Managing people and productivity are prime concerns of modern business organizations. Many empirical studies were conducted during the era of scientific management (Taylor, 1911) to investigate What and How? McGregor’s (1960) epic theory — Theory X and Theory Y, categorizing all employees into two groups and prescribing methods to motivate and control them was the best. However, his findings also suffered strong criticisms, creating research gaps. The objective of this study was to investigate further and to conclude that there are three major groups named Theory A, Theory B, and Theory C. Amongst them, a middle group — Theory B is most dominant, having all capabilities to significantly influence productivity and prosperity of organizations. The methodology used was qualitative, based upon intensive and critical shop-floor observations. Since this study was not empirical, it had many limitations requiring further researches. Therefore, rightly recommended that future studies should correlate the impact of technological advancements upon motivations and productivity of the modern business organization (Veitch, 2018).

Keywords: Motivation, Productivity, Theory X, Theory Y, Theory A, Theory B, Theory C

Authors’ individual contribution: The Author is responsible for all the contributions to the paper according to CRediT (Contributor Roles Taxonomy) standards.

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1. INTRODUCTION

In this era of technological advancements, no doubt that machines, equipment, plants, software are very important, but they can never replace and undermine the importance of effective human resources. Many important and empirical studies were conducted all over the world, since the beginning of the twentieth century (Drucker, 1964; Herzberg, 1959; McClelland, 1961; McGregor, 1960; Ouchi & Price, 1978; Taylor, 1911; Vroom, 1964) to find out some universally acceptable principles and practices of motivation and control of employees. Amongst these research findings, McGregor’s (1960) Theory X and Theory Y became the most popular and acceptable for many years. But gradually, it attracted strong criticisms on the grounds of non-applicability (Ouchi & Price, 1978). Many other studies were also conducted worldwide, but none of them could provide valid and reliable answers to address the problem of effectively managing people at work. Hence, there remained a big research gap, demanding more fundamental researches to bridge up these gaps and to come up with universally acceptable principles and practices of managing the most dynamic human resources.

The main objective of this study was to examine afresh these problems and to submit scientifically valid findings and conclusions for efficiently and effectively managing, motivating, controlling the employees to enhance their productivity. In this context, the first observation made was that the findings and recommendations of McGregor’s (1960) Theory X and Theory Y are no longer relevant and valid in the present fast-changing complex and modern business organizations. The second observation was that there are actually three major groups and not two groups (as concluded by McGregor) in any modern business organization. And the most vital and landmark
observation was that there lies the existence of the middle group, usually, the silent group, which has all the hidden potentials to bring positive changes in organizations for its survival, growth, and prosperity. This vital aspect about the existence and critical importance of the middle group was never reported, highlighted, and concluded in any of the research findings to date from anywhere.

In order to examine this critical and comparatively difficult topic, the methodology chosen was also very complicated and complex, using combinations of multiple techniques. The main focus was on simple, descriptive, exploratory, and qualitative techniques, based upon intensive and critical shop-floor observations. Depending on the nature of the problem to be investigated, formulations of hypotheses or any other assumptions were also considered not necessary, rather non-quantitative techniques — mainly unstructured interviews, field surveys, opinion-poll of experts — were preferred in the research design to arrive at conclusions. This might have possibly resulted in a number of limitations of the study. Hence, it was recommended that serious empirical studies may be conducted in the future to arrive at logically valid, acceptable, and scientifically reliable conclusions. It was also further emphasized that future researchers should also correlate the impact of technological advancements upon the minds, morale, motivation, group behaviors, and performances of employees (Daugherty & Wilson, 2018).

2. LITERATURE REVIEW

From the very beginning of the twentieth century, many practitioners of management, mainly Frederick W. Taylor, took up the challenge of critically studying the behavioral patterns of different groups of employees and the impact of certain changes in the working environments upon the levels of their motivation and productivity.

In fact, Taylor (1911) was the first to make an attempt to introduce scientific systems of management by advocating the concepts of work study, motion study, and other principles of scientific management. He found that these technical techniques are quite significant in enhancing the productivity of the workers, at the same time improving the levels of their motivation and sense of active involvement and participation. But the main focus of Taylor (1911) was especially on the technological aspects of improving the productivity of the workers rather than on the human and behavioral aspects of worker’s productivity. No doubt, Taylor’s findings were unique and very important to pave the way for scientific management but it had limited applications which inspired a lot of criticisms, mainly by the leading psychologists. Numerous writings were Elton Mayo, who attempted to empirically study the problems of worker’s levels of job satisfaction, motivation, and their relative enhancements of productivity by making certain changes in working conditions, especially by improving lighting arrangements on the working spots. In his famous Hawthorn studies, he made a striking observation to integrate the technological aspects with behavioral aspects of worker’s productivity and concluded that possible changes in the working conditions play a significant role in substantially improving the levels of involvement and participation of the workers.

It was Abraham H. Maslow, who made empirical studies on the behavioral aspects of worker’s involvement, motivation, and related job satisfaction. He concluded by his pioneer research findings — The Hierarchy of Needs (Maslow, 1950) — that fulfillment of various needs, from basic needs to self-actualization needs, enhances the levels of satisfaction and ultimately enhances the motivations, which results in higher performance and productivity by the employees.

Hence, he concluded that higher performance by the employees is directly co-related to their need for fulfillments and hence the employers should appropriately design organizational strategies to satisfy workers by fulfilling their changing needs over a period of time. But again, Maslow’s theory — the hierarchy of needs — was subjected to many critical objections by practitioners of management and psychologists, mainly Frederick Herzberg, who in his landmark the two-factor theory of motivation (Herzberg, 1959) concluded that hygiene factors were preferred in the research design to arrive at logically valid, acceptable, and scientifically reliable conclusions. It was also further emphasized that future researchers should also correlate the impact of technological advancements upon the minds, morale, motivation, group behaviors, and performances of employees (Daugherty & Wilson, 2018).

Further, Drucker (1964), who was amongst the first (after Taylor, 1911) to give an application and concept of management by concluding and depicting management as a distinct function and manager as a distinct responsibility. He was the first to advocate that a manager should behave as a team leader and should be able to win the confidence and cooperation of employees instead of showing powers and authorities, capable of putting the workers. By virtue of his scholarly writings, he was considered and regarded as the “father of modern management”. But in spite of that, some of the main issues of dealing with employees at work still remained unresolved and unanswered, which inspired a couple of other leading psychologists (Ouchi & Price, 1978) and other management consultants to enter into the field and to give their empirical findings. But still, the question of getting a single point solution to the problems of managing, motivating, and controlling the employees in this fast-changing modern business environment continued to be an open ground for further empirical researches.
In this process of research findings, the contribution of McGregor (1960) — Theory X and Theory Y — still continued to be an important and landmark theory, which completely changed the entire focus and directions of ongoing researches from designing a motivational strategy to integrating appropriate control strategies of the employers. He tried to emphasize and outline the extremal so as to draw the fencing within which the organizational man is usually seen to behave. But the fact remained that no organizational person would ever actually belong to either Theory X or Theory Y as he/she shares the traits of both. What happens exactly is that a person normally swings from one set of properties to the other with changes in his/her moods and relative motives in this dynamic changing industrial complexities. Since the main focus of McGregor's Theory X and Theory Y was on categorizing all people at work in two major groups: Theory X (those employees, who were normally lazy and reluctant to work at their own and needed constant monitoring and close supervisions to make them work) and Theory Y (those employees who were self-motivated and hence needed only supports and appreciations to happily perform their own assigned tasks, without much of controls and supervisions). Initially, no doubt, McGregor's (1960) theories gained much importance, appreciation, and acceptance all over the world. But after some time, it faced many criticisms, mainly from psychologists and practitioners of management (Drucker, 1964; McClelland, 1961; Ouchi & Price, 1978; Vroom, 1964) on the grounds that there were numbers of employees who never fell exactly either in Theory X or in Theory Y and were apparently silent performers. This instigated a series of serious empirical studies to understand and find out what actually makes employees work and how to motivate them to obtain optimum productivity, so as to make the organization able to sustain and withstand the throat-cutting global challenges. But, during this very long period of experimentations (spanning over more than sixty years) with numbers of research findings infowing, nothing very concrete was yet available, which could give a single point solution to the problems. The whole fault with McGregor's finding was that he considered the existence of only two prominent groups (although not categorically stated anywhere but, most probably, 25% in Theory X and about 25% in Theory Y). He, thereby, totally overlooked the existence and influences of the rest of employees (might be another about 50% who were also supposed to play a definite and defined role in the organizations). There was absolutely no mention of these left out employees either in McGregor's findings or in other researcher's findings in the determination of productivity, survival, sustainability, growth, and future prosperity of organizations. Surprisingly, this still continued to be a research gap.

This was the ignition point of this study, where the author was trying to critically observe behavioral patterns of both workers and supervisors over a period of time (more than fifty years) and was trying to formulate principles to control and manage their performances. He ultimately came out with unique and absolutely new findings — that instead of two groups, there are, in fact, three major groups of employees named Theory A (most active, vibrant, about 25%), Theory B (comparatively silent and hidden, about 50%), and Theory C (usually lazy, inactive, and not interested in work, about 25%) in any large business organization. During his intensive and very long critical observations, he further found that the most dominant and relatively very silent group (which normally never came on the surface) was the middle group named Theory B. This actually served as the foundation of the exclusively new theory — Theory A, Theory B, and Theory C of managing people at work (Singh, 2017).

3. METHODOLOGY

The methodology used for this study was a mixed one based upon fundamental assumptions that there are many groups and sub-groups of employees working in large and modern business organizations:

1. Primary data was collected through unstructured interviews of about 1000 supervisors and managers.
2. Field and pilot survey in about 10 major industrial plants in different parts of India.
3. An opinion poll of heads of organizations and experts.
4. Intensive and critical shop-floor observations in a major Indian Railways plant at Kharagpur, India (employing more than 25,000 workers) spanning over a period of more than 50 years.

First of all, rough data (both primary and secondary) obtained through the above sources were suitably analyzed by using appropriate statistical tools and techniques, like normal curves, correlation coefficients, etc., to have tentative ideas about the various relationships. But the findings and conclusions heavily relied on the intensive and matured critical and judicial observations of the researcher, using the case and critical incident method at the largest Indian Railways factory, Kharagpur, India, in the same style as the Hawthorn studies.

3.1. The case of the Indian Railways, Kharagpur Workshops, India, 1995

The Kharagpur Railway Workshops, in particular, and the Indian Railways, in general, were facing a tremendous financial and technological crisis in the early 1990s due to the major policy decisions of the Railway Ministry, Government of India to totally phase out steam locomotives. The main problem for this massive transformation was, undoubtedly, the financial crunch, but the real and hidden issue was the technology handicaps and retentions of a few million unskilled, semi-skilled, and low-qualified workers.

The Railway Board issued necessary instructions to the zonal headquarters to prepare lists of about 30% to 40% surplus workers all over the Railways, who could be thrown out of employment. There was also a confidential circular to specifically identify and to review the service records of those employees, whose performances were below average and who could be spared and served with a notice of pre-mature and compulsory retirements, by giving them some token and partial settlement benefits.
Taking advantage of this confidential circular, most of the managers and their controlling supervisors prepared huge lists of workers, who were mainly unauthorized abseners, drinkers, etc., were facing various disciplinary actions. So far the Kharagpur Workshops was concerned, a list of nearly 500 workers was prepared and they were facing removal from service. Because the specially constituted high-power expert committee was of the opinion that these workers were beyond rectifications and not fit for re-deployments at any other alternative place. Moreover, none of the managers or supervisors of larger shops was ready to accept them, apprehending that their productivity might be lowered by the induction of these totally unwanted workers. The recognized central trade unions, mainly All India Railwaymen's Federation (AIRF) raised their violent protests against the proposed removal of lacs of workers all over the Indian Railways, but they were unable to suggest any alternative or viable solutions to the problems.

In the case of Kharagpur Workshops, after all the two days of active manulations, permutations, and combinations about 300 workers were still left behind, whom no manager was willing to accept, fearing that they might pollute and infect existing good workers. At this juncture, the only option left for top management was to sack all these workers by giving them some partial benefits. This was the gravity of the situation when the researcher (a former national level Railway trade union leader of 1.6 million workers and also former Secretary of Joint Productivity Council) and the Plant Manager took the responsibility of taking charge of these rejected workers and to save their jobs by suitable training and re-deployments.

With the active support and able guidance of then Chief Works Manager (Mr. Debashis Ray) a new overhaul shop named Diesel Bogie Repair Shop No. 35 was opened with these so-called "useless and surplus workers". All superior managers including some fellow managers were over sure that this idea was going to flop miserably. The reason for this so-called "misleading conception" was that these totally undesired workers, mainly from non-engineering trades like carpentry, blacksmithy, etc., would not be able to grasp even the basics of the sophisticated diesel locomotive technology.

Moreover, bogies of these locomotives were the most vital under gear containing bogie frame, wheels, springs, bearings, equalizing beams, etc. whose assembly required tremendous alignments and state-of-the-art technology sophistcations with zero tolerances.

In the beginning, it appeared to be impossible since these surplus workers were semi-literate, unskilled, and not at all capable of understanding anything about sophisticated diesel locomotive systems and the technology involved. Moreover, they were quite mentally down and practically demoralized. As such, it was a marathon and equally challenging task for the management to get the planned and target production of six diesel locomotives per month. Moreover, the same bogie under gear was also used for the most sophisticated newly inducted electric locomotives. Based upon strengths and weaknesses of these workers and also of the supervisors dealing with them, all workers were divided into three groups: Theory A (workers having potentials of high performance), Theory B (just capable of average performance), and Theory C (not capable of any performance). It was quite shocking and surprising that nobody was found fit for Theory A-group, there were hardly 10% workers in Theory B-group, and the rest of the workers (about 90%) were in Theory C-group. Then, tailor-made special training programs were designed (both technical and behavioral) individually for all these workers. Gradually, it was observed that the percentage of workers in Theory C started sliding down and there was a tendency for these workers to move and joining Theory B and so on. Again, some workers from the Theory B-group started moving up and joining the Theory A-group.

Initially for the first three months, in spite of using all motivational techniques and behavioral reinforcements applied, the production did not pick up and it was still three locomotives per month, instead of targeted six locomotives per month. There were constant peer-instigated negative reinforcements, creating a panic environment that this strategy was not working and that a sophisticated technology-based overhaul-oriented repair of the bogie underframe of diesel and the electric locomotive would be a flop.

But still, an environment of confidence and mutual trust was maintained amongst all levels of workers and supervisors. This humanistic strategy and action of the management changed the mindset of the workers, boosted their morale and the production of this shop started moving up every month, and by the end of six months, the actual production surpassed the targeted production of six locomotives per month. By the end of another six months, it achieved the level of twelve locomotives per month with excellent quality and reliability features with 0% on service breakdowns and failures.

On close, critical, and judicial monitoring, it was found that the percentage of workers in group Theory C came down to 20–25% from 90% earlier; the percentage of workers in group Theory B moved up from 10% to 50%, and in group Theory A it moved from 0% to 25%. After some time, based upon higher production targets achieved, the top management of the Indian Railways was pleased to extend and introduce a monthly incentive scheme to this newly set up Diesel Bogie Frame Repair Shop. The same set of once rejected and discarded workers became highly motivated and their level of engagements went up. They were now known for high productivity, high quality, and extremely high in-service reliability.

Earlier, similar experiments were also conducted (during the years of 1990–1993) under the same leaderships of the researcher, in the formation of the Diesel Coil Winding and Manufacturing Shop (an import substitution activity), under the Diesel Repair Shop No. 21, under the Kharagpur Railway Workshops, India, with hundred percentage women workers (mainly widows, appointed on compassionate grounds). These widows earlier, in a most conservative and traditional way, were never allowed to work in the factory and to take up any technical and skilled jobs on the shop floors. They were allowed to join on humanitarian grounds only as office peons, messengers, sweepers, lady shop-floor cleaners, etc. and were not given any further avenue or channel of promotions and growth. At present, the
same Coil Winding and Manufacturing Unit of Diesel Repair Shops, Khargapur Railway Workshops, Indian Railways, has become the main attractions for the foreign visitors, since it has added to the glory of this 200-years old largest Indian Railways Workshops.

4. FINDINGS AND DISCUSSIONS

The original findings of McGregor (1960), which broadly categorized all employees in any organization in two major groups: Theory X and Theory Y, has failed to take into account the ground realities. The factual position remains that apart from these two major groups identified by McGregor (with estimated strengths of about 25% in each group), the major chunk of employees (nearly about 50%) was found, actually, not falling in either of these two groups concluded by McGregor (1960). It was for the first time through this new theory, identified this left out a group of employees is none else but the middle group (Theory B). It was also found that it is, actually, the most vital and potential group in any business organization, directly playing very crucial roles to influence and decide ultimate fate and futures of organization, which becomes fit to survive in this era of throat-cutting global competitions (Singh, 2017). In another major survey conducted by the same researcher earlier in the year 1994 in Indian Railways Workshops (employing about 20,000 direct workers), it was found that amongst these three groups of supervisors and managers there are actually seven levels and stages of their motivations, as furnished below:

Table 1. Levels of motivation of supervisors and managers in different organizations

<table>
<thead>
<tr>
<th>Level</th>
<th>Theory A</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Committed</td>
<td></td>
<td>2%</td>
</tr>
<tr>
<td>2) Dedicated</td>
<td></td>
<td>3%</td>
</tr>
<tr>
<td>3) Highly motivated</td>
<td></td>
<td>5%</td>
</tr>
<tr>
<td>4) Motivated</td>
<td></td>
<td>13%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>25%</td>
</tr>
<tr>
<td>Theory B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5) Just satisfied</td>
<td></td>
<td>50%</td>
</tr>
<tr>
<td>Theory C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6) Dissatisfied and depressed</td>
<td></td>
<td>15%</td>
</tr>
<tr>
<td>7) Frustrated</td>
<td></td>
<td>10%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>25%</td>
</tr>
</tbody>
</table>

Source: Singh (1994).

Based upon this study, the following are the main findings:

1. It was wrong to just categorize all employees in two groups (McGregor, 1960), against three groups (Singh, 2017).

2. The middle group or, the left out group (never highlighted in other research findings), is actually the most vital and potential group, capable of bringing positive changes in organizations if they are properly taken care of, used, and nurtured professionally.

3. Individual leadership styles of the supervisors are very much responsible for either upgrading or degrading minds, morale, motivation, and engagement levels of workers, which are directly reflected in the performance and productivity of the workers (Singh, 2003).

4. It is essentially important, while planning and designing the motivational and control strategies of employees, to integrate the appropriate leadership styles into the organizational designs so as to use and synchronize optimal potentials of all groups of workers (i.e., Theory A, Theory B, Theory C) in the organizational context (Singh, 2017).

5. CONCLUSION

Based upon this study, it was concluded that the number of major groups in any organization is three (i.e., Theory A, Theory B, and Theory C) and amongst them the middle group — Theory B — is the most influential and controlling. Hence very close and intensive attention is to be paid to employees belonging to Theory B-group (which was always neglected in all research findings to date) so as to make the organization more vibrant and proactive to sustain future challenges and to grow and prosper.

Secondly, it is easier to avoid, eliminate, and reject certain workers under a number of allegations or in the name of maintaining quality and productivity or downsizing. But ultimately, it proves to be the greatest blunder of the management in the long run and becomes a certificate of non-capability and failure to use the most costly and scarce human resources, to bring positive changes, growth in the organization.

Based upon this study, the following recommendations are made:

1. Human resources are the most vital and scarce resources amongst all resources, at the same time, most sensitive and dynamic. Hence, all employers should take utmost care and responsibility while designing any motivational and control strategies for workers, so as to get cent-percent involvement and participation of employees in the process of future success, growth, and prosperity of the organization (Jain, 2019).

2. The personal traits and leadership styles of the supervisors/managers play a most crucial and vital role while dealing with the employees/workers, particularly in controlling, especially in enforcing disciplinary and punishment measures in these modern days of pro-union and pro-labor laws (Singh, 2017). The suggested leadership styles should be preferably the nurture and situational leadership styles instead of autocratic and dictatorial (Singh, 2003).

3. All managers and supervisors should be adequately trained to prescribe and administer the most appropriate techniques of positive behavioral reinforcements to convert Theory C-group employees (who are not performing) into Theory B-group workers (the middle group, who are just satisfied and not making any extra efforts) and ultimately to Theory A-group (who are very active performers and considered to be an asset to the organization).

4. Instead of resorting to hurried and immature penal actions against any worker, it is always better to resort to employee counselling and other mentoring techniques. During close and judicial shop-floor observations, it was found that transition from bad workers and bad performers to average performers and further to good performers is very much possible and feasible if one has the strong determinations to do it and get it done.
5. All managers/supervisors should be capable of creating a sense of faith, confidence, and trust in the minds of a fellow worker and not panic, threat, and terror. He/she should be able of creating an environment of mutual cooperation, confidence, and trust considering the workers as their equal partners, in the process of achieving higher productivity, quality, growth, and prosperity (Singh, 1986).

6. All technical managers/supervisors should be periodically trained and retrained in the latest behavioral reinforcement techniques and interpersonal skills and they should be re-designated as “people manager”, rather than a “technical manager”, or “production manager”.

The following are the limitations of this study:

1. This study is not purely empirical and quantitative, but in fact, descriptive, exploratory, and qualitative, based upon intensive critical and long matured shop-floor observations. Hence, it has some inherent limitations.

2. Since the findings are based upon shop-floor critical observations, field surveys, unstructured interviews, and opinion poll of experts, it has again some natural limitations.

3. Some of the findings are directly based upon the previous empirical findings of the author, by using old structured questionnaires, primary and secondary data analysis, hence limitations are likely to be there.

The following are the future scopes of this study:

1. There is always a huge scope for further empirical research in this field since, after the epic findings of McGregor (1960) and Drucker (2007), the numbers of fundamental researches in the field are very less. Hence, there is a huge demand for undertaking serious empirical studies in this field to come out with some reliable and universally acceptable findings and recommendations.

2. In this era of technological advancements, digitalization, and artificial intelligence, the impact of these modernizations is bound to bring significant changes to the mindsets, morale, motivations, commitments, involvements, and engagements of the workers (Parker & Grote, in press; Schmid, 2020).

Hence, all future empirical studies should try to correlate the impact of such technological advancements upon the mindsets, motivations, morale, and working conditions of the employees during planning, designing, and structuring of the organizational design in this changed context to maximize the organizational commitments (Al-Madi, Assal, Shrafat, & Zeglat, 2017).

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