

TEAM EFFECTIVENESS IN INDIAN ORGANIZATIONS A COMPARATIVE ANALYSIS OF PUBLIC AND PRIVATE SECTOR

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PURPOSE

THE prime purpose of this study was to find out the difference in team effectiveness (TE) of Indian public and private sector Organizations. It also aimed and explored the differences between TE of small and large teams.

Design/methodology/Approach: Total 88 samples (37 from public sector and 51 from private sector, total 8 teams of different sizes) from Indian Manufacturing Organizations were gathered using TEAM (Team Effectiveness Assessment Measure). Team functioning (TF) and team empowerment (TE_m) dimensions were measured on the factors like cohesion, confrontation, collaboration, task clarity, autonomy, support and accountability.

Findings: Visibly, the public sector had higher cohesion, confrontation and TF, while the private sector had higher other factors. But the differences with respect to TE factors and dimensions across sectors and teams of varied sizes were not statistically significant.

Research Limitations/Implications: In spite of limitations like small sample size and survey of few teams from a certain type of manufacturing organizations, this research carries implications for researchers to investigate for the unrevealed facts on TE in Indian contexts.

Practical Implications: Suggestions for better team work have been made on the basis of preliminary scores and observable differences. For instance, public sector executives may increase their TE through enhanced autonomy and the private sector executives may also achieve higher TE through increasing cohesion, as interpreted from the findings.

Originality/Value: The use of specific TE factors/dimensions and the contexts of Indian Manufacturing Organizations makes the study a unique contribution towards the dearth of the relevant literature.

Key Words: Team Effectiveness, Team Functioning, Team Empowerment, Cohesion, Collaboration, Autonomy, Support.

Introduction

Organizations want to build and sustain in own industry as well as in the corporate. But, only today's success is not enough to survive tomorrow. Continuity in performance is required for long term sustainability. In view of Kratzer et al., (2004), 80% companies which have more than 100 employees

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are using team based approach either for new product development or for research and innovation (Griffin, 1997). It is because the teamworking is termed as the driver of competitive improvement. Most managers believe in using teamwork to increase productivity of their departments and their success. As per Savelsbergh et al., (2010), the application of work teams is expected to result in greater adaptability, productivity, and creativity, and to provide more innovative and comprehensive solutions to complex organizational problems as compared to what individual employees can offer (Beers, 2005).

Singh (2004) called team work as the ability to cooperate and work effectively together, where each participant think and act for the group rather than for his own personal benefits. Team work provides the better utilization of existing workforce and therefore organizations have begun to function as team of individuals. Almost all contemporary organizations to improve the efficiency of their business rely on team approach. But in the words of Ross et al., (2008), "An ineffective team can cause organization to waste resources, fall short of performance objectives, rework designs, and extend time to market". Therefore mere team work is not the objective; rather making the teams effective is the foremost concern. The members of an effective team are expected to complement and cover each other's shortcomings and absentia. In other words, the work in organizations is never expected to be hampered in any case. Due to major benefits of cost effectiveness and greater innovations, a significant research is going on identifying the variables to measure Team Effectiveness (TE). The concept of TE attracts researcher to work upon and suggest new facts. Many TE measurement models are available to refer and measure TE and improve on the weak areas (for eg Cohen et al., 1996; Cohen and Bailey, 1997; Hackman, 2002; Pareek, 2002 etc.) The purpose of this study is to measure and compare TE of Indian private and public sector teams on the basis of Team Effectiveness model developed by Pareek, (2002).

Team Effectiveness (TE) and Team Performance studies in Indian Context

Singh and Antony (2005) in a study of public and private sector indian managers revealed that overall the managers highly valued the practice of team based functioning and demonstrated good teamwork practices in their organizations. Further the respondents strongly agreed to give their best contribution as team members to make their team effective and favored the no bossism philosophy of a team. While exploring the team work benefits to Indian public and private sector managers, the researchers found that promoting trust and cooperation by reducing hierarchical bindings renders better team work. They further advocated willful contribution and involvement of members for improving TE and pointed out that cooperation and coordination both are required for fruitful results of team work. This way their findings suggested trust, cooperation, involvement, cooperation and coordination as significant elements for better team work.

Ganesh and Gupta (2006) in their study on Indian software development teams identified team climate as a crucial factor in determining the team performance. They reported that virtual characteristics of the software development negatively affected the team climate. Such degradation of team climate also affected the team performance negatively. This way the study contributed to draw attention towards drawbacks of virtual characteristic of software development teams.

Sharma (2007) investigated the impact of team size on team performance on a sample of 60 teams of various sizes from Indian Information and Technology (IT) companies. Data on team performance were gathered from team leaders. The Results showed significant effect of team size on team performance where the total team performance was found high in small size teams and medium size teams than large size teams. They concluded that small and even medium sized teams function better and are effective than large teams.

Huckman et al., (2009) Studied 543 projects teams at Indian Software Services firm reported that the average number of times a team member worked with other team members has positive significant effect on team performance. They attributed it as team familiarity. Thereby they suggested improving the interactions amongst the members while performing the team tasks. Their findings also highlight that role experience of members had positive association with team performance.

Tamilmani et al., (2009) conducted a study on team effectiveness of an Indian garments company, using a total of 100 responses (20 responses from each of the 5 departments). Their study focused the components like team synergy, performance objectives, skill requirement, resource use, quality, innovation and reward systems. They inferred that efficient employee utilization and employee participation in decision making are two important factors for a team to be effective.

Bhatnagar and Tjosvold (2012) surveyed team leaders and members in Indian organizations. In the survey, the team leaders showed their participation, people, and productivity values and the team members marked their constructive controversy as well as their effectiveness and performance. The researchers concluded that the combination of leader productivity values and constructive controversy results into effective teamwork in India. Thus they advocated participative and productive orientation of leaders and discussion of the diverse views by members open-mindedly. However they had contradictory results in term of non predictive people values, as Indian society is considered as a collectivist society.

The literature survey indicated small number of team effectiveness studies in Indian contexts and that too primarily confined to only Indian IT sector. Just a few studies were found focused on other sectors. Therefore the redundancies of studies and growing importance of team approach draws the attention to pursue research on TE for adding to dearth of literature on TE in Indian contexts.

Conceptual Framework and Theoretical Background

The theoretical base of this study has been drawn on TE model developed by Pareek, (2002). There are two dimensions, namely Team Functioning (TF) and Team Empowerment (TE_m). Where TF is the combination of cohesion, confrontation and collaboration; and TE_m is composed of task clarity, autonomy, support and accountability. *Cohesion* indicates the tendency of a team to stick together and stay united in pursuit of its goals and objectives regardless of difficulties and set-backs. *Confrontation* means the open, positive and healthy discussion on issues in the team. *Collaboration* among team members allows for exchanges of help and division of work through better communication throughout the tasks. *Task Clarity* provides the aptitude to focus work at the front, where without it members are likely to indulge in unnecessary negotiations about their roles. *Autonomy* means the degree to which a job provides discretion and independence to schedule own work and determine own way of working. *Support* means no lack of human resources and financial resources; integration; and mutual facilitation. *Accountability* is the willingness or compulsion to accept responsibility for one's actions related to tasks; here it proposes that the team needs to communicate accountability and take responsibility as a unit for actions. All factors and dimensions therefore can be represented as the below Conceptual Framework Model.

Cohesion

Cohesion is the most discussed team characteristic in the literature on TE. Team cohesiveness increases when individual members perceive themselves as a part of the team rather than individuals (Guzzo and Shea, 1992; Hogg, 1992). With such cohesiveness, members willingly show cooperative behaviour and stay bind strongly together (Mullen and Copper, 1994). A positive relationship exists between team cohesiveness and team effectiveness (Mullen and Copper, 1994; Gonzalez et al., 2003), also a direct relationship exists between cohesiveness and task commitment (Zaccaro and Lowe, 1988). When the team members don't work face to face then their cohesion and trust gets reduced due to high social and synchronization problem, (Walther and Bunz, 2005; Curseu, 2006).

Confrontation

Confrontation in constructive form improves the team performance and in destructive form (i.e conflict) reduces the team performance (Sawyer, 2001). Constructive confrontation is a structured, systematic approach that decreases conflict by bridging the gap between what people want and what organizations need (Hoover and DiSilvestro, 2005). An open and face to face discussion on issues leads to better team functioning by reducing misunderstandings and unrest amongst the team members. Hence every team should promote constructive confrontation instead of destructive conflict.

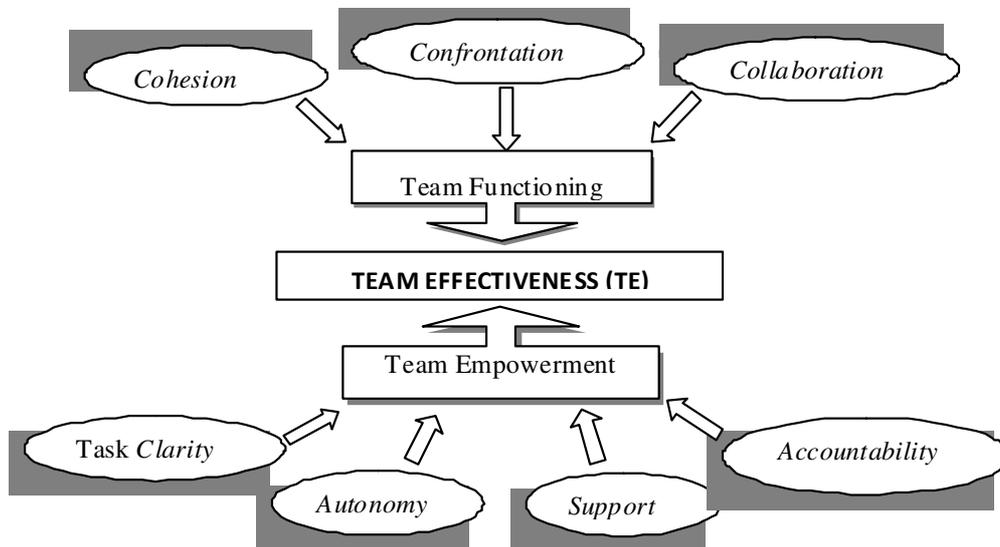


Figure 1: The Factors and Dimensions of Team Effectiveness Based on Pareek, (2002).

Collaboration

Collaboration symbolizes smooth flow of communication which enhances the exchange of helps and voluntary task sharing. Hence, with increased collaboration, the team members can ask for any sort of help and can divide the tasks into further small groups within the team. According to Ebert and Neve (2001), communication and its frequency affect the efficiency of a team. Therefore, Communication problems should be addressed by managers well in time. A team where members are working face to face need not to have technical expertise to communicate with other members and therefore such teams have effective communication (Kirkman et al., 2004).

Task Clarity

Task clarity means that the members know clearly “what is to be done and who is to do that”. It frees the members from unnecessary debate or confusion; hence the team effectiveness increases (Verma et al., 2011). Mohammed and Dumville, (2001) also found that team performance is greater when there is Task Clarity. Researchers like Shrader et al., (1989) suggested that Standard tasks are easily managed by centralization but complex tasks are not. However, irrespective of the nature of tasks, every team should focus on bringing task clarity amongst its members.

Autonomy

Autonomy provides a person the right to determine his own way of performing the assigned duties. With such freedom, the person takes responsibility of performing well and put extraordinary efforts. Without autonomy members will not act in time even if they have high task clarity, therefore autonomy is a preliminary condition for effectiveness of team (Verma et al., 2011). Members, who have significant autonomy, freedom and interdependence, reveal innovativeness in their teams (Ozaralli, 2003). Without autonomy the members may feel helpless and restricted to dispose their duties effectively.

Support

In addition to the availability of sufficient material and human resources, support also symbolizes the conducive and favorable environment within the team. Support promotes a sense of integration and this in turn provides mutual facilitations to the deeds of team members (Erez et al., 2002). Supporting others for innovative ideas and ways of working has significant positive impact on team performance (Huckman et al., 2009). With enough support, the members don't hesitate to assume accountability for performing their duties as they know that all needed resources are present with them.

Accountability

Accountability is needed to measure the true extent of achievements and progress of tasks, therefore effective team makes members individually and jointly accountable for team's overall purpose, goals and approach, (Price et al., 2006). Reallocation of responsibility to a lower level is a vital element for successful team empowerment, (Cunningham et al., 1996). Such relocated responsibility always has an associated accountability, for which the authorized person is answerable. Thus, accountability in teams help in assessing the task against goals and it also helps in preventing the misuse of autonomy and support.

Based on the above described constructs, this study aims to measure and compare TE in Indian organizations, so as to identify the major differences in TE and its factors/dimensions across the public and private sectors. Furthermore, it intends to explore whether the team size has any relation with team effectiveness. Thus we intend to address the following research questions:

RQ1: whether there is any significant difference in TE (and TE factors/dimensions) of public and private sector of India?

RQ2: whether there is any significant difference of TE (and TE factors/dimensions) between small teams and large teams?

Research Methodology

The Sample

The study targeted independent units of Organizations and the key position holders in those units. The organizations and their units were selected at convenience sampling from both Indian public and private sector. The nature of organizations was production and infrastructure development i.e manufacturing. Total eight teams (four from each sector) were surveyed, where the respondents were responsible for working together for unit's output. From public sector, the four teams were of sizes N=13, N=8, N=7 and N=9. From private sector the four teams were of sizes N=15, N=14, N=17 and N=5. The different sized teams were picked intentionally to check effect of size on TE. For the purpose of this study, the teams with 8 or less members are being considered as small and the rests as large. The purpose of all the Teams was to produce best quality output to meet customers' (either professional contractors' or individual consumers') expectation well in time, so as to achieve the organizational goals. The average age and experience of the total surveyed respondents (N=88) were 38 years and 14 years respectively. Their average annual income was 5 to 10 Lacs (in Indian rupees) and a majority of those were engineering graduates and post graduates. The Table 1 shows the demographics of each team, each sector and in total. It can be observed that the teams in public sector had higher experience and age as compared to those in private sector. Whereas the education levels of public sector employees were lower (i.e Graduation only) than those of private sector employees (i.e Post graduation). However, the salary levels were equivalent in both the sectors.

The Instrument

As discussed earlier, the TEAM (Team Effectiveness Assessment Measure) developed by Pareek, (2002) was used for data collection. Here each member of the team is asked to rate his/her team on 28 items. Each of the seven factors is composed of 4 items, sample items of each factor are:

Cohesion: "Members of this team generally feel that their concerns and views are ignored by other members"; "Members back the decisions taken by the group"

Confrontation: "Members generally avoid discussing the problems facing the team"; "Members of this group do not hesitate to express their differences with each other"

Collaboration: "Members do not volunteer to help others"; "Members of this team hesitate to ask for others help when they need help"

Table 1: The Demographic Profile of Respondents

	Avg. Age (in years)	Avg. Exp. (in years)	Avg. Income (in Indian Rupees)	Avg. Education
Team 1 (N=13)	39.9	18.38	5 to 10 Lacs	Graduation (Engineering)
Team 2 (N=8)	46.25	21.85	Above 10 Lacs	Graduation (Engineering)
Team 3 (N=7)	27.7	4.85	5 to 10 Lacs	Post Graduation
Team 4 (N=9)	45.22	19.55	5 to 10 Lacs	Graduation (Engineering)
Public (N=37)	40.27	16.86	5 to 10 Lacs	Graduation (Engineering)
Team 5 (N=15)	40.4	15.8	5 to 10 Lacs	Post Graduation
Team 6 (N=14)	41.6	17.14	Upto 5 Lacs	Graduation (Engineering)
Team 7 (N=17)	34.4	9.28	5 to 10 Lacs	Post Graduation
Team 8 (N=5)	29	5.2	Upto 5 Lacs	Post Graduation
Private (N=51)	37.62	13.03	5 to 10 Lacs	Post Graduation
Overall (N=88)	38.73	14.66	5 to 10 Lacs	Post Graduation

Task Clarity: “The goals of this team are well defined”; “There is confusion amongst members of the team about its main tasks”

Autonomy: “The team has enough freedom to decide its way of working”; “The team does not have autonomy in vital aspects of its working”

Support: “The team is given adequate resources to carry out its functions”; “The team does not get adequate support to perform its tasks”

Accountability: “The sense of responsibility and accountability is pretty high amongst the team members”; “No one cares to assess the true extent of achievement of the goals of the team”

Respondents rate each item on a five point Likert scale ranging from 0 to 4, where 0 means not at all true about team, 1 means very little true about team, 2 means slightly characteristic of team, 3 means fairly characteristic of team and 4 means highly characteristic of team. The even number items are negatively framed and therefore their markings are reversed for scoring, as: 0=4, 1=3, 3=1, 4=0 and 2 remains 2. For each individual, the average of cohesion, confrontation and collaboration gives TF dimension and the average of task clarity, autonomy, support and accountability gives TEM dimension and the average of two dimensions gives the overall team effectiveness score. Therefore, the maximum possible score of each factor, dimension and overall team effectiveness is 16. All member responses can be averaged to obtain the factors, dimensions and effectiveness of a particular team. The instrument revealed alpha coefficient ranging from .85 to .93 for all the factors and total TE on all the teams and on overall respondents, and hence the instrument is considered reliable.

Analysis and Results

To perform the preliminary analysis, the scores were aggregated taking averages at team levels, at sector level for both sectors and at overall basis. Table 2 shows TE and factors/dimensions mean scores out of 16.

Table 2: Team wise and Sector wise Average Scores of TE and Factor/Dimensions

	Coh.	Conf.	Col.	TF	TC	Aut.	Supp.	A	T Em.	TE
Team 1 (N=13)	12.69	11.15	11	11.62	12.69	10.69	11.69	12.31	11.85	11.73
Team 2 (N=8)	11.63	11.87	12	11.83	12.63	10.38	10	11.63	11.16	11.49
Team 3 (N=7)	10.57	9.43	9.57	9.86	9.29	9	9.29	9.29	9.21	9.54
Team 4 (N=9)	9.33	10.88	10.55	10.23	12.33	10.77	10.66	11.22	11.25	10.75
<i>Public (N=37)</i>	11.24	10.77	10.84	11	11.95	10.32	10.62	11.32	11.05	11.03
Team 5 (N=15)	11.13	10.86	11.33	11.11	13.6	11.2	11.93	12.26	12.25	11.68
Team 6 (N=14)	11.07	11.21	11.21	11.16	12.14	11.29	11.29	11.43	11.54	11.35
Team 7 (N=17)	10.41	9.71	10.06	10.06	12.18	10.18	9.29	10.41	10.51	10.29
Team 8 (N=5)	10.8	11.8	11.2	11.26	13.6	11.2	10.2	12	11.75	11.51
<i>Private (N=51)</i>	10.88	10.66	10.86	10.79	12.73	10.88	10.71	11.39	11.45	11.11
<i>Overall (N=88)</i>	11.06	10.72	10.85	10.9	12.34	10.6	10.67	11.36	11.25	11.07

Note: *Coh.* = Cohesion, *Conf.* = Confrontation, *Col.* = Collaboration, *TF* = Team Functioning, *TC* = Task Clarity, *Aut.* = Autonomy, *Supp.* = Support, *A* = Accountability, *T Em.* = Team Empowerment, *TE* = Team Effectiveness.

Overall the Indian Manufacturing executives revealed highest Task Clarity (12.34) and least Autonomy (10.6). The average scores across sectors and teams show some observable variations. The Public sector had higher Cohesion (11.24), Confrontation (10.77) and TF (11) than those of Private sector (i.e 10.88, 10.66 and 10.79 respectively). Whereas the Private sector had higher Collaboration (10.86), Task Clarity (12.73), Autonomy (10.88), Support (10.71), Accountability (11.39), TEm (11.45) and TE (11.11) than those of Public sector (i.e 10.84, 11.95, 10.32, 10.62, 11.32, 11.05 and 11.03 respectively). It means that Indian Private sector has better TE through higher empowerment factors like task clarity, autonomy, support, accountability, whereas the public sector lacks the effectiveness inspite of having higher TF factors like cohesion and confrontation. Moreover, Team 1 had highest Cohesion (12.69), Accountability (12.31) and TE (11.73); Team 2 had highest Confrontation (11.87), Collaboration (12) and TF (11.83); Team 5 had highest Task clarity (13.6), Support (11.93) and TEm (12.25); and Team 6 had highest Autonomy (11.29). The average aggregation method removed any possibility of higher scores due to larger team size. Therefore the results reflected true differences across the teams. However the statistical significance was yet not obtained in this preliminary analysis.

The data was further analysed through independent sample t test and ANOVA (Analysis of Variance) at 95% significance level using SPSS 17.0. Table 3 shows the statistical significance of differences across teams and sectors.

To pursue the first research question, independent sample t test was conducted at sector level (i.e public and private sectors) to measure the significant difference of means of TE and its factors/dimensions across sectors. The results revealed no significant difference ($t =$, $p > .05$), which means that the cohesion, confrontation, collaboration, task clarity, autonomy, support, accountability, TF, TEm and TE of public sector and private sector executives were similar.

ANOVA (analysis of variance) was employed to answer the second research question. This aimed to find out the team size effect on TE and its factors/ dimensions across the scores of respondents of the

Table 3: Statistical Significance of the differences in TE factors/ dimensions

	Public versus Private		Team 1, 2, 3, 4, 5,6, 7 & 8	
	T	p	F	p
Cohesion	1.189	0.318	0.274	0.800
Confrontation	0.835	0.561	-0.093	0.929
Collaboration	0.568	0.780	-0.290	0.781
Team Functioning	0.806	0.584	-0.022	0.983
Task Clarity	1.724	0.115	-1.247	0.259
Autonomy	0.677	0.691	-1.549	0.172
Support	1.542	0.165	-0.345	0.742
Accountability	1.266	0.278	-0.538	0.610
Team Empowerment	1.531	0.169	-0.948	0.380
Team Effectiveness	1.142	0.346	-0.566	0.592

p > .05, Not Significant

eight teams at team level. As the teams were of different sizes, some significant variations were expected. But, the results show that there was no significant difference ($F=$, $p > .05$) in the cohesion, confrontation, collaboration, task clarity, autonomy, support, accountability, TF, TEm and TE of the eight teams on the basis of their sizes.

Discussion

As per scores of the surveyed manufacturing executives, the highest task clarity and least autonomy were in contradiction. Both these empowerment factors need to be focused and increased in equal proportions (Verma et al., 2011). In absence of autonomy the clarity of task will be of no worth. Moreover, the support and TF were lower as compared to constituting factors of TEm. It is not in congruence to Singh and Antony (2005), who reported the presence of higher cooperativeness, trust and high level of contribution among the Indian industrial executives. The Indian economy went through the phase of recession from 2008, which led to higher employee turnovers through retrenchments and layoffs. It affirms that recent past has witnessed degradation of mutual trust and sharing attitudes in Indian industrial executives and it is reflected in the responses here. The same might have resulted into individualistic and non-cooperative behaviours of the executives. That is why in this survey, they have reported lack of collaboration, support and cohesion. Thus it means that the executives prefer to search for better options in other organizations rather than staying loyal to their existing teams. The TE for aggregated 88 responses was also only at moderate level i.e 69.19% (11.07/16). It is also demanding attention to work upon the weak areas so as perform better.

Private sector executives had higher TEm and therefore they achieved higher TE as compared to Public sector executives. While the executives in Public sector inspite of having high TF factors like cohesion and confrontation could not outperform the Private sector executives. It is reflecting that better TE can be achieved through higher empowering factors like Task Clarity, Autonomy, Support and Accountability. But the TF factors are no less important for TE. According to Pareek (2002), TE is the composition of both TF and TEm. Thus the manufacturing organizations of both the sectors are required to focus upon both the dimensions of TE.

Indian Public sector executives had least autonomy i.e the freedom to function own way (Ozaralli, 2003). It is probably due to too much dependence on backward and forward profiles while taking their decisions. The public sector has long delays due intervention of several formalities in decision making. Decentralization is not much prevalent and the decision making power remains in the hands of top administrative and political actors. Due to this reason the executives might have perception of lack of sufficient autonomy. On the other side, the Private sector executives had comparatively slight higher autonomy but they revealed to have least cohesion. Singh and Antony (2005) found that in India both Public and Private sector executives have togetherness or cohesiveness, but contrastingly, our results indicate that Public sector executives have better cohesion than Private sector executives. This can be attributed to the fact that Private sector lacks stability in jobs. The employees are more into frequent job changes and switch more often to other organizations. The ample opportunities lessen the tendency of maintaining with the group and during the phase of setbacks, the private sector executives prefer to leave their teams. Hence the Cohesiveness decreases.

The most contributing element of TE in both the sectors was Task Clarity. It means that there is hardly any confusion about the tasks and the Indian manufacturing executives have sufficient knowledge about their role and result areas. It provides further support to the observation of Mohammed and Dumville (2001) that team performance increases through task clarity. Although, compared with Private sector, the Public sector had lower task clarity. It can be justified as the Indian Public sector has a bureaucratic system of functioning, here the procedures and formalities are weaved too complex that the members may have doubts that “who is to do what?”. The hierarchical and structural formalities cause too much delay which in turn reflects as lack of task clarity. However such differences of TE components between Public and Private Reign were not found significant, it symbolizes that the both are working at similar levels of effectiveness.

Additionally, it was observed that inspite of being large sized (compared to other teams), the Team 1 (N=13) had highest TE through its highest cohesion and accountability. It seems in contradiction to the notion that small teams perform better than large teams. However it may possibly be because, the team size was not so large, but moderate (Sharma, 2007). It also attributes that to achieve a higher team effectiveness; the cohesion is an important element. It is in congruence to the suggestion of Mullen and Copper, (1994) and Gonzalez et al., (2003) that team cohesiveness contributes positively towards performance. Team 1 belonged to Public sector and had higher cohesion possibly be because of very high job stability prevailing in the Indian Public sector. Here the employees work and retire from the same government job. There are hardly any switches and members tend to maintain with the group for long. Such tendency in turn results into higher cohesion. The accountability in Team 1 was also pretty much high. It indicates that Indian Public sector executives assume responsibility and maintain accountability of their assignments. The higher accountability in Team 1 in turn contributed towards its highest TE. This is in congruence with the findings of Price et al., (2006) that accountability enhances true extent of achievements and leads to better performance.

Team 2 was comparatively small i.e N=8, it had highest TF through its highest Confrontation and Collaboration. This is somehow in line with the findings of Sharma, (2007) that small teams have better exchange of view, ideas and helps. This in turn enhances the overall effectiveness of team through its better functioning. Team 5 had 15 members (i.e comparatively large in size) and still it had highest team empowerment through its highest task clarity and support. It signifies that even large teams can achieve higher empowerment with rising support and task clarity. Team 6 with highest autonomy was also comparatively large i.e N=14. It suggests that irrespective of its size, the team can perform well through higher empowerment.

Although, the score at a glance show better TE as well as cohesion in large teams and better confrontation and collaboration in small teams; but such differences between small and large teams were not found statistically significant. Thus it can be said that inspite of major differences discussed above, both small and large Indian teams are equally functioning, empowered and effective. It might be because the respondents being from manufacturing industries had reflected more or less similar responses on

the survey. Manufacturing organizations are production oriented and performance in such organizations is target oriented. Whether public or private, both sectors have predefined schedules and critical paths. Therefore the functioning factors like cohesion, confrontation and collaboration are necessary to achieve desired performance levels. The differences in nature of sectors might have increased or decreased the importance of such factors in the respective domains (as discussed earlier), but still both public and private sectors have alike TF. Similarly, measurable and tangible output of manufacturing industries stipulates the need of empowerment. It means that the overall production targets are further divided into sub targets to be easily accomplished and measured. Here, the empowering factors like task clarity, autonomy, support (in terms of resources) and accountability also bear tremendous weightage. All manufacturing organizations should better manage the empowerment factors in order to attain higher TE. Here also the nature of sectors might have reflected the differences in empowerment scores of Public and Private sector, but there was not actual such differences. This makes us to answer both our research questions in terms of “NO” i.e there is no difference in team effectiveness (and its factors/dimensions) in Indian Public and Private sector teams and also there is no difference between small and large teams in terms of team effectiveness (and its factors/dimensions).

Implications

The findings bear significant implications for the surveyed executives as well as for the executives working in similar nature of industries in India. *First*, it is clear that higher empowerment in teams leads to better TE and hence it is advised that executives should focus on higher task clarity, autonomy, support and accountability to further enhance their empowerment. *Second*, the confrontation and collaboration should be focused to have better functioning teams and ultimately higher TE. *Third*, it is advisable to improve task clarity in large teams through the subdivision of overall targets into small sub targets. *Fourth*, the large teams can adopt empowerment as a tool to achieve better TE. *Fifth*, the public sector executives may increase their TE through enhanced autonomy i.e by reducing unnecessary dependence on peer profiles and working independently; and the private sector executives may also achieve higher TE through increasing cohesion i.e maintaining stability in their jobs and avoiding frequent job changes. *Sixth*, strategies may be designed to cover up the reported weak areas of each team, for eg. Team 1 and 5 may plan to improve upon autonomy, Team 2 and 8 should work upon increasing support, Team 4 and 6 can enhance cohesion and Team 7 is advised to increase collaboration. *Seventh*, the practitioners and consultants may design and run training programs for improving TE based on the reference model of TE used in this study.

Limitations and Scope for future work

The study had significant implications but the same is subject to few limitations. The overall sample size was 88 with 37 from public sector and 51 from private sector. Only eight teams were surveyed. Therefore the findings are subject to improvement with increased sample size. The respondents were from particular type of manufacturing organizations and therefore the findings cannot be generalized to entire Indian Manufacturing industry. The sizes of teams were varied but not so much. Hence size impact can be further reaffirmed. The data was collected through questionnaire survey and therefore the responses were not free from personal bias. The demographic attributes of the respondents are not considered in the analysis. The major differences are pointed out and discussed on the basis of preliminary scores to suggest the areas of improvement but the statistical significance of such differences was however not affirmed. Hence the implementation of the suggestions by the teams and sectors will actually determine the effectiveness of the implications drawn above.

In addition to address the above mentioned limitations, the future research can incorporate samples from different nature of industries. A cross industrial as well as a cross national study on team effectiveness can be performed to mark out the differences across. Moreover the incorporation of few independent variables (for eg. leadership, motivation, decision making) to predict TE can add new dimensions to this research As mentioned earlier, a post analysis of TE can be performed on the same sample (after implementation of the suggestions) to further measure and compare their TE to diagnose the ways of achieving higher TE.

Conclusion

Team Effectiveness (TE) has become major concern for organizations and hence researchers are interested more in working on TE phenomenon. Cohen and Bailey (1997) propounded that conflict, collaboration, cohesiveness, norms and cognition being components of team functioning are influential factors of team performance. Kirkman *et al.*, (2004), and Gondal and Khan, (2008) found that highly empowered teams are more productive as compared to less empowered teams and empowering factors like autonomy, accountability, support, task clarity often flow from top to bottom throughout the structure. This study performed analysis of the team effectiveness (TE) in Indian Organizations on the dimensions of Team Functioning (TF) and Team Empowerment (TE_m) based on Pareek, (2002). Overall TE was found to be 69.19%. Hence the manufacturing sector executives are suggested to improve on the weak areas like autonomy should be increased and zeal of mutuality (i.e. support, collaboration and cohesion) is needed to be arisen. The main aim of the study was to analyze the difference in TE across sectors and between small and large teams. The public and private sectors were found to be significantly same. However the survey results were reflecting few differences. For eg. the private sector had higher TE as compared to public sector, where the major differentiating component remained the empowerment dimension. Thus inspite of having better functioning, the public sector had lower TE. The teams were significantly similar to each other in respect of their TE. Although the small size teams had better cohesion and confrontation but the large teams could gain higher TE through their cohesion, accountability, task clarity and support. It implied that empowerment is a significant tool for large teams to perform well and stay united. The study addressed the gap of TE researches in Indian contexts, especially through picking up other than IT sector (i.e the Manufacturing sector) for survey. This way it contributed to the dearth of literature in the said contexts.

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