METHOD

4.1 Title of the Research Problem:
Occupational Locking-in, And Organizational Stress among University Teachers.

4.2 Aim of the Study:
The aim of the present investigation is to collect relevant information from a representative group of university teachers of West Bengal who experienced occupational lock-in conditions in order to understand the following consequences and implications:
(i) What are the nature and level of the locked-in feeling of the stagnated teachers?
(ii) What effects does feeling of locked-in have on the concerned teachers?
(iii) How do teachers who feel locked-in cope with their situations?
(iv) How does the being locked-in concept influence the relationship among other individuals and organizational level variables?

4.3 Concepts and Operational Definitions:

4.3.1 Occupational Locking-in:
It refers to the ongoing feeling when individuals had almost no opportunity to move from their present jobs or virtually when there is no berth available for their promotions (Quinn, 1975). Kay (1975) described a chain of events leading to such locking-in. According to him, a series of steps beginning with a college graduate or post-graduate being hired into an organization like an industry or college or university, because he has particular skills, remaining in the same area over a number of years and becoming a functional specialist. Now as he has developed his expertise through his long experience, he should attain the next higher position and should also receive the appropriate rewards for his
service and good performance. Eventually, upward mobility is no longer possible yet he may feel the need for a change. As for example, in case of university Readers, who were promoted from Lecturer either through open competition or by way of Merit Promotion Scheme (MPS) in the year 1986 or 1987 are undoubtedly getting stagnated as there were no adequate number of posts of Professor in most of the university departments for the possibility of upward movement of those Readers as well as the MPS had also been withdrawn in 1987 by the UGC. Meanwhile, majority of those Readers, apart from increasing their teaching experience published good research articles, books, conducted research projects and successfully guided Ph.D students. At this point, even after working for at least 10-15 years as Readers, they found that it was very difficult to make an upward shift and even to a lateral shift in different organizations. This is because the concerned teachers have no experience in any area other than his original area, and secondly, his salary is too high for the experience level he offers to other areas. Hence, he has become stagnated or locked-in.

Such problems of career development may lead to stress at work when a professionally accomplished and experienced teacher fails to receive an anticipated promotion. Here his personal and career aspirations are not being satisfied, and the resulting frustration can be intense.

4.3.2 Organizational Stress:

Organizational stress means negative environmental factors associated with a particular job (Cooper, 1983) in an organization. Such negative factors may be in connection with administrative policies and strategies, organizational structure and design (Kasl, 1992), organizational process, and working conditions. Organizational stress may be defined as “a condition arising from the interaction of people and their jobs and characterized by changes within people that force them to deviate from their normal functioning” (Beehr and Newman, 1978).

In an organization, career development may be a source of stress, if an individual do not find scope to develop his career. Marshall (1977), and Wolpin and Burke (1986) identified lack of job security and obsolescence, status
incongruity (under or over promotion, and frustration due to non-reaching to the
career ceiling as a result of occupational locking-in condition) as the potential
sources of stress. In addition, poor pay is also a source of potential stress for an
individual (worker) in any organization.

In the present study, the operational definition of the organizational stress
has been made following Pareek's Role-stress construct (1983, 1993). Accordingly, a cluster of negative aspects is considered in relation to the role-
playing of the concerned teachers. Those are as follows:

(i) Inter Role Distance (IRD): Conflict between organizational role and
other roles.

(ii) Role Stagnation (RS): Few opportunities for learning and growth in
the role.

(iii) Role Expectation Conflict (REC): Conflicting demands made on the
role by different persons.

(iv) Role Erosion (RE): A feeling that some important functions a role
occupant would like to perform is given to some other role, not
having challenging work.

(v) Role Overload (RO): A feeling that too much is expected from the
role.

(vi) Role Isolation (RI): A lack of linkages between one's role with other
roles in the organization.

(vii) Personal Inadequacy (PI): Lack of knowledge, skills or adequate
preparation to be effective in a role.

(viii) Self Role Distance (SRD): Conflict of one's values and self-
concepts with the requirements of the organizational role.

(ix) Role Ambiguity (RA): Lack of clarity about expectations of others
from the role, lack of adequate feedback.

(x) Resource Inadequacy (Rln): Non-availability of resources needed
for effective role performance.
4.3.3 Psychological Strains:

In literature, stress and strain have been conceptually differentiated. Strain is defined as an individuals' maladjustive psychological and physiological responses to stress (Eysenck, 1983). Strain has also been defined as any bodily response that is made to a troublesome event, physiological, psychological, or behavioural which reflects a stress event. Thus in a sequential order strain would follow stress (Ghadially and Kumar, 1989). Job related strain affects a person both mentally and physically. Robert Karasek (1979) originally developed and provided evidence of job strain concept and model. Uncorrected work stress results in psychological strain among the individuals in the organization. In the present study psychological strain are assessed in terms of the poor health status, job dissatisfaction and unsuccessful coping dynamics.

For operational definition of these variables – Occupational locking-in, Organizational Role Stress, Type A – Type B personality, General Health Status, Job Satisfaction and Coping strategy pattern considered in the present study, to collect measures (scores), for the verification of the research hypotheses the definitions and rationale used by the following authors of the tests were primarily followed:

3. R.W.Bortner (1966) – Type A – Type B Self Test;
5. G.Gurin, J.Viroff and S.Feld (1960) – General Health Questionnaire;
4.4 Hypotheses:

**Hypothesis 1:** Stagnated group of teachers express more intense amount of locked-in feeling than non-locked-in teachers.

**Hypothesis 2:** Locked-in group of teachers exhibit significantly higher amount of Organizational Role Stress while comparing with non-locked-in teachers.

**Hypothesis 3:** Locked-in group of teachers exhibit poor amount of Coping Ability Pattern while comparing with non-locked-in teachers.

**Hypothesis 4:** Locked-in group of teachers express significantly different profiles in Type-A coronary-prone behaviour while comparing with non-locked-in group.

**Hypothesis 5:** Locked-in group of teachers exhibit significantly poor Health Status while comparing with non-locked-in group.

**Hypothesis 6:** Locked-in group of teachers express significantly more amount of Job dissatisfaction while comparing with non-locked-in group.

4.5 Sample:

In order to conduct the present investigation, two groups of subject were required for the two separate phases of the study: (1) Pilot Study, and (2) Full Scale Study.

(1) **Pilot Study:** In this phase of the study a group of 100 university Readers and Professors (78 males and 22 females) having at least 10 years' teaching experience were randomly selected from a list of 250 such teachers taken from two universities located in the Calcutta city. These groups of subjects were required for the development and / or local adaptation of the psychological instruments used in the present study.
(2) **Full Scale Study:** Two separate list of teachers one for the Readers and the other for the Professors were prepared for this phase of the present study, each list contained 250 teachers having at least 10 years' teaching experience in the university and attained a minimum age of 48 years. A preliminary survey on the four universities (located in and around the Calcutta city) was conducted by the present investigator to prepare those two lists of teachers - who spontaneously expressed their willingness to participate in the present study in addition to their prescribed age and teaching experience criteria. During the preparation of the list of teachers following the criteria of age and teaching experience, no special attempts had been made to include equal number of male and female teachers in each list because of the relative poor number of female teachers in the concerned universities.

After that, in consultation with the Random Table numbers, two final lists (one for the Reader and the other for the Professor) of teachers were prepared taking 150 from the existing 250 for the collection of data. However, 134 Readers (93 males and 41 females) and 120 Professors (98 males and 22 females) finally participated in the test sessions for the full scale study – where the former group was labelled as ‘Occupational locking-in group’ and the latter as ‘Non-locking-in group’.

4.6 **Tools Used:**

4.6.1 **Occupational Locking-in Questionnaire:**

In order to assess the amount of occupational locking-in feelings of the stagnated group of teachers mainly, a Likert-type five-point scale consisting of nine items has been developed by the present investigator for the teaching population, following the conceptual framework of Wolpin and Burke (1986). The scoring rationale is, the higher the score the greater is the amount of locking-in feeling.
From the Pilot study and indepth interview, it was derived that a great majority of the stagnated Readers are suffering from lack of motivation virtually due to very poor opportunity for their career development or further promotion, relatively poor pay in comparison to other jobs, inadequate infrastructural facilities, etc.

Following the standard criteria (Edwards, 1973) of the test development procedure a pool of 15 items were structured and were administered on a group of 100 randomly selected Readers and Professors from two universities. After item analysis in that Pilot Study, a cluster of 9 significant items was selected finally for the present study.

The questionnaire was thus developed to determine the level and nature of locked-in feeling among the selected university teachers. The odd-even reliability co-efficient was calculated as 0.86 and item-total coefficients of correlation were calculated as measures of validity with university teachers as subjects. The set of items along with its significant critical values (t-value) has been presented in the Appendix-II.

4.6.2 Organizational Role Stress Scale:

The original idea for the development of this scale was stemmed from the rationale and theoretical framework of the ORS scale developed by Pareek (1983 and 1993). Pareek developed and standardized the ORS Scale mainly on the individuals working in industrial settings. Hence, it seemed necessary to modify the nature of items in most of the cases of the ten enquiry areas of the ORS Scale. In addition, several new items were also included in most of the enquiry areas as a result of the preliminary interview with the concerned teachers. The items were structured in the statement form answerable along a five-point scale continuum designated by five fixed responses. The items selected in the final scale were dispersed along the following 10 enquiry areas like: (i) Inter-role Distance (9 items); (ii) Role Stagnation (7 items); (iii) Role Expectation Conflict (5 items); (iv) Role Erosion (7 items); (v) Role Overload (7 items); (vi) Role Isolation (8 items); (vii) Personal Inadequacy (7 items);
(viii) *Self-Role Distance* (15 items); (ix) *Role Ambiguity* (3 items); (x) *Resource Inadequacy* (10 items).

The draft version consisting of 102 items was sent to a group of three experts for adjudging the face validity of the items and after necessary modification, on the basis of their observations, was subjected to item analysis in the pilot study. The final version, thus prepared contains 78 items.

The odd-even split half reliability coefficients of the scales were calculated and observed to be ranged between 0.66 to 0.80 with an average value of 0.71. In addition item-total coefficients of correlation, for each of the 10 categories, were also calculated as the measures of the Content Validity. The final scale containing the set of significant items along with their critical values have been presented in the Appendix –III.

4.6.3 **Ways of Coping Questionnaire:**

The modified and adapted version of Folkman and Lazarus (1988) was used in this questionnaire. This modified Scale has eight sub-scales: (i) Positive Reappraisal (PR); (ii) Accepting Responsibility (AR); (iii) Self Control (SC); (iv) Seeking Support (SS); (v) Distancing (D); (vi) Escape Avoidance (EA); (vii) Problem Solving (PS); (viii) Confrontation (C). The respondents were asked to identify a specific stressful situation and rate on a four point scales. Six of the eight sub-scales (Positive Reappraisal, Accepting Responsibility, Self Control, Seeking Support, Problem Solving, and Confrontation) assess Approach Coping.

There are two types of Approach

*Original Ways of Coping Inventory developed by Folkman and Lazarus (1988) had items of five coping strategies such as (Goldberger and Breznitz, 1993):

1. Social Support/ direct problem solving, which included items indicating the seeking out and use of social support, as well as other direct problem-solving actions (e.g., "I talked to someone to find out more about the situations.")
2. Distancing, which involves effort to detach oneself from the stressful situations (e.g., "I didn't let it get to me. I refused to think about it too much.")
3. Positive focus, characterized by efforts to find meaning in the experience by focusing on personal growth (e.g., "I came out of the experience better than I went in.")
4. Cognitive escape / avoidance, which involves such efforts as wishful thinking (e.g., "I wished that the situation would go away."")
5. Behavioural escape / avoidance, such as efforts to avoid the situation by eating, drinking, smoking, using drugs or taking medications.

Other two sub-scales (Distancing and Escape-Avoidance) assess avoidance coping. Like approach coping there are two types of avoidance coping e.g. Cognitive Avoidance Coping and Behavioural Avoidance Coping. Cognitive Avoidance Coping comprises responses aimed at denying or minimizing the seriousness of a crisis or its consequences, as well as accepting a situation as it is and deciding that the basic circumstances cannot be altered. Behavioural Avoidance Coping covers seeking alternate rewards, that is trying to replace the losses involved in certain crises by becoming involved in new activities and creating alternate sources of satisfaction. It also includes openly venting one’s feelings of anger and despair, the behaviour that may temporarily reduce tension, such as acting impulsively, going on and eating binge, and taking tranquilizers or other medications.

The adaptation with the set of 42 items then started, after modifying the language of several items taking due care to suit in the present investigation, with the subjects in the Pilot Study. After conducting the administration, scoring and necessary statistical analysis a cluster of 10 items were found insignificant and the remaining 32 items (four items in each of the eight coping categories) constituted the present adapted version of the test of “Ways of Coping Questionnaire”.

The split-half reliability co-efficient were calculated and observed to be within the range of 0.66 to 0.88 with an average of 0.78. The item-total coefficients of correlation were calculated for each of the eight categories as measures of content validity. The final questionnaire having the set of significant items (t-values) along with the instructions has been presented in the Appendix -IV.
4.6.4 Type A – Type B Self Test:

This scale was adopted from R.W. Bortner (1966) ‘A Short Rating Scale as a potential measure of Pattern A Behaviour’. It is a standardized test and consists of seven items in Semantic differential pattern. The scoring rationale is – the higher the score the higher is the Type A Coronary-Prone Behaviour. This questionnaire was used to see whether the selected group of teachers exhibited their personality pattern as Type A or not. The nature of significance of the items and the reliability co-efficient of this test with the pilot study sample was checked and observed to be highly reliable (odd-even reliability co-efficient is 0.90). Here also item-total coefficients of correlation were calculated to check the content validity. The final set of items along with its t-values as well as instruction to the subject has been presented in the Appendix –V.

4.6.5 General Health Questionnaire:

This questionnaire was developed by the present investigator in consultation with the psychosomatic symptoms employed by Gurin et al. (1960), and Ross and Altmaire (1994). It has 60 significant statements concerning various psychosomatic complaints answerable along a four-point scale. The scoring rationale is – the higher the score, the higher is the amount of symptoms.

In the Pilot Study with a group of 100 university teachers the draft General Health Questionnaire had 68 items which was reduced to 60 items after item analysis. The odd-even split-half reliability co-efficient of the total test was determined as 0.82. Item-total coefficients of correlation were calculated also to assess the nature of content validity. The final questionnaire having significant set of items along with their critical values as well as instructions to the subject has been presented in the Appendix –VI.

4.6.6 Job Satisfaction Scale:

This scale was originally developed by Kanungo (1982) and further adapted by the present investigator. It consists of 16 items, Each item is
provided with a six-point response scale. A high score indicates more job satisfaction and low score indicates less job satisfaction. The set of items have been observed to be quite significant and the odd-even split-half reliability of the scale was found to be 0.84 with the sample of the Pilot Study. Finally item-total coefficients of correlation were obtained to check the validity of the items. The set of items along with its significant critical values (t-value) as well as instruction to the subject has been presented in the Appendix-VII.

4.6.7 General Information Questionnaire:

This includes personal characteristics like age, sex, working experience, academic qualification, family size and family type. General information characteristics of the subjects have been presented at the outset of Appendix-II.

4.7 Test Administration:

As mentioned earlier the study was conducted in two separate phases: (1) Pilot Study (2) Full Scale Study.

4.7.1 Pilot Study:

This study was mainly responsible to develop or to adapt the test items of the different questionnaires and scales used in the present investigation. These draft tests which were prepared either by taking the standard items from the already available standardized tests, or by modifying several items of those, or by incorporating a cluster of new items as suggested by the experts who had adjudged the face validity of the tests. These tests in their draft forms were administered on the selected hundred teachers for item analysis. The significant set of items in each test was thus obtained along with their reliability and validity check-up for the final full scale study in the next phase.

4.7.2 Full Scale Study:

In this stage four universities of West Bengal viz, Calcutta University, Jadavpur University, Rabindra Bharati University and Kalyani University were
included for the purpose of the investigation. A group of 120 Professors (those who had been working for at least 10 years of which 2 years as Professors) and 134 Readers (who had been in the same post for at least 10 years) were selected through Stratified Random Sampling technique. Thus it was taken into consideration that both the group of teachers were matched well in age and teaching experience.

Now a tentative programme schedule was developed in consultation with the selected group of teachers to conduct the full scale study. In accordance with the above programme schedule, the research instruments were administered on all the selected group of teachers. Each of the teachers was supplied with 6 booklets accompanied by the required answer sheets. The answer sheets were collected from them on the dates as per their availability. Each answer sheet was scrutinized carefully to find out that not a single item remained unanswered.

Apart from the above-mentioned tests administrations and scrutiny of the answersheets the present investigator felt the necessity to conduct an unstructured informal interview session with most of the stagnated Readers, individually, and did that with 72 available Readers, who had more intense* amount of locked-in feeling. During such informal interview the concerned Readers had been observed to express freely many of their felt but untold problems related to the issue of their stagnation for a long period as well as some negative aspects of organizational issues contributive to organizational stress.

4.8 Scoring and Tabulation:

The study used two groups of subjects, viz. Occupational locked-in group of Readers and Occupational Non-locked-in group of Professors. Moreover a set of six standardized research tools were used in this study. For each tool, the score given

* The Readers possessing more intense amount of locked-in feeling were identified as those who had occupational locking-in scores \( \geq \text{Mean Occupational locking-in score} + 1\sigma \) i.e. at least one standard deviation higher than the mean score.
to each individual against each item was based upon the standard scoring keys. Then, the total score for each test, both for the Readers and the Professors, was evaluated. Here, it is worth-mentioning that, those tests (Organizational Role Stress Scale and Ways of Coping Questionnaire), which have sub-categories, the individual score in each sub-category, were summated and arranged in a tabular form.

Thus, for the six standard tests six sets of scores were obtained for each of the two groups – one Readers group (i.e. the occupational locking-in group) and the other Professor group (i.e. the non-locking-in group).

4.9 Statistical treatment of Data:

The general information of data regarding age and experience had been processed and the average values of age and teaching experiences for the two groups, were calculated; percentages of male and female teachers were also obtained; Regarding family size, mode value of the two groups were calculated; percentage of the type of family (whether nuclear or joint) were also obtained.

The data obtained in the Pilot Study were scored and mainly utilized for the item analysis of each of the six tools used in the present study. Item analysis was done, for each test, by applying t-test to discriminate between the high-scored and low-scored groups along each of its component items. Only significant set of items \( p < 0.05 \) were included to form the final adapted version of each test. Reliability Coefficient for each was done by determining Product-moment coefficient of correlation between odd-even split halves and then by applying Spearman-Brown formula. Measures of content validity were obtained for each test through calculating item-total coefficients of correlation.

The data of the Full Scale Study were mainly utilized for the comparisons between ‘occupational locking-in group’ (i.e. Reader) and ‘Non-locking-in group’ (i.e. Professor) in terms of the scores of each of the selected six tests. Accordingly, t-test were applied for all the five tests scores – Occupational locking-in, Organizational Role stress, Ways of Coping, General Health and Job
Satisfaction while Chi-square test was applied to determine the difference between the two groups in Type-A – Type-B personality pattern.

Furthermore, diagramatic presentations of data like frequency polygon, bar diagram, pie-chart and profile pattern were done to make the comparisons readily intelligible.