Chapter 13
Psycho–Social Impact of Shift Work:
A Study of Ferro–Alloy Industries in Orissa

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ABSTRACT
The aim of this study was to explore the effect of work related problems on shift workers' attitude, aptitude and job satisfaction. A total of 240 shift workers in five Ferro-alloy industries of Orissa working in rotating three shift systems were participated in this study. The findings indicated that shift work has major adverse impact on psychological, social, family and conjugal life of shift worker. It has also been seen that the shift work schedule curtails leisure activities, affects sleep and causes various health problems.

1. INTRODUCTION
In modern societies, many companies and organizations stay open 24 hours a day, requiring people to work in shifts. The term “shift work” means different things to different people. The shift work is a work schedule in which a group of workers work in shifts. The shifts can be organized either in a rotation, continuity or in a discontinuous system. Day by day, the shift work becomes increasingly prevalent in contemporary life, affecting 20% to 25% of the employees in manufacturing industries and a growing number in the service industries. However, the shift work which requires alterations in sleeping and working hours of the workers, affects their efficiency. It is realized that there is no ideal shift system which meets fully the needs of an organization and social and family needs of each and every employee. Many researchers define shift work as an employment in

DOI: 10.4018/978-1-4666-2652-2.ch013
which two or more groups of employees work at
different times of a 17-hour or 24-hour time span,
including a so-called “day” shift. For a significant
proportion of these employees, working after-dark
hours may not only reduce satisfaction with their
jobs but may also create troublesome problems
for their health, family life, social activity and
psychological life.

Shift work has both advantages and disad-
vantages. Shift work provides a number of no
pecuniary advantages for some workers. Working
in evenings or nights allows employees more free
time during the day. Some workers enjoy a variety
of rotating shifts, while others appreciate of being
able to remove themselves from unwanted family
situations or responsibilities. The camaraderie and
sense of loyalty is satisfying features of certain
evening or nighttime occupations, which can be
the satisfying substitutes for normal social and
family life (Hedges et al., 1979). Many shift
workers have less tension and a more relaxed pace
in night shift than during the day because of less
supervision or fewer interruptions from clerical
or management personnel. Finally, shift work ac-
commodates “night owls”, who function poorly in
day time and best during evening or night.

The attraction of shift work is considerable
for many individuals. But the benefits must be
weighed by shift workers and policymakers alike
against the drawbacks that affect the health, in-
terpersonal relationships, leisure time activities,
and perhaps the safety of a large proportion of
shift workers. The central feature of shift work
that creates dissatisfaction for many evening and
night workers is that, it puts them “out of rhythm”
with their minds and bodies, families and social
lives and routines of the rest of the community.
The shift workers experience more family related
problems than the day time employees because
of the lack of synchrony between their hours on
the job and their daily routines of the families.
The most serious family disturbance is that, many
people who work in the evenings and nights are
less able to spend time with their children, espe-
cially with the small children who go to bed early.
The shift workers cannot spend much time with
their spouses because a shift worker’s wife or
husband who works during the day, or who does
not work, is often awake at those times precisely
when the shift worker must sleep. It is argued
that the shift workers get less sleep, have worse
mental and physical health and have fewer friends
in the society. So generally, they fall out of steps
with the rhythms of life and experience disrupted
family relations.

The study is about the employees of Ferro
alloy industries in Orissa, India. Ferro alloy is a
sector which largely feeds on iron and chrome ore
and steady power supply. Because of availability
of iron ore and chromites ore in Orissa, the Ferro
alloy plants have witnessed a sound growth in
Orissa in recent years. There are 9 Ferro alloy
plants in the state in operation. These Ferro alloy
plants produce different alloys depending upon
the market demand and production capacity.

2. LITERATURE SURVEY

The industrial and commercial activities that
operate outside normal work hours have become
widespread in recent years; services such as bank-
ing, communications, transport, catering, and
retailing are routinely available during evening
hours and often round-the clock. Consequently,
the work patterns of a substantial proportion of
the population now extend beyond regular day-
work hours; variable schedules (often including
evening or night work) and rotating shifts are
both widespread. In a recent European survey,
28% of the workforce had variable work patterns,
10% had evening or night schedules, while 17%
worked two-shift or three-shift rotating schedules
(Boisard et al., 2003). Further analyses showed