SIGNIFICANT FACTORS INFLUENCING THE PARAMETERS OF INDUSTRIAL RELATIONS IN AN ORGANISATION

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ABSTRACT: *In the study of Industrial Management with respect to the organisations, much focused on manufacturing industries in the study, this research study will through the implications and the impact of Demographics variables in the study of Industrial Management. The aim of this paper is to study the impact of the demographics of the respondents like the age of the respondents, gender of the respondents, educational qualification of the respondents, scale of employment of the respondents and grade of employment of the respondents in the manufacturing industries have significant influences on the parameters of industrial relations in any organisation.*

Keywords:
Industrial Relations, Organisation, Demographic Variables, Manufacturing Industries

In any organisation, Industrial Relations is one tool which enhances the production, inter-personnel relations, better industrial relations between the management and the working staff along with better performance, updation of skills, training and motivations. However, there are some facts that influence the Industrial Relations in any organisation as far as any research study, survey or opinions are concerned. I have Interviewed 10 each randomly selected employees for primary data from 10 Government enterprises, 15 Public Sector Units and 25 Private Sector organisations for the research study.

The samples are drawn from different levels of employees differing in their age profile, gender, educational qualification, working status etc., and is heterogeneous in nature. For this purpose, the population was divided into various homogeneous strata and from these strata, random samples of employee respondents have been taken. Hence the Stratified Random Sampling Method was used for this study by taking 500 as the sample size of respondents. The sample size of 500 respondents is categorized as under:

Table No.1 – No. of Respondents in different types of Companies

Company Type	No. of Respondents
Government Companies	100
Public Sector Companies	150
Private Sector Companies	250
Total No. of Respondents	500

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The data collected has been tabulated and analysed to arrive at suitable inferences. Statistical tools such as tabulation & diagrammatic/graphical presentation of the data collected, and analytical tools like ratios, percentages are used in this Study. Graphical representation of data has been carried out with the help of MS-EXCEL software. Since the Study has more than 50 variables to be covered, these are grouped into several Factors and this has been achieved with the help of Factor Analysis using SPSS software. This software programme is extensively used to draw various bi-variate frequency distributions involving two variables & correlation coefficients between related variables. Hypothesis Testing is carried out by using Analysis of Variance procedures & Levene's Statistic. The study of the association between related attributes is analysed with the help of the Spearman's Correlation Coefficients.

Various demographic variables are included in the Study to ascertain their effect on industrial relations existing in an organisation. Following is the list of the demographic variables covered by the Study.

A] Age of the respondents B] Gender of the respondents C] Qualification of the respondents D] Grade of Employment of the respondents and E] Scale of Employment of the respondents

The following paragraphs deal with the effect of these demographic variables on the industrial relations in an organisation. The factor Industrial Relations includes the following parameters as per the results of the Factor Analysis conducted:

(a) Industrial safety requirements (b) Motivation by superiors (c) Stress on enhancement of work skills (d) Better communication channels (e) Communication of Information (f) Training g) Presence of inputs and h) Grievance Cell

The responses given by the sample employees of the organisations are assumed to not to vary significantly based on the demographic variables, on the Industrial Relations in organisations in the form of null hypothesis for testing the significance.

This is carried out as follows:

Null Hypothesis: There is no significant variation in the opinion of the employees on the Industrial Relations based on their demographic profile viz., Age, Gender, Qualification, Grade of Employment and Scale of Employment.

Alternative Hypothesis: There is a significant variation in the opinion of the respondent employees on the Industrial Relations based on their age profile viz., Age, Gender, Qualification, Grade of Employment and Scale of Employment.

Various demographic variables are included in the Study to ascertain their effect on industrial relations existing in an organisation.

Significance level: 5%

The Test Statistic used to test the above null hypothesis is Levene's Statistic whose results are as follows:

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	p-value
Age	0.327	4	495	0.860
Gender	7.810	4	495	0.000
Qualification	7.825	4	495	0.000
Grade of Employment	12.466	4	495	0.000
Scale of Employment	2.712	4	495	0.029

Conclusions:

- This leads to the acceptance of the null hypothesis and the conclusion is drawn that the respondents do not vary significantly in their opinion on Industrial relations in organisations based on their age parameter.
- The conclusion is drawn that the respondents vary significantly in their opinion on Industrial Relations in organisations based on their Gender, Qualification, Grade of Employment and Scale of Employment. This implies that the respondents are unanimous in ranking these parameters of Industrial Relations in all the organisations that the Study covered.

The conclusion is drawn that the respondents vary significantly in their opinion on Industrial Relations in organisations based on their Gender, Qualification, Grade of Employment and Scale of Employment.

Data Analysis: The data relating to the age profile of the employees in the organizations and their ratings over the parameters of Industrial Relations are analysed as under: The respondents are asked to give their age (years) and these are converted into the age categories and the number of respondents under different age categories is found out.

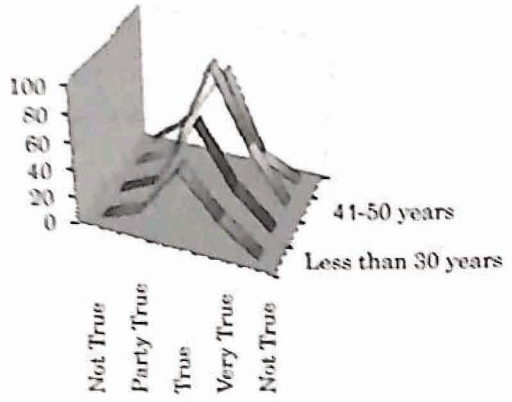
The opinions of the respondents on the parameters of industrial relations are measured on a 5-point scale viz., Not True, Partly True, True, Very True and Not Sure. The results are as follows:

Age		Avg. Ranking on IR parameters					Total
		Not True	Partly True	True	Very True	Not Sure	
Less than 30 years	No. of Respondents	2	13	52	22	1	90
	% within "Age"	2.22	14.44	57.78	24.44	1.11	100.00
	% within "IR_AVGSC"	10.00	15.66	18.12	21.36	14.29	18.00
	% of Total	0.40	2.60	10.40	4.40	0.20	18.00
Between 31 and 40 years	No. of Respondents	3	17	68	26	1	115
	% within "Age"	2.61	14.78	59.13	22.61	0.87	100.00
	% within "IR_AVGSC"	15.00	20.48	23.69	25.24	14.29	23.00
	% of Total	0.60	3.40	13.60	5.20	0.20	23.00
Between 41 and 50 years	No. of Respondents	7	23	93	40	3	166
	% within "Age"	4.22	13.86	56.02	24.10	1.81	100.00
	% within "IR_AVGSC"	35.00	27.71	32.40	38.83	42.86	33.20
	% of Total	1.40	4.60	18.60	8.00	0.60	33.20
Above 50 years	No. of Respondents	8	30	74	15	2	129
	% within "Age"	6.20	23.26	57.36	11.63	1.55	100.00
	% within "IR_AVGSC"	40.00	36.14	25.78	14.56	28.57	25.80
	% of Total	1.60	6.00	14.80	3.00	0.40	25.80
Total	No. of Respondents	20	83	287	103	7	500
	% within "Age"	4.00	16.60	57.40	20.60	1.40	100.00
	% within "IR_AVGSC"	100.00	100.00	100.00	100.00	100.00	100.00
	% of Total	4.00	16.60	57.40	20.60	1.40	100.00

IR_AVGSC: Avg. Ranking on IR parameters.

The data in the above table are shown in the following Chart.

Chart showing the opinion of the respondents on parameters of IR based on their age



It is also evident from the data that progression in the age increases the confidence in employees to express their opinions frankly and clearly without much ambiguity.

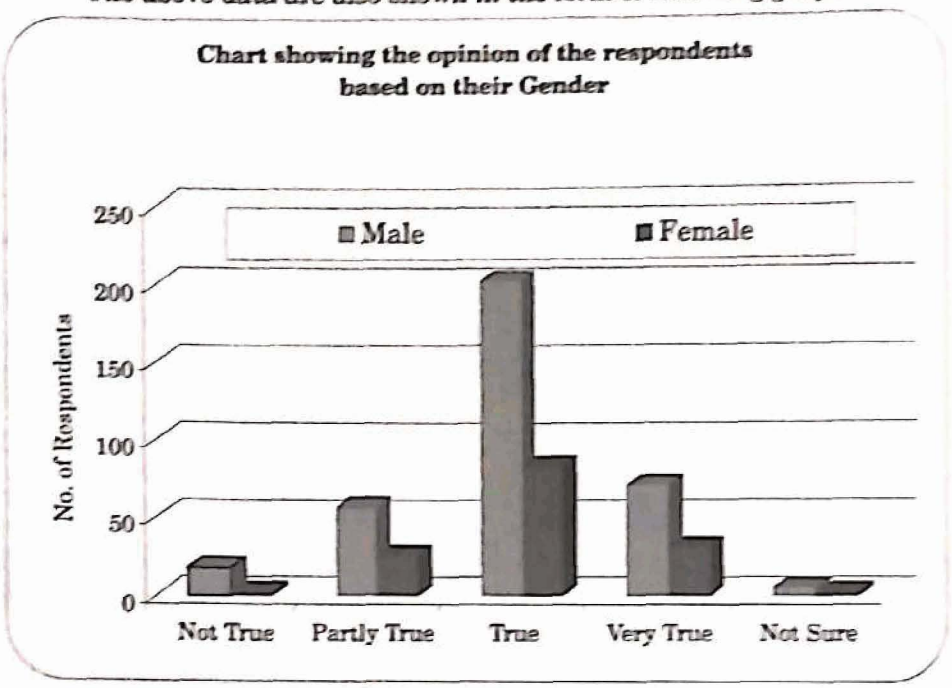
Inference: From the analysis of the above data, the conclusion is drawn that significant percentage of respondents are above 31 years of age and are in agreement with the parameters of Industrial Relations in the organizations.

It is also evident from the data that progression in the age increases the confidence in employees to express their opinions frankly and clearly without much ambiguity. Very few of the respondents who are aged are in a predicament to express their firm opinion.

(2) The analysis of data relating to the respondents' Gender and their ratings over the parameters of Industrial Relations is as follows: The respondents are categorized as Male and Female on the basis of their Gender and their ratings on the parameters of industrial relations are measured on a 5-point scale and analysed as under:

Gender		Avg. Ranking on IR parameters					Total
		Not True	Partly True	True	Very True	Not Sure	
Male	No. of Respondents	18	57	203	72	5	355
	% within Gender	5.07	16.06	57.18	20.28	1.41	100.00
	% within IR_AVGSC	90.00	68.67	70.73	69.90	71.43	71.00
	% of Total	3.60	11.40	40.60	14.40	1.00	71.00
Female	No. of Respondents	2	26	84	31	2	145
	% within Gender	1.38	17.93	57.93	21.38	1.38	100.00
	% within IR_AVGSC	10.00	31.33	29.27	30.10	28.57	29.00
	% of Total	0.40	5.20	16.80	6.20	0.40	29.00
Total	No. of Respondents	20	83	287	103	7	500
	% within Gender	4.00	16.60	57.40	20.60	1.40	100.00
	% within IR_AVGSC	100.00	100.00	100.00	100.00	100.00	100.00
	% of Total	4.00	16.60	57.40	20.60	1.40	100.00

The above data are also shown in the form of following graph.



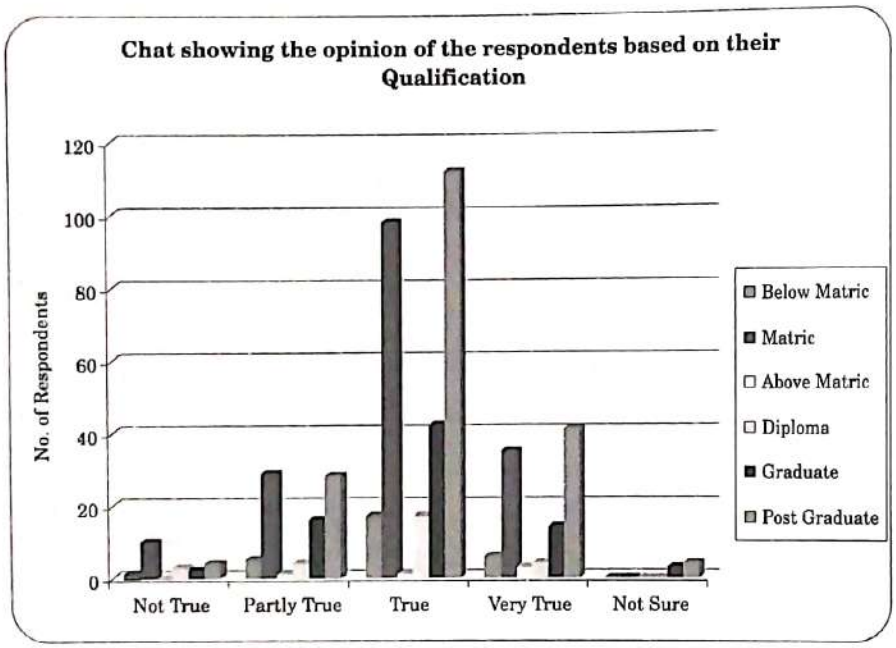
(3). The analysis of data relating to the respondents' Qualifications and their ratings over the parameters of Industrial Relations is as follows: The respondents are grouped on the basis of their educational qualifications as "Below Matric", "Matric", "Above Matric", "Diploma", "Graduate" and "Post Graduate". Their rating preferences on the parameters of industrial relations are measured on a 5-point scale and the results are tabulated as under:

Qualification		Avg Ranking on IR parameters					Total
		Not True	Partly True	True	Very True	Not Sure	
Below Matric	No.of Respondents	1	5	17	6	0	29
	% within "Qualification"	3.45	17.24	58.62	20.69	0	100.00
	% within IR_AVGSC	5.00	6.02	5.92	5.83	0	5.80
	% of Total	0.20	1.00	3.40	1.20	0	5.80
Matric	No.of Respondents	10	29	98	35	0	172
	% within "Qualification"	5.81	16.86	56.98	20.35	0	100.00
	% within IR_AVGSC	50.00	34.94	34.15	33.98	0	34.40
	% of Total	2.00	5.80	19.60	7.00	0	34.40
Above Matric	No.of Respondents	0	1	1	3	0	5
	% within "Qualification"	0	20.00	20.00	60.00	0	100.00
	% within IR_AVGSC	0	1.20	0.35	2.91	0	1.00
	% of Total	0	0.20	0.20	0.60	0	1.00
Diploma	No.of Respondents	3	4	17	4	0	28
	% within "Qualification"	10.71	14.29	60.71	14.29	0	100.00
	% within IR_AVGSC	15.00	4.82	5.92	3.88	0	5.60
	% of Total	0.60	0.80	3.40	0.80	0	5.60
Graduate	No.of Respondents	2	16	42	14	3	77
	% within "Qualification"	2.60	20.78	54.55	18.18	3.90	100.00
	% within IR_AVGSC	10.00	19.28	14.63	13.59	42.86	15.40
	% of Total	0.40	3.20	8.40	2.80	0.60	15.40
Post Graduate	No.of Respondents	4	28	112	41	4	189
	% within "Qualification"	2.12	14.81	59.26	21.69	2.12	100.00
	% within IR_AVGSC	20.00	33.73	39.02	39.81	57.14	37.80
	% of Total	0.80	5.60	22.40	8.20	0.80	37.80
Total	No. of Respondents	20	83	287	103	7	500
	% within "Qualification"	4.00	16.60	57.40	20.60	1.40	100.00
	% within IR_AVGSC	100.00	100.00	100.00	100.00	100.00	100.00
	% of Total	4.00	16.60	57.40	20.60	1.40	100.00

Following are the findings of the data in the above table:

- Of the sample size interviewed, 29 respondents have the educational qualification of below matriculation standards, 172 are matriculates, 5 have qualification above matriculation, 28 of them are diploma holders, 77 are graduates and 189 are post graduates.
- Among the 29 respondents who are below matriculation, majority of them, numbering 28, are rating their opinion towards the truthfulness of the parameters of industrial relations. Only one of them feels that the parameters are not true. The Percentage of below matric respondents who feel that the parameters are true has been worked out to 96.55.

All these findings are shown graphically as under:



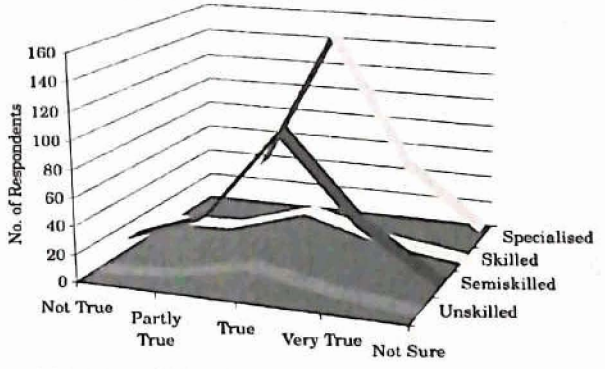
The respondents are classified on the basis of their grade of employment as "Unskilled", "Semi-skilled", "Skilled" and "Specialised".

(4). The analysis of data relating to the Grade of Employment of the respondents and their ratings over the parameters of Industrial Relations is as follows: The respondents are classified on the basis of their grade of employment as "Unskilled", "Semi-skilled", "Skilled" and "Specialised". Their rating responses on the parameters of industrial relations are measured on a 5-point scale and the results are as follows:

Source : Table 6

Grade of Employment		Avg. Ranking on IR parameters					Total
		Not True	Partly True	True	Very True	Not Sure	
Un-skilled	No. of Respondents	1	5	17	6	0	29
	% within emp_grade	3.45	17.24	58.62	20.69	0	100.00
	% within IR_AVGSC	5.00	6.02	5.92	5.83	0	5.80
	% of Total	0.20	1.00	3.40	1.20	0	5.80
Semi-skilled	No. of Respondents	9	29	98	37	0	173
	% within emp_grade	5.20	16.76	56.65	21.39	0	100.00
	% within IR_AVGSC	45.00	34.94	34.15	35.92	0	34.60
	% of Total	1.80	5.80	19.60	7.40	0	34.60
Skilled	No. of Respondents	5	7	24	8	0	44
	% within emp_grade	11.36	15.91	54.55	18.18	0	100.00
	% within IR_AVGSC	25.00	8.43	8.36	7.77	0	8.80
	% of Total	1.00	1.40	4.80	1.60	0	8.80
Specia-lised	No. of Respondents	5	42	148	52	7	254
	% within emp_grade	1.97	16.54	58.27	20.47	2.76	100.00
	% within IR_AVGSC	25.00	50.60	51.57	50.49	100.00	50.80
	% of Total	1.00	8.40	29.60	10.40	1.40	50.80
Total	No. of Respondents	20	83	287	103	7	500
	% within emp_grade	4.00	16.60	57.40	20.60	1.40	100.00
	% within IR_AVGSC	100.00	100.00	100.00	100.00	100.00	100.00
	% of Total	4.00	16.60	57.40	20.60	1.40	100.00

Chart showing the ratings on parameters of IR of the respondents based on their grade of employment

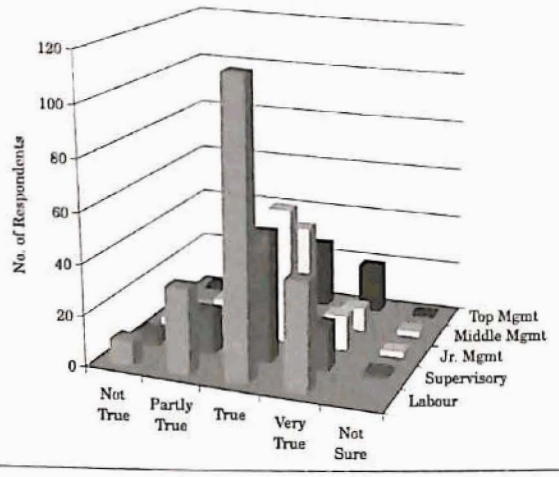


(5). The analysis of data relating to the Scale of Employment of the respondents and their ratings over the parameters of Industrial Relations is as follows: The respondents are classified into different categories based on their job category known as Scale of Employment. These scales are : Labour, Supervisory, Junior Management, Middle Management and Top Management. The ratings on the parameters of industrial relations by these different cadred employee respondents are measured on a 5-point scale and the results are summarized in the following table and the associated graph:

Scale of Employment		Avg. Ranking on IR parameters					Total
		Not True	Partly True	True	Very True	Not Sure	
Labour	No. of Respondents	10	34	116	43	0	203
	% within emp_scale	4.93	16.75	57.14	21.18	0	100.00
	% within IR_AVGSC	50.00	40.96	40.42	41.75	0	40.60
	% of Total	2.00	6.80	23.20	8.60	0	40.60
Supervisory	No. of Respondents	5	17	51	18	2	93
	% within emp_scale	5.38	18.28	54.84	19.35	2.15	100.00
	% within IR_AVGSC	25.00	20.48	17.77	17.48	28.57	18.60
	% of Total	1.00	3.40	10.20	3.60	0.40	18.60
Junior Mgmt	No. of Respondents	3	14	54	14	2	87
	% within emp_scale	3.45	16.09	62.07	16.09	2.30	100.00
	% within IR_AVGSC	15.00	16.87	18.82	13.59	28.57	17.40
	% of Total	0.60	2.80	10.80	2.80	0.40	17.40
Middle Mgmt	No. of Respondents	0	12	40	9	2	63
	% within emp_scale	0	19.05	63.49	14.29	3.17	100.00
	% within IR_AVGSC	0	14.46	13.94	8.74	28.57	12.60
	% of Total	0	2.40	8.00	1.80	0.40	12.60
Top Mgmt	No. of Respondents	2	6	26	19	1	54
	% within emp_scale	3.70	11.11	48.15	35.19	1.85	100.00
	% within IR_AVGSC	10.00	7.23	9.06	18.45	14.29	10.80
	% of Total	0.40	1.20	5.20	3.80	0.20	10.80
Total	No. of Respondents	20	83	287	103	7	500
	% within emp_scale	4.00	16.60	57.40	20.60	1.40	100.00
	% within IR_AVGSC	100.00	100.00	100.00	100.00	100.00	100.00
	% of Total	4.00	16.60	57.40	20.60	1.40	100.00

The respondents are classified into different categories based on their job category known as Scale of Employment.

Chart showing the opinion of the respondents on the parameters of IR based on their scale of employment

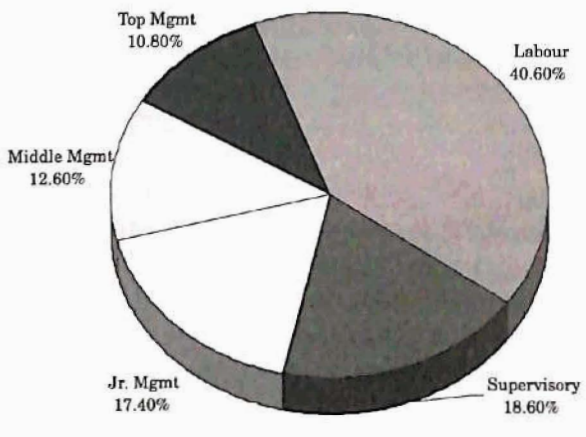


Following are the additional findings from the analysis of the data presented in the table and the graph:

- A large number of respondents based on their scale of employment is in the cadre of Labour.
- The cadre wise break up is as follows:

Scale of Employment/Cadre	No. of respondents	% to Total respondents
Labour	203	40.6
Supervisory	93	18.6
Jr. Mgmt	87	17.4
Middle Mgmt	63	12.6
Top Mgmt	54	10.8
Total	500	100.0

Pie Chart showing the number of respondents based on their scale of employment



Inference: The following conclusions / inferences are drawn based on the above findings:

- There are large numbers of employee respondents in all the cadres who are firm in their opinion on the parameters of the industrial relations.
- There are large numbers of employee respondents in the labour cadre and they are more vocal in expressing their opinions either positively or negatively. A few of them are in a state of dilemma.
- Some respondents in the other cadres (even at the top levels of management) are not sure of expressing their opinion on either side of the scale.
- It is evident from the data that the respondents' ratings are based on the scale of employment / cadre of employment. The ratings appear to be more dominant in the lower cadres of employment and they become thinner and thinner as the employees move up in the hierarchy.

CONCLUSION:

From the data analysis presented in the above paragraphs, the conclusion is drawn that the demographics of the respondents like the age, gender, educational qualification, scale of employment and grade of employment have significant influences on the parameters of industrial relations in any organisation. More specifically, factors like age, gender, educational qualification, scale of employment and grade of employment are the significant factors which influence the parameters of industrial relations in an organisation.

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