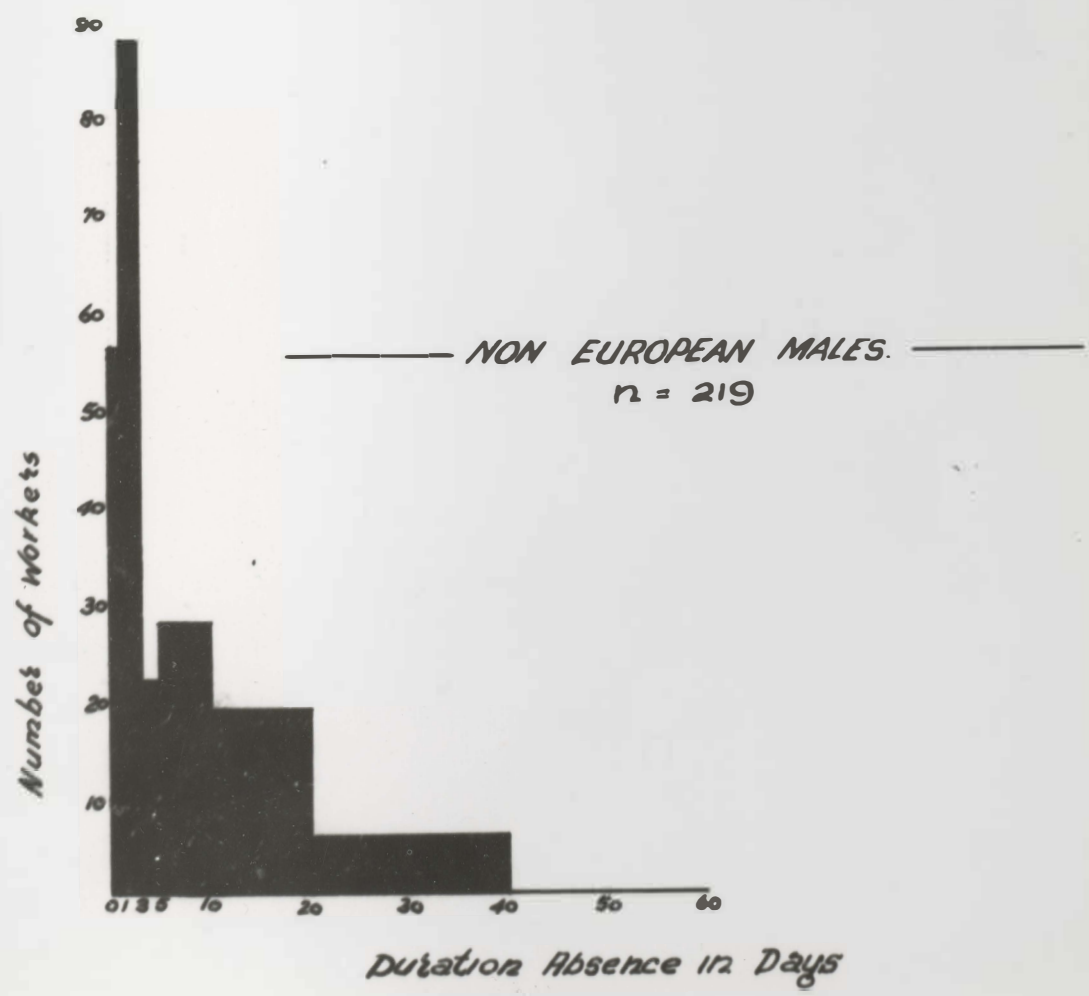
(ii) NON-EUROPEAN MALES

Histograms Illustrating the Duration of Absences for the different groups of Workers and the Numbers affected thereby. During 1950.

(i) Histogram Plotted on Absentee Figures of Group 1.



(ii) Histogram Plotted on Absentee Figures of Group 2.

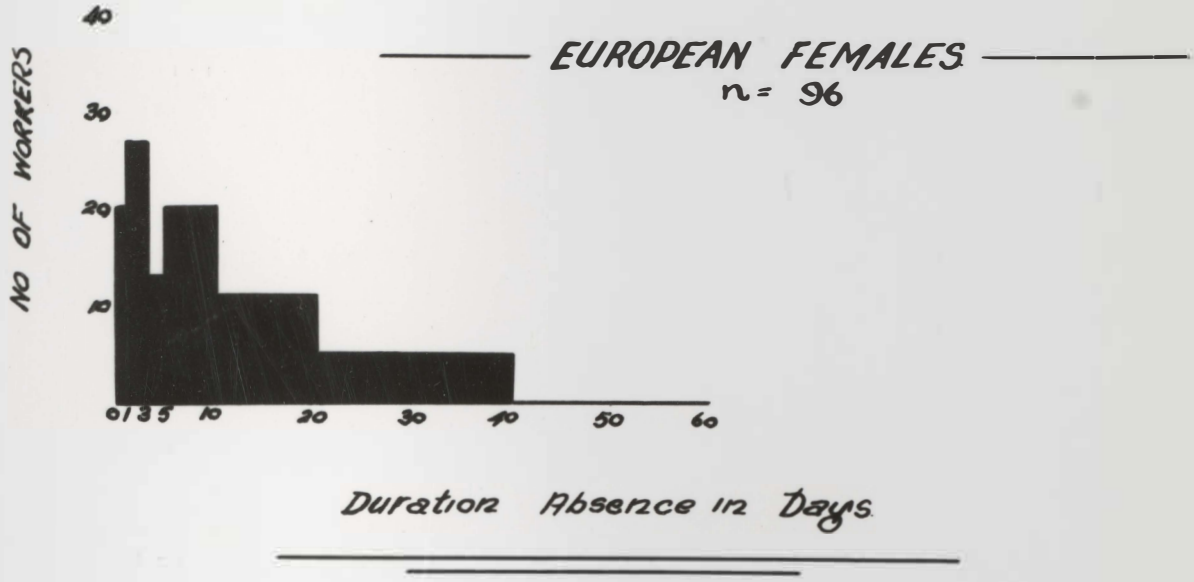


HISTOGRAMS ILLUSTRATING THE DURATION OF ABSENCES FOR THE DIFFERENT GROUPS OF WORKERS AND THE NUMBERS AFFECTED THEREBY DURING 1950.

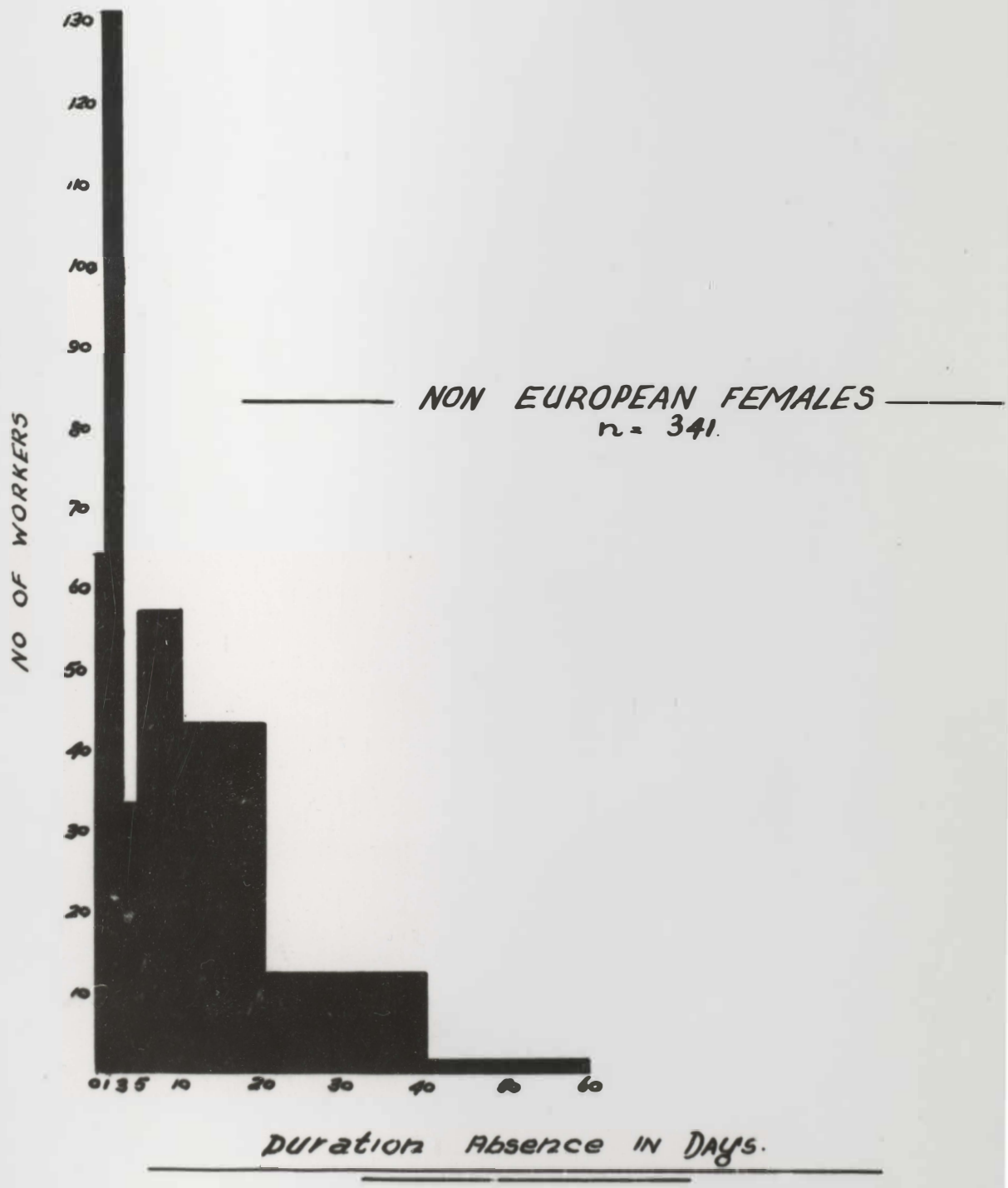
(iii) EUROPEAN FEMALES

(iv) NON-EUROPEAN FEMALES.

(iii) Histogram Plotted on Absentee Figures of Group 3.



(iv) Histogram Plotted on Absentee Figures of Group 4.



It is clear from these, that the majority of workers have short absences occurring more frequently than long absences and, as seen in Table VII, the shorter absences affect a larger percentage of the workers than the longer ones, and yet (ref. Table VI.), the principal absentees are confined to a very small group of workers.

From this we may safely assume on the basis of every day experience, that, as seen in Table VI., the longer the duration of an absence, the more likely is it to fall into the category of being an "unavoidable" absence (Section 1. - Certified). It is unlikely that any organization will tolerate more than an occasional absence of ten to fifteen days of an "avoidable" (Section 2.) nature. Conversely then, a substantial proportion of half to three-day absenteeisms consist of "avoidable" absences.

Further evidence to substantiate the above findings will be adduced in the analyses of absenteeism within the different groups, and the reasons accepted therefor in Chapter IV.

CHAPTER IV.

DETAILED ANALYSIS OF GROUPS AND THEIR REASONS FOR ABSENCES.

In the previous Chapter, the absentee rates for the different groups of workers dealt with in this investigation were analysed, giving their reasons for absenting themselves from work, and the frequency in which they occurred.

In this Chapter, as a further step towards arriving at a solution of the pattern of absenteeism of the workers concerned, their marital status and ages, with the corresponding reasons for absences, are examined.

The groups selected for analysis and the period to which they refer are the same as referred to in the previous Chapters, with the exception that each group has been reduced to the number of married workers and single workers respectively. The average age of each group and the standard deviation has also been computed for the groups 1, 2, 3 and 4, and for convenience, the grouping numerals have been maintained, incorporating the subscript "m" for married and "s" for single members of the workers.

TABLE 9(a).

SINGLE MALE GROUP

	GROUP	NUMBER OF WORKERS	AVERAGE AGE	STANDARD DEVIATION
EUROPEAN MALES	1s.	70	20.0	4.2
NON-EUROPEAN MALES	2s.	146	20.9	3.42

TABLE 9(b).

MARRIED MALE GROUP.

	GROUP	NUMBER OF WORKERS	AVERAGE AGE	STANDARD DEVIATION
EUROPEAN MALES	1m.	27	34.3	9.9
NON-EUROPEAN MALES	2m.	73	31.3	8.4

TABLE 10(a).

SINGLE FEMALE GROUP

	GROUP	NUMBER OF WORKERS	AVERAGE AGE	STANDARD DEVIATION
EUROPEAN FEMALES	3s.	66	21.1	3.51
NON-EUROPEAN FEMALES	4s.	263	19.9	1.53

TABLE 10(b).

MARRIED FEMALE GROUP.

	GROUP	NUMBER OF WORKERS	AVERAGE AGE	STANDARD DEVIATION
EUROPEAN FEMALES	3m.	30	29.9	6.12
NON-EUROPEAN FEMALES	4m.	78	29.4	5.85

The interesting feature of the distribution of the ages of the workers as reflected above, is that the single males and females between the ages of 17 and 24 years comprise sixty per cent of the workers. The remainder, comprising married males and females, are increasingly sparsely dispersed with, finally, only five per cent of the workers over 35 years of age at the extreme range of the distribution.

To arrive at a more comprehensive solution for the various reasons for absences for each group, the writer analysed the reasons 1 to 6 in relation to rank order series; that is, the majority of absences depicted by each category of reasons was ranked from the maximum down to the minimum.

TABLE 11(a).

SINGLE GROUP MALES

GROUP	NUMBER	RANK ORDER					
		(I)	(II)	(III)	(IV)	(V)	(VI)
1s.	70	1	2	5	6	3	4
2s.	146	1	2	5	6	4	3

TABLE 11(b).

MARRIED GROUP MALES

GROUP	NUMBER	RANK ORDER					
		(I)	(II)	(III)	(IV)	(V)	(VI)
1m.	27	1	2	5	6	3	4
2m.	73	1	2	6	4	5	3

The interpretation of Tables 11(a) and 11(b) by inspection is that for the males of all groups, the order rank of 1, 2, 5 is predominant, with the exception of Non-European married males, who are responsible for the divergence in the third order rank, which is significant and will be referred to later. For the present we can say that the Non-European married males are responsible for more absences of the nature of family reasons than any of the other male groups.

The final order series of the rank is of the general pattern 6, 3, 4. In European males, single and married, there is complete harmony in this respect; but with the Non-European males the rank order is at variance - 6, 4, 3 for the single, and 4, 5, 3 for the married groups respectively. The final rank order of 3 is common to both.

What we are mainly concerned with here, then, is the displacement of category 4 (Funerals), which is dominant in the final order series - i.e. the Non-European married males are more likely to be absent due to funerals, than any of the other male groups.

On the basis of the above deductive reasoning, we may state that the likelihood of Non-European married males, in contrast to European married, and European and Non-European single males, absenting themselves for family, funeral and miscellaneous reasons, will occur more often in the former than in any of the latter.

TABLE 12(a).

SINGLE GROUP FEMALES

GROUP	NUMBER	RANK ORDER					
		(I)	(II)	(III)	(IV)	(V)	(VI)
3s.	66	1	2	6	3	5	4
4s.	263	1	2	6	5	4	3

TABLE 12(b).

MARRIED GROUP FEMALES

GROUP	NUMBER	RANK ORDER					
		(I)	(II)	(III)	(IV)	(V)	(VI)
3m.	30	1	2	6	3	4	5
4m.	78	1	2	6	5	4	3

In the initial three categories of the rank order series, there is complete harmony between the groups. But, in the final categories of the order (4, 5, 6) there is a certain degree of variance with groups 4s. and 4m. (Non-Europeans). There is harmony in the rank of the nature of 5, 4, 3; and in 3s. and 3m. (Europeans) there is a general pattern of 3, 4, 5, quite the reverse condition of the Non-Europeans in the final order of the series. With category 4 (Funerals) in the 5th order of rank common in both, we are left with the invariance of 3 and 5, which are at opposite poles, between Europeans and Non-Europeans.

The conclusion we draw from this is that the Europeans as a group are more likely to approach management with the request for time off due to Business and other Personal matters than the Non-Europeans, who are more diffident and secretive in this respect; and hence the likelihood of their absenting themselves would be greater on this score than the Non-Europeans.

Reviewing the reasons for absences in respect of the rank order for the entire group under investigation, the pattern exhibited with reference to Table V. (page 18) on the percentage basis would be of the following nature:-

Males and females of all groups } Rank Order: 1, 2, 6, 5, 4, 3.

In retrospect to conclusions made earlier and the general pattern for absenteeism that has evolved at this stage, reasons for absences certified by a doctor account for more absences (55%) than any other single factor and this is firmly established by the findings of this survey.

Uncertified reasons for absences (28% in severity) is the next most significant cause for the workers remaining away from work. Accepting this as a genuine reason for absence - though in the light of practical experience this may be difficult - we are faced with the startling information that illnesses account for 83% (55% + 28%) of the workers' reasons for absences. The remaining 17% is spread over Family reasons of 10%; Miscellaneous reasons of 3% and Funerals and Personal reasons of 2% each.

The single group males European and Non-European, and the married European males, can be expected to absent themselves more often for miscellaneous reasons than any of the other groups of the survey. This, to a large extent, can be regarded as an avoidable absence, and by actively concentrating on eliminating this factor, management can go a long way to reducing the incidence of absenteeism as a pernicious influence in industry.

The Non-European married males are responsible for a very high degree of absenteeism in respect of funerals and, as previously pointed out, this can be genuinely accepted as an adequate reason for absence. Traditionally the Malays, who constitute 30.5% of the Non-European element, make the finest tailors and are much in demand in the Clothing Industry. The high incidence of funerals can, therefore, be expected.

In contrast, the accent on the family reasons for absence of the Non-European males is out of proportion to the other male groups, and this is in part due to the Malay element, who accept private work and absent themselves to complete an article of clothing. In practice, the foreman is aware of this, particularly prior to the festive season when these tailors are inundated with work and this type of casual absenteeism is prevalent. This is an aspect that management is reluctant to control by disciplinary action, as more often than not, it is the better tailors who are responsible.

The direct cause of this is that with the present labour shortage of skilled tailors, management does, to a certain extent, tolerate this type of absenteeism, though within reasonable limits; the limits depending on just how good a tailor is, and how convincing a returned absentee can be in submitting his reason for absence.

The European females, constituting 12.7% of the workers under survey, are the worst offenders, with a higher absentee rate (ref. Table IV - page 16) than any of the other groups. The survey proves statistically throughout that in every phase of absenteeism they are in the forefront. The Non-European female element, comprising 45.3% of the workers, in direct contrast demonstrate that they are more regular and stable in their attendance, comprising as a group a more reliable source of workers, on whom management can depend to attend work with a greater degree of regularity than the minority group of European females.

The female employees, as may be expected, will absent themselves due to family reasons to a greater extent than males, and the figures from this survey prove this contention. In the case of the married personnel, absenteeism for family reasons is proportionately higher than for single members.

By discrimination and more care being taken to elicit all relative information on employment, management may establish the fact whether prospective employees have family ties which are likely to necessitate their absence due to future difficulties in placing the children in a crêche, or the appointment of a suitable individual to care for the children.

CHAPTER V.

SUMMARISED CONCLUSIONS AND RECOMMENDATIONS.

Results obtained from the study of this investigation show that absenteeism as a problem in industry can be reduced, using the knowledge we have gained and supplementing this with the statistics of absenteeism as a guide in the selection of prospective employees.

Each individual case, though, must be thoroughly investigated by means of a questionnaire, and the probability may be assessed from the answers whether the applicant is absentee prone. In other words, the basis of an investigation of this type cannot be used to generalise, as, for example, by stating that married female operators are the worst offenders and, therefore, that the policy should be not to employ them in the future. Each case must be treated on its own merits. If it is thought that a questionnaire will involve too much additional expense and clerical work, additional time should be spent in making the final selection of new employees by the use of a patterned interview. This patterned interview, in the hands of a capable and trained employment officer, will elicit the information which will largely decide management as to the desirability, or otherwise, of employing a prospective candidate.

In essentials, the fundamental problem is to select the correct employee to do the job for which he is best suited in a happy and contented frame of mind; maintaining the standards required by management in the quality and quantity spheres; giving reasonably efficient service consistently, and attending work regularly.

Selection of employees who can give the best service and find the greatest personal satisfaction requires, amongst other things, a knowledge of the physical capacities of applicants, which only a thorough physical examination by a doctor who understands and appreciates the requirements of management, can give; with a view to controlling and minimizing the possibility of future absenteeism caused by physical impairments.

The purpose of the physical examination is firstly for the protection of the employee, in that it assists management to decide in just what occupation the applicant should be placed, as in some cases the nature of the work would be hazardous to the applicant. Secondly, it is for the protection of present employees, as applicants with communicable diseases, or other conditions which may endanger the health or safety of present employees, should be rejected. Finally, it is for the protection of the employer. Old injuries are discovered and recorded, so as to prevent unjust claims. Accidents are reduced by proper placement and engagements are limited to the physically best suited employees. The objective should be safe productive employment.

The examining doctor should establish whether there has been any epilepsy; diabetes or insanity in the applicant's family. By the provision of Medical History cards, questionnaires* of the following general type may be instituted:-

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* reference: Harris Seybold Company - U.S.A. Physical Examination Procedure.

HAVE YOU RECENTLY HAD, OR DO YOU NOW HAVE:-

FREQUENT HEADACHES: .....

FREQUENT COLDS: .....

FREQUENT SORE THROATS: .....

EARACHE: ..... DISCHARGE: .....

CHRONIC COUGH: .....BLOOD SPITTING: .....

HEART TROUBLE:.....

BACKACHE: .....

FAINTING SPELLS: .....

FEMALES: REGULAR MENSES: ..... NO. OF DAYS: .....

EVER NEED TO GO TO BED BECAUSE OF PAIN:

.....

ANY OBSTETRICAL HISTORY: .....

.....

NERVOUS BREAKDOWN: .....

HERNIA (RUPTURE): .....

PEPTIC ULCER: .....

KIDNEY TROUBLE: .....

RHEUMATIC FEVER: .....

CHOREA (ST. VITUS'S DANCE): .....

HAVE YOU EVER HAD ANY SERIOUS INJURY: .....

.....

DO YOU HEAR WELL:..... SEE WELL: .....

DO YOU WEAR GLASSES? .....

WHAT OPERATIONS HAVE YOU HAD: .....

.....

From information obtained from the answers to the above, management may establish the desirability of engaging prospective employees, and the possible incidence of absenteeism in the future due to illnesses.

Any organization with a large employment programme would be well advised to consider the appointment of a visiting industrial doctor; or, preferably, establishing a permanent position in its organization for a full-time doctor. In view of the fact illustrated by this survey, that 83% of absences are due to certified or uncertified illness, the appointment of a full-time doctor, or a visiting doctor, is an essential requirement in combating the problem of absenteeism.

A further measure to control absenteeism in the factory is the appointment of a full-time Welfare Officer who, indirectly, can stimulate workers to give maximum production by removing anxieties and attending to the welfare needs of the workers; helping them with advice in their domestic difficulties, and assisting them to procure easily repayable loans from the organization for dire requirements. A worker who is in an anxious frame of mind due to financial difficulties, is a potential accident prone operator. The consequence may be a serious accident necessitating a long absence, all for the want of financial assistance.

The influence of a welfare officer should extend to the homes of the workers. From personal visits to the home and contact at the factory, the confidence of the worker is obtained. Advice is freely given in the care and management of the home, and the placing of children in a suitable crêche, so that the parents may leave for work with their minds at ease.

When selecting prospective employees, management should ascertain, in the case of a married female, whether she is the mother of children and if so, of how many, and whether she has anybody to care for them during her absence at work. In the instance where the applicant is staying with her own parents, the possibility of her absenting herself due to family reasons is very slight; whilst the probability in the case where a nursemaid is hired is considerably higher, especially in the case of the Non-Europeans who find it extremely difficult to obtain nursemaids since few of the Non-Europeans wish to work for one another.

A number of observations have been commented upon and tentative suggestions have been put forward to eliminate unnecessary absenteeism. These suggestions offer the scope for further enquiry and research in the same field. A survey of the medical reasons for absences, apart from the value of medical research into the problem, would be of material assistance to doctors and management alike.

The basic assumption of this survey is that the chief contribution psychology can make in industry, is to analyse the problem of absenteeism and to develop techniques which will facilitate the employment of personnel less likely to remain away from the work bench, particularly for avoidable reasons for absence. While psychology cannot readily answer many of the basic problems in labour management relations, psychologists have been able to demonstrate in recent years that they have significant contributions to make - given the opportunity and the co-operation of management - towards the solution of this problem child of industry.

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APPENDIX "A".

SURNAME.....SEX.....RACE.....WORKER NO.....

ADDRESS.....OCCUPATION.....

.....RATE OF PAY.....

.....DATE OF BIRTH.....

DATE ENGAGED.....MAR./SINGLE.....

A B S E N T E E R E C O R D.

DATE OFF	DATE RETURNED	DAYS ABSENT	REASON	DOCTOR'S CERTIFICATE

DATE LEFT EMPLOY.....REASON.....

WORKER'S SIGNATURE.....

APPENDIX "B".

ABSENTEE or LATE REPORT.

NAME: .....

NO.: ..... DEPARTMENT: .....

DATE ABSENT FROM: ..... TO: .....

EMPLOYEE'S REASON FOR ABSENCE: .....

.....

FOREMAN'S REMARKS: .....

.....

.....

FOREMAN'S SIGNATURE: .....

Date: .....

ANALYSIS OF ABSENTEEISM.

APPENDIX."C".

RACE.....

SEX.....

MARRIED.

SINGLE.

AGE.	1.	2.	3.	4.	5.	6.	TOTAL.	AGE.	1.	2.	3.	4.	5.	6.	TOTAL.