

Exploring the impact of Task and Outcome Interdependence and Self-Efficacy on Employee's Work Motivation

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Abstract-

Motivation has an effect on the output of the business and concerns both quantitative and qualitative aspects. Business relies heavily on the efficiency of the productive labors to ensure meeting the demand requirements. Review indicates that motivation has been one among the areas that has been researched a lot in varied dimensions across the world and results reveal that lack of motivation has led to disastrous consequences. Although motivation is an external source which encourages employees; inspiration comes from within the employees.

Though employees come from different backgrounds, possess different educational qualifications, have varied work experiences and come from diverse family background, the primary interest of employees is to satisfy their personal needs, ambitions, desires and goals link the above factors to survival and security concerns with a desire to belong and generate positive feelings from within and from others, and to be self-fulfilled. Hence a study was conducted to identify the factors that effects employee motivation and examine the relationship between task and outcome interdependence and self efficacy on employees' motivation.

The study was descriptive in nature and adopted survey strategy. Data was collected using a developed and validated questionnaire. The study chooses an automobile sales and service unit in Coimbatore and 30% of the respondents were selected at random. The collected data was analyzed using percentage analysis, one way Analysis of Variance, correlation and Friedman's test. Results of the study reveal that Self Efficacy, Outcome interdependence Received task interdependence, Initiated task interdependence, Collective effort, and Cooperation are positively correlated with each other and all these factors have a positive impact on employees work motivation.

I. INTRODUCTION

Motivation can have an effect on the output of the business and concerns both quantity and quality. Business relies heavily on the efficiency of the production staff to make sure that products are manufactured in numbers that meet the demand requirements. Employees are the greatest asset and no matter how efficient the technology and equipment may be, it is no match for the effectiveness and efficiency of the work.

Motivation is operationally defined as the inner force that drives individuals to accomplish personal and organizational goals. Motivation is the force that makes people do things to satisfy the individual needs and needs vary from person to person as everybody has their individual needs to motivate themselves. Depending on how motivated employees are, it further determines the effort the employees put in their work and therefore increase the standard of the output. Research reveals the common motivating factors as interesting work, good wages, full appreciation of work done, job security, good working conditions, promotions and growth in the organization, feeling of being in on things, personal loyalty to employees, tactful discipline, and sympathetic help with personal problems. Hence the factors that motivate individuals and the level of motivation varies across individuals depending primarily on their demographic characteristics, but yet the primary interest of employees is to satisfy their personal needs, ambitions, desires and goals and ensures that they perform their best at the job so that survival and job security is taken care.

Hence we conducted a study to identify the factors that effects employee motivation and also examine the relationship between task and outcome interdependence and self efficacy on employees' motivation.

II. REVIEW OF LITERATURE

The theory of human motivation started as an interest of psychologists, but managers soon realized the importance of knowing how to motivate their workforce. The work of human motivation started with Skinner's experiments and later motivation through conditioning responses has been explored in great detail since the late 19th century. In 1943, A.H. Maslow came out with "A Theory of Human Motivation," in which he discussed how humans have basic needs that need to be met. The five basic needs that are identified in Maslow's theory are: physiological, belonging, self-actualization, safety, and esteem. Maslow further summarized that human beings are never satisfied and, as such, their goals are never fully achieved. Because individuals always want, they play a game of give and take with the order and priority of their goals. In other words, as goals are met or reprioritized, there is always another need to take its place.

Robert, (2005) take into account the work of Baron, (1983) in which he mentioned that not only motivation can influence performance, but performance can also influence motivation, if followed by rewards. Sirota, Michkind, and Meltzer (2005) in their study discussed that the main belief is that management is meant to motivate employees. Management should make employees happy—thus it will positively affect employee morale and performance—thus helping the company's bottom line. Management negatively affects morale by making policy and business decisions based on the "bad seeds" or negative employees, and by not giving employees enough credit or kudos for doing their jobs well.

Trist (1970) analyzed the psychological requirements and identified seven job design principles: variety of tasks, a series of tasks that relate to a single overall task, optimal length of work cycles, standards of performance and recognition, boundary tasks, tasks requiring some level of skill and worthy of respect and tasks that are perceived to contribute to the overall product. Trist's theory makes a great argument for aligning people with jobs that will motivate them based on what motivates them psychologically. Although the seven principles

make sense for the majority of people, the theory still needs to expand to encompass that not all employees are going to be motivated by the seven principles outlined.

Interdependence tasks possess significant motivation potential in terms of mutual support among co-workers and it can lead to a feeling of responsibility for another person's work outcome. Task interdependence refers to the interconnection between tasks and the performance of one's work that is dependent on the completion of others' work and as a job attribute it has significant motivation potential. Interconnected tasks can lead to situations that emphasize collective efforts and cooperation which increases cooperation and subsequently boosts the performance of individuals within each group and, thus, group performance. Task interdependence consists of two important components namely initiated and received task interdependence. Initiated task interdependence can be defined as work flows from one particular job to one or more other jobs, thus making the latter job performances heavily dependent on the initiating job, while received task interdependence refers to the extent that a worker's job performance is influenced by the job workflows of others. The statement of interdependence tasks has been revealed by (Kiggundu 1983; Johnson and Johnson 1989, 1999; Hackman 1990; Pearce and Gregersen 1991; Saavedra et al., 1993).

Outcome interdependence is defined as a situation where an employee perceives that his or her personal work benefits and costs are greatly influenced by the performance of other colleagues. Studies show that group oriented goals influence the increase of responsibilities felt by and towards work group members and thus increases the performance of the group. It has affirmed two types of extreme outcome interdependencies, namely positive and negative outcome interdependence (Kelley and Thibaut 1978; Van der Vegt et al., 1998).

Self-efficacy refers to an individual's self-beliefs, related to their own ability to perform specific tasks successfully. Bandura and Cervone (1986) revealed that employees' self-efficacy perceptions are positively related to their productivity, quality, cohesion and commitment. As stated by Bandura (1998), if people have no belief in their ability to produce results, they are more likely to avoid the situations or jobs that they feel unable to handle. Such situations become worse once the required behaviors are difficult to create and further reinforce their already low efficacy expectations.

With the increasing importance of teamwork, many organizations are looking for better ways of linking teamwork to compensation. Robbins (1996) claimed that group rewards are an important determinant for team cohesion, since collective rewards increases the group feeling, while DeMatteo et al., (1998) in their study claimed that group rewards encourages team productivity and helps to overcome limitations of larger group based plans such as gain sharing. Studies reveal that supporting team-based structures, promoting cooperation among team members (Tjosvold 1986), and strengthening peer pressure leads to better team performance Kandel and Lazear (1992). Lawler et al., (2001) in their study identified that outcomes could affect the actions or particular levels of performance and the expectancies that people hold about the likelihood of their actions leads to the intended performance. Studies of outcome interdependence have reported a positive relationship between cooperative behaviour and outcome interdependence (Kelley and Thibaut 1978, Wagner 1995) while Deutsch's (1980) finding showed that group-based outcomes enhance workers' effort. Studies by

Wood and Bandura (1989), O’Neill and Mone (1998), Krishnan et al., (2002) show a positive direct relationship between self-efficacy and effort.

With this research background a study was carried out to find the implications of task and outcome interdependence and self-efficacy on employees’ work motivation in terms of cooperation and effort in a automobile sales and service unit in Coimbatore City.

III.OBJECTIVES OF THE STUDY

The objectives of the study are

- To find out the major factors which motivate employee to perform better
- To identify the factors which demotivate the employees
- To find out the factors which contribute towards increasing the self efficacy of employees
- To find the impact of task and outcome interdependence and self-efficacy on employees’ work motivation

IV.METHODOLOGY

The research purpose and research questions revealed that this study is descriptive in nature and the study adopted survey strategy. Data was collected using a questionnaire. The study adopted the questionnaire developed by Ayupp and Kong (2010), measured along a five point scale of Likert from Strongly Agree (5) to Strongly Disagree (1). The variables considered for the study are defined as follows

| | |
|--------------------------------|--|
| Self Efficacy | The employee self-beliefs, related to their own ability to perform specific tasks successfully in the organization |
| Outcome Interdependence | The employee Outcome interdependence is defined as a situation where an employee perceives that his or her personal work benefits and costs are greatly influenced by the performance of other colleagues. |
| Received Task Interdependence | The received task interdependence refers to the extent that a worker’s job performance is influenced by the job workflows of others. |
| Initiated Task Interdependence | The Initiated task interdependence can be defined as work flows from one particular job to one or more other jobs, thus making the latter job performances heavily dependent on the initiating job. |
| Collective Effort | The employee collective rewards increases the ‘group feeling’. claimed that group rewards encourages team productivity and help to overcome limitations of larger group-based plans |
| Cooperation | Employee believed that higher levels of task interdependence would bring more cooperation or mutual support among coworkers due to the fact more communication. |

The respondents for the study comprised managers, supervisors and shop floor workers. The sample size for the study was 30% of the respondents amounting to 172 employees who were selected at random. The

sample has been selected to include the views of the respondents’ at all hierarchical levels. The collected data was analyzed using percentage analysis, one way Analysis of Variance, Correlation and Friedman’s test.

V. ANALYSIS AND DISCUSSION

Demographic profile of the respondents: 48% of the respondents are Male and 52% of the respondents are Female. 76% of the respondents are in the age group of 20-30 years and 18% in the group of 31-40 years. 5% of the respondents are Managers, 13% are Supervisor and 47% are Shop staff workers. 21% of the respondents are Fresher, 27% have Less than 2 years of experience, 35% have 3-5 years of experience. 32% of the respondents earn below Rs 5,000 per month, 52% between Rs.5,000-10,000,13% between Rs.10,000-20,000 and 3% above Rs. 20,000. 30% of the respondents are Diploma holders, 51 % of them are under graduates and 16% are post graduates. This portrays the diverse profile of the respondents which is essential for the study, since the study focuses in determining the impact of Task and Outcome Interdependence and Self-Efficacy on Employees’ Work Motivation among a diverse work group.

Descriptive Statistics:

Table 1: Descriptive Statistics

| Self-efficacy | | | Outcome interdependence | | | Received Task interdependence | | |
|--------------------------------|------|--------------------|-------------------------|------|--------------------|-------------------------------|------|--------------------|
| Variables | Mean | Standard Deviation | Variables | Mean | Standard Deviation | Variables | Mean | Standard Deviation |
| SE1 | 4.03 | 0.969 | OI1 | 2.00 | 0.000 | RTI1 | 4.16 | 0.825 |
| SE2 | 4.00 | 0.739 | OI2 | 2.00 | 0.000 | RTI2 | 3.70 | 0.990 |
| SE3 | 3.82 | 0.947 | OI3 | 2.00 | 0.000 | RTI3 | 3.60 | 1.092 |
| SE4 | 3.89 | 1.180 | OI4 | 2.00 | 0.000 | RTI4 | 3.78 | 0.927 |
| SE5 | 3.96 | 0.984 | OI5 | 2.00 | 0.000 | RTI5 | 4.12 | 1.066 |
| Initiated task interdependence | | | Collective effort | | | Cooperation | | |
| Variables | Mean | Standard Deviation | Variables | Mean | Standard Deviation | Variables | Mean | Standard Deviation |
| ITI1 | 4.01 | 0.990 | CE1 | 4.07 | 1.157 | COP1 | 4.15 | 0.833 |
| ITI2 | 4.12 | 0.998 | CE2 | 4.03 | 0.969 | COP2 | 4.15 | 0.821 |
| ITI3 | 4.05 | 0.936 | CE3 | 4.23 | 0.827 | COP3 | 3.85 | 1.058 |
| | | | CE4 | 4.20 | 0.791 | | | |
| | | | CE5 | 4.27 | 0.763 | | | |
| | | | CE6 | 4.12 | 0.795 | | | |
| | | | CE7 | 4.24 | 0.806 | | | |

The mean value for the variables with regard to work motivation which consists of variables namely Challenging job, Skills and abilities, Depend for materials means and others, presence, help and support, materials means and others, Colleagues depend on their job well, Information and advice, Exert myself to the fullest, Job duties to help others employees, Knowledge and expertise, Successful in my work, Full capacity and job duties, Benefit of the company, Mutual support to each other, Member without been asked, Members during

the day are greater than 4.00 which implies that work motivation have high agreement regarding the above items.

The mean value for the variables with regard to work motivation which consists of variables namely colleagues attain the goals, Concerns and colleagues, Colleagues want to accomplish, Colleagues succeed in their jobs, Colleagues succeed in their jobs in expense or benefits, are greater than 1.00 which implies that outcome interdependence have positive agreement regarding the above items.

The mean value for the variables- with regard to work motivation which consists of variables namely Overqualified, Past experience, Scope of ability, Depend for doing job well, Depend for information and advice, Depend for presence, Difficult task, are greater than 3.00 which implies that work motivation have agreement regarding the above items.

Analysis of Variance: Analysis of variance was carried out to find whether respondents of varied demographic profile differed in their perception towards the variables Self Efficacy, Task Interdependence and Work Motivation.

Table 2: Perception of respondents of varied demographic profile

| Variables / Demographic Profile | Gender | | Age | | Designation | | Experience | | Income | | Education | |
|---------------------------------|--------|-------|-------|-------|-------------|-------|------------|-------|--------|-------|-----------|-------|
| | F | Sig. | F | Sig. | F | Sig. | F | Sig | F | Sig | F | Sig |
| Self Efficacy | 5.295 | 0.024 | 3.996 | 0.021 | 3.167 | 0.028 | 1.665 | 0.180 | 3.942 | 0.011 | 2.200 | 0.093 |
| Received task interdependence | 4.425 | 0.038 | 0.393 | 0.676 | 2.959 | 0.036 | 0.238 | 0.870 | 0.797 | 0.498 | 0.120 | 0.948 |
| Initiated task interdependence | 0.968 | 0.327 | 2.997 | 0.055 | 2.344 | 0.078 | 0.391 | 0.760 | 3.114 | 0.030 | 4.104 | 0.009 |
| Collective effort | 3.305 | 0.072 | 2.269 | 0.109 | 3.289 | 0.024 | 0.494 | 0.687 | 2.139 | 0.100 | 1.262 | 0.292 |
| Cooperation | 2.588 | 0.111 | 5.227 | 0.007 | 2.650 | 0.053 | 3.088 | 0.031 | 3.681 | 0.015 | 2.345 | 0.078 |

Testing the 5% level of significance, table 2 reveals that the employees of varied gender perceive differently variables Self Efficacy (p=0.024) and Received Task interdependence (0.038) and employees of varied age groups perceive differently variables Self Efficacy (p=0.021) and Cooperation (p=0.007). Post hoc analysis was conducted to find out which age group of respondents differed in their perception and results revealed that respondents in the age group of 41-50 years differed in their perception compared to respondents of other age groups for both the variables, since respondents of this age group out of their experience over the years have gained maturity and hence their perception varied from the rest.

Employees of varied gender designation perceive differently variables Self Efficacy ($p=0.028$), Received task interdependence ($p=0.036$) and Collective effort ($p=0.024$). Post hoc analysis revealed that Managers differed in their perception compared to respondents of other designations. Employees of varied experience levels perceive differently variable Cooperation ($p=0.031$) and post hoc analysis revealed that employees with less than 2 years of experience differed in their perception compared to the others, since within the short time span their understanding of the system of the organization would have not been possible.

Employees of varied income groups perceive differently Self Efficacy ($p=0.011$), Initiated task interdependence ($p=0.03$) and Cooperation ($p=0.015$). Post hoc analysis revealed that respondents who earned Above Rs. 20,000 per month differed in their perception compared to others for all the three variables. Employees of varied educational qualification perceive differently the variable Initiated task interdependence ($p=0.009$) and post hoc revealed that respondents who have studied till school level differed in their perception compared to others, since their level of understanding could be low compared to others.

Correlation Analysis:

Table 3: Correlation Analysis

| | | Self Efficacy | Received task | Initiated task | Collective effort | Cooperation |
|--|---------------------|---------------|---------------|----------------|-------------------|-------------|
| Self Efficacy | Pearson Correlation | 1 | | | | |
| | Sig. (2-tailed) | | | | | |
| Received task | Pearson Correlation | .244* | 1 | | | |
| | Sig. (2-tailed) | .014 | | | | |
| Initiated task | Pearson Correlation | .571** | .321** | 1 | | |
| | Sig. (2-tailed) | .000 | .001 | | | |
| Collective effort | Pearson Correlation | .459** | .211* | .496** | 1 | |
| | Sig. (2-tailed) | .000 | .036 | .000 | | |
| Cooperation | Pearson Correlation | .444** | .267** | .490** | .686** | 1 |
| | Sig. (2-tailed) | .000 | .007 | .000 | .000 | |
| *. Correlation is significant at the 0.05 level (2-tailed). | | | | | | |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | | | | |

Correlation analysis reveals that there is a statistically significant high correlation between the Variables Self efficacy and Initiated task interdependence ($r=0.571$), Self efficacy and collective effort ($r=0.459$), Initiated task interdependence and Collective effort ($r=0.496$), Initiated task interdependence and Cooperation ($r=0.490$). Correlation results indicate that work motivation are followed in the organization are interrelated with each other.

Friedman Test: Friedman test was carried out to find whether respondents ranked the factors Salary, Promotion, Leave, Motivation, Recognition and Motivation. The ranks given to the five factors are

not the same. The order of importance is understood from the descriptive statistic table. The most important factor is Motivation (mean rank 2.10), followed by salary (mean rank 2.64), Promotion (mean rank 2.84), Recognition (mean rank 3.36), and Leave (mean rank 4.06).

Table 4: Friedman Test

| Ranks | |
|-------------|-----------|
| Factors | Mean Rank |
| Salary | 2.64 |
| Promotion | 2.84 |
| Leave | 4.06 |
| Motivation | 2.10 |
| Recognition | 3.36 |

| Test Statistics ^a | |
|------------------------------|--------|
| N | 42 |
| Chi-Square | 62.291 |
| Df | 8 |
| Asymp. Sig. | .000 |
| a. Friedman Test | |

VI. CONCLUSION

This study investigates the relationship between task and outcome interdependence and Self-efficacy on employees work motivation. The study focused on two forms of interdependence, namely task interdependence (works execution) and outcome interdependence (compatibility of co-workers' performance), while work motivation looked at employees' cooperation and collective effort. The results show a significant and positive support regarding the relationship between outcome interdependence and self-efficacy towards employees work motivation. Interdependence and self-efficacy components possess motivational potential towards employees work behavior, such as the effort and cooperation level that they choose to contribute to their company. Furthermore, initiated task interdependence is found to have a significant relationship with employees' cooperative effort. Work motivation of employees can be reinforced by linking the goals of individual employees to the company's goals. Work motivation is also affected by the employee's self-efficacy. This self-belief has potential to influence an individual employee's working behavior and group performance. The findings highlight the essential role of mutual support among the co-workers where it has been shown that effective interdependence job outcomes can only occur when each member takes into account others work performance, and work in a more cooperative and joint manner

Studies by Matsui et al., (1987) and Mitchell et al., (1990), reveal that group oriented goals influence the increased responsibilities felt towards members of the work group and, thus, increase the performance of the group. Hence to enhance a positive work motivation the management could have a close collaboration with the

employees and assign challenging jobs must to effectively utilize their potential. Job rotation could be implemented which would help the employees learn different tasks and even reduce monotony at work, which will also foster collaboration and cooperation among the employees. Managers should encourage clear and open communication among the employees and encourage co-workers to help each other when needed. Training programs with focus on team development can increase the employees' self efficacy since such programs helps in increasing collaboration and reducing interpersonal conflicts (Gist et al., 1989), and also helps in enhancing collective efficacy on the team level (Eden 1993). This is important because self-efficacy is also found to have a significant and positive influence towards automobile industry workers' cooperation and collective effort. Focus of the management could be on recruiting and retaining highly self-efficacious employees in order to improve the overall work motivation within the organization.

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