

Man in Socio-Technical Environment : A Psychological Overview

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Abstract:

The breakdown of an individual's mental health i.e his behavior and adjustment has been increasingly linked by industrial psychologists and organizational personnel to the level of stress he experiences at work in industry. An effort should be made to know, what special stresses industrial worker are exposed to which are different from normal stresses to be experienced by non-industrial people and that lead to psychopathology in them. The study is a pilot survey on 100 pottery workers to get access to their behavior, thoughts and emotions and to perceive these men in socio-technical systems as human beings. The study revealed significant findings to make strong recommendations for the well being of this vulnerable population.

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Introduction:

There is a wide gap between the traditional values of life and outlook of people in this age of technology and industrial environment. Basically, the human organism is ill equipped physiologically and psychologically to cope with the physical and social changes everywhere in the world especially due to industrialization. Still, he has obstacles to overcome, deficiencies to be supplied, and choices to be made, in terms of the traditional values of life, sentiments, emotions and basic relations to other living beings.

At the one extreme, circumstances responsible for more suffering are conspicuous by their presence in the industrial society among the industrial workers, creating a world of unhappy people, unable to cope effectively with life demands ,limited in their ability to love, work, or find meaning in their lives, either over extended periods or in brief, stress-related episodes. Industrialized society thus, is viewed as a shaky fabric.

Its scale, diversity and constant change is thought to frustrate a basic human desire for intimacy, consistency and predictability in

social living. As regards industrial workers or labourers most of them come from diverse social backgrounds. Their customs, manners and languages are different. They have little in common in the way of resources and skills and their aptitude for developing socially acceptable modes of mastering ways of life for that new setting is at best uncertain. Such a climate is bound to influence the mental health affecting human dignity and satisfaction in living, leading to increase in several adjustment problems including major psychopathology. As Silverman (1970) pointed out, when discussing the influence of the environment, "Organizations do not react to their environment, their members do".

Morgan (1986) in his book 'Images of organization, sees organizations as complex entities, he has identified basically eight different ways of constructing organizations: as machines, as organisms, as brains, as cultures, as political systems, as psychic prisons, as flux and transformation, and as instruments of domination.

Trist and Bamforth (1951), working in British coal mines, showed that if technology is

introduced which disrupts existing social groups, rules and relationships, then there are serious consequences for productivity, industrial relations and employee psychological well-being. Their work gave birth to the “socio-technical systems” approach to work design.

Ling (1945) said “Maladjustment to work has been a major factor in ill health of many of 800 men and women treated by him in Roffey Park in England”.

“ A study of factors affecting personal adjustments among industrial workers” was reported by Raman in 1970. This study gave the striking results in relation to the maladjusted population of workers. These workers showed low home adjustment, low efficiency, low job satisfaction and general health suffered. Bhaskaran, Seth and Yadav (1970), reported greater emotional disturbance in the migrated industrial labourers in comparison to resident workers of Bihar. Gautam,S (1997) and his associates reported poor mental health of industrial workers in a survey conducted on these labourers in Jaipur .

The above literature and studies provides the clear idea that problems of behavioral adjustment in industrial workers should not be taken lightly and has not be overlooked at all.This study is an effort to explore minority groups as well as the other major population of industrial workers in the work place helping to identify the source of their stress, as well as suggesting ways of remedying them.

Therefore the present study was undertaken to fulfill the following objectives:

Objectives:

- 1 . To investigate the period prevalence of mental ill health in workers of Khurja, pottery industry
- 2 . To find out the role of socio-demographic variables in such workers.

- 3 . To study the role of some life events and interpersonal relationships in these workers.

Sample:

A sample of 100 workers {men only was taken from pottery industries of Khurja, (Dist Bulandshahr) U.P. The Khurja pottery industry is on the world map because of its(ceramic /stone ware} workmanship.

Tools for data collection

- 1 . **Proforma**- A self devised proforma was prepared to have identification data, socio-demographic information of workers including the habits, addiction and certain life events.
- 2 . **General health Questionnaire (GHQ)** by Goldberg, et.al(1978) to assess the psychological health of workers.
- 3 . **Sacks sentence completion Test (SSCT)** by Sacks & Levy to assess and explore the personality characteristics of an individual in four areas.

Result & Discussion:**Table 1 :** Indicating the workers with emotional problems and mental ill health on GHQ

| Workers category | Workers studied | Workers with mental ill health |
|------------------|-----------------|--------------------------------|
| Male Normal | 46 | 5 |
| Migrated | 34 | 7 |
| Other minorities | 20 | 6 |
| Total | 100 | 18 |

In this table categorization of workers was done according to their proforma details normal males included the population with no significant details on their life events, habits or socio-demographic details. Other minorities included workers with certain habits-addictions and with significant life event details

Table 2 : Mean & SD of various areas on SCT of mentally healthy and mentally unhealthy workers.

| Areas | Mental healthy workers (N=18) | | Mentally unhealthy workers (N=18) | | t-ratio | SIG P |
|--------------------|-------------------------------|----------|-----------------------------------|----------|---------|----------|
| | X | σ | X | σ | | |
| Family Area | 4.26 | 2.62 | 6.72 | 2.38 | 2.94 | <.01 |
| Sex Area | 1.87 | 1.28 | 2.38 | 1.69 | 1.28 | N.S |
| Interpersonal Area | 7.3 | 2.82 | 12.13 | 3.78 | 4.92 | <.001 |
| Self-concept | 10.32 | 3.05 | 14.83 | 3.53 | 3.58 | <.001 |

To compare means a control group of 18 workers was selected on random basis from mentally healthy workers. It is evident from the above table that mentally unhealthy workers have significantly more conflicts in the areas of family, interpersonal relations and self-concept than their healthy counterparts. However, sex area was found to be insignificant may be because of inhibitions we have in our society that talking about sex is still considered a tabboed subject.

Table 3: Showing addiction in workers

| Attribute | Mental healthy workers (N=82) | | Mental unhealthy workers (N=18) | | Total N=100 |
|-----------|----------------------------------|------|------------------------------------|------|----------------|
| | f | % | f | % | |
| Addiction | | | | | |
| Present | 18 | 21.9 | 10 | 55.4 | 28 |
| Absent | 64 | 78.0 | 8 | 44.4 | 72 |
| Total | 82 | 100% | 18 | 100% | 100 |

$\chi^2 = 8.265$; $df = 1$; $p < .05$

Table 4: Showing how loan affects the general health of the worker

| Life event | Mentally Healthy Workers N=82 | | Mentally Unhealthy Workers N=18 | | Total N=100 |
|------------|----------------------------------|------|---------------------------------------|------|----------------|
| | f | % | f | % | |
| Loan | | | | | |
| Present | 5 | 6.0 | 5 | 27.7 | 10 |
| Absent | 77 | 93.9 | 13 | 72.2 | 90 |
| Total | 82 | 100% | 18 | 100% | 100 |

$\chi^2 = 7.698$; $df = 1$; $p < .01$

Table 5 : Show the role of medical illness on general health of workers

| Attribute | Mentally Healthy Workers (N=82) | | Mentally Unhealthy Workers (N=82) | | Total (N=100) |
|-----------------|------------------------------------|------|--------------------------------------|------|------------------|
| | f | % | f | % | |
| Medical illness | | | | | |
| Present | 8 | 9.7 | 8 | 44.4 | 16 |
| Absent | 74 | 90.2 | 10 | 55.5 | 84 |
| Total | 82 | 100% | 18 | 100% | 100 |

$$\chi^2 = 13.211 ; df = 1; p < .01$$

Due to limitations of the journal it was not possible to depict all the variable (in tabular form) considered in this study on industrial workers. But it is important to state that mentally unhealthy workers did not significantly differ in terms of age, education, marital status, income, no of children, migration, court case, quarrel with the contractors etc. The study needs a more elaborate survey on this population as increasingly, women, ethnic minorities, the disabled and other minority groups are entering the work force in even larger numbers. If we are to overcome the obvious entry obstacles, work-related and future problems of these minority groups, we must know something about the extent and nature of their difficulties at work.

It should be borne in mind that there is nothing more difficult to arrange, more doubtful of success, and more dangerous to carry through than initiating changes....The innovator makes

enemies of all those who would prosper under the old order, and only lukewarm supporter is forthcoming from those who would prosper under the new.

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