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# WORKER EFFICIENCY IN RELATION TO ALIENATION, PARTICIPATION AND ANXIETY

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#### <u>ABSTRACT</u>

In the present investigation an attempt has been made to study the relationship between alienation, participation, and anxiety with respect to worker efficiency. The study was conducted in a file manufacturing unit having a total strength of 48 workers. Two groups of workers were identified with high efficiency and low efficiency on the basis of 3rd and 1st quartiles. There are 12 workers in the high efficiency group and 13 in the low efficiency group. Obtained results indicate that alienation and participation relate significally for the high efficiency group but no significant relationship was observed for the low efficiency group. Anxiety was negatively and significantly related to efficiency only for the combined groups. A negative but insignificant correlation was obtained between anxiety and efficiency for the high efficiency group; it is positive for the low efficiency group.

It is a will recognized fact that the performance of an employee depends not only on the physical environment of that organization where he works but also on his attitudes, feelings and personality characteristics. The fate of an organization lies in the hands of its employees. Since the begining of industrial psychology researchers are interested in unfolding the complex relationships between various personality, attitudinal, and environmental factors and their effects on individuals functioning and performance. However, despite all the great achievements in this direction the obtained solutions are not exhaustive. Much remains to be done. The present study is an attempt to see what relationship exists between alienation, participation, anxiety, and efficiency.

Alienation - once a subject of interest only to social philosophers - has become an issue of major interest to the behavioural scientists. In a number of researches alienation has been found to be closely related with satisfaction and performance (Ahmed & Pestonjee, 1978; Pestonjee, 1979; Singh & Shrivastava, 1979). Kanungo (1979) has defined work alienation as a generalized cognitive state of psychological separation from work. Stokols (1975) suggests that an individual's alienation develops within the concept of an ongoing relation—ship between himself and some other entity for example - a person, group, society or culture. The experience of alienation is brought about through a decline in the quality of one's relationship with a particular context, and this perceived deterioration evokes dissatis—

faction with present situation and a yielding for something better which has been either lost or, as yet, unattained.

Participation, as suggested by Vroom (1960), is frequently used to refer to the degree to which a person takes part in a descussion or activity. An individual who takes an active part in interacting with others with respect to a given task is said to participate great deal, while one who plays a more passive role does not participate to the same degree. Participation can also be defined "as a process of joint decision making by two or more parties in which the decision has future effects on those making them. The amount of participation of any individual will be the amount of influence he has on the decisions and plans agreed upon" (French, Israel, and As, 1960). In a number of investigations participation has been found to influence performance and productivity of industrial workers (Vroom, 1960, 1964; Singh 1980).

Anxiety is one of the most important personality factors which influences the performance of an individual. Cox (1960) and Sharma (1970) in their studies confirm the Yerkes - Dodson law which states that the relationship between anxiety and performance tends to form an inverted U- Curve. That is, for effective performance optimum level of motivation (anxiety) lies in the middle ranges. In case of either very high or very low anxiety a performance decrement can be predicted.

#### HYPOTHESES

The following specific hypotheses were formalated for the present investigation:

- 1. The high efficiency group and low efficiency group workers will vary significantly on alienation, participation, and anxiety measures.
- 2. Alienation, participation, and anxiety will be significantly related to work efficiency, alienation and anxiety having negative correlation while participation will show positive relationship with efficiency.
- 3. The relationship between anxiety and efficiency will be negative for the high efficiency group but will become positive for the low efficiency group.

## METHOD

#### Sample:

The study was conducted at a file manufacturing unit in Western India. The sample was drawn from the cutting section of the unit. The Total work group (N = 48) was classified into three sub-groups;

(1) high afficiency group (2) low efficiency group; and (3) average efficiency group. The high and low efficiency groups were selected on the basis of third quaritiles and first quartiles which happen to be 78 and 66. Thus, in the process there were 12 cutters in the high

group, 24 in the middle group, and 13 in the lower group. Only the high efficiency group and the low efficiency group were included in this study.

#### Measure :

Alienation was measured by using A-Scale (Dutt & Kureshi, 1976; Kureshi, 1979). There are 21 items in the total scale measuring alienation in the five areas namely, despair, disillusionment, unstructured universe, narcissisum, and psychological vacuum. Each item has four response alternatives, namely, always, mostly, sometimes and never.

The extent of psychological participation was assessed with the help of Psychological Participation Index developed and standardized by Singh and Pestonjee (1978). The Index comprises of fifteen statements covering four areas, remely, decision-making, autonomy, opinion-seeking, and involvement. The items are in the form of positively and negatively worded statements with five response alternatives for each item namely, definitely true, mostly true, sometimes true-sometime false, mostly false, and definitely false. The reliability of the Index has been determined by Cronbach's (1950) alpha coefficient and has been found to be .83. The index of homogeniety and internal validity of the items are established through point biserial coefficient of correlation (rpb.). The scale was validated against Pestonjee's (1973)

'sense of participation' dimension of Edmployee's Morale Scale. It is found to be .4° on a representative sample of 200 blue-collar industrial workers.

Anxiety was measured with the help of Shorter Version of Sirho's (1968) W.A. Self-Analysis form standardized by Khan & Hasan (1978). In this scale there are only 30 items as against the 100 items of the orginal scale. Response on each item is obtained through two response alternatives 'Yes' and 'No'. The split-half reliability of this shorter scale was found to be .72 (corrected).

The efficiency level of the workers was obtained through their actual efficiency records available in the unit. The efficiency scores were calculated by averaging the efficiency for three consecutive months (i.e., April, May, June, 1981). The efficiency in the unit is measured on a 133 point scale. The procedure for calculating efficiency followed by the unit is output divided by standard norms developed by the company for eight hours of work. The stan ard norms developed by the company are very old and were never revised while a number of workers with innovative ideas combined a number of operation together which were carried in the past separately. Thus, in some cases the level of efficiency has exceeded to 133 points of the scale.

#### RESULTS AND DISCUSSION

The results of this investigation are recorded in tables 1 to 3.

The mean and standard deviation scores for plienation, participation.

anxiety and efficiency are given in Table 1. It is evident from these results that the high efficiency group has scored high on participation.

### TABLE 1 HERE

and low on enxiety measures than the low efficiency group. In the case of alienation a slightly higher score has been c'tained for the high efficiency group than for the low efficiency group. When the high and low efficiency groups were compared on alienation, participation, and anxiety using the Median Test as suggested by Siegel (1956), statistically significant differences were found only in the case of participation and anxiety (Table 2). As it can be seen from Table 2,

#### TABLE 2 HERE

most of the workers in the high efficiency group have a high sense of participation and feel less anxiety as compared to the low efficiency group. Results recorded in Table 3 indicate that alientation is related to efficiency only in the case of high efficiency group and not in the low efficiency group or the overall group (both the groups combined). Our finding are consistant with the previous observations

#### TABLE 3 HERE

that alienation and performance are negatively and significantly related to each other only in the case of high efficiency group

(Singh, 1978; Singh, 1980; Singh & Shrivastava, 1979). Contrary to these findings the obtained correlation coefficient between efficiency and alienation for the overall efficiency group is almost negligible. The results suggest that the knowledge about their own efficiency/performance might have acted as a moderator in controlling behaviour.

The obtained correlation between psychological participation and efficiency has been found to be significant and positive in the case of high efficiency group as well as for both the groups combined. However, a nonsignificant and positive relationship is observed between participation and efficiency for the low efficiency group (Table 3). This again indicates that the knowledge about their own efficiency might have changed their perception about others their colleagues and supervisors, etc.

The correlation coefficient between anxiety and efficiency, although not significant is different in terms of direction for the high efficiency and low efficiency groups — the relationship being positive for the low efficiency group while negative for the high efficiency group. The coefficient of correlation between these variables for the combined group is negative and statistically significant. This indicates that upto a certain level anxiety raises efficiency but after that higher level anxiety is detrimental to efficient functioning. These results appear to agree with the Yerkes — Dedson law which posites that there is an optimum amount of stress in terms

than this amount results in steadily decreasing performance. The reasons behind this, as noted by Vroom (1964) in his review of a number of studies, is that the anxiety associated with stress leads to physiological involuntary autonomic responses that interfere with performance, and the subject becomes primarily motivated to reduce the anxiety rather than to perform the task. The lower performance associated with very low levels of stress in usually explained by the low motivation that accompany the low stress and the sase with which the subject is therefore diverted from the problem by extraneous factors.

The findings of this study indicate that the knowledge of performance/efficiency might also act as a moderator of alienation-efficiency and participation-efficiency relationships. However, hese findings are only suggestive and highlight the need for urther research to draw firmer conculsions.

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TABLE 1

Mean and S.D. of Alienation, Participation and Anxiety for high and low efficiency groups.

Efficiency	Alienation		Participation		Anxiety	
	Mean	SD	Mean	SD	Mean	SD
High $(N = 12)$ (M = 94.91) SD = 17.92	46.5	4.74	42.5	5.32	10.92	1.93
Low (N = 13) (M = 62.46 Sd = 3.29)	<b>45.</b> 54	5.76	36.31	6.63	14.23	3.30

TABLE 2

Median Test for Comparison between Alienation, Participation and Anxiety for high and low efficiency groups.

Efficiency	Alienation		Participation		Anxiety	
	H <b>i</b> gh	Гом	High	Low	Hìgh	Low
High	В	7	10	5	3	11
Low	4	б	2	8	g	2
x <sup>2</sup>	<b>0.</b> υ6		3.532*		6.744	

<sup>\*</sup>p<.10

<sup>\*\*</sup>p<.01

TABLE 3

Spearman Rank Correlation Coefficient between Alienation, Participation, Anxiety and efficiency for high and low groups.

Efficiency	Alienation	Perticipation	Anxiety	
High	~0.643*	0.837**	-D.198	
Low	-0.007	0.152	0.221	
Overall Group	-0.068	0.551**	-0.519**	

p < .05

<sup>\*\*</sup> p< .01