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Article

Team-role Compatibility in Work Teams: A Vital Factor in the Age of Workforce Diversity

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Abstract

Workforce diversity is being seen today as evidence for the ethical and legal recruitment practice, which is free of bias or discrimination based on gender, race, religion, ethnicity, etc. Organisations are being encouraged by the government and social interest groups to adopt affirmative practices and publish Diversity and Inclusion statistics on their websites (available in the public domain). As most organisations have a work-team-based organisational structure, it is of interest and importance to understand how increasing diversity in workplaces and diversity within teams affect work-team performance or work-team outcomes. This study suggests team-role compatibility as a key factor in determining work-team outcomes. Compatibility with teammates based on deeper level factors like an individual who prefers a team role will override the effect of surface-level factors like gender, demographics, race, etc., in the long run. This study uses a phenomenological approach to explore the patterns of interactions and interrelations within a team based on the most preferred team roles of the individuals involved. And also to identify the combinations of team roles that can be deemed compatible/incompatible and thus affect the team performance.

Keywords: *Team roles, Compatibility, Work Teams, Diversity*

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Introduction

With the advent of globalisation and increasing diversity in workplaces and this trend showing no slowdown, the workplaces are becoming more heterogeneous. Though laws against discrimination based on gender, race, colour, religion, etc., in the workplace were framed in the early to mid-1900s, the issue of workplace diversity came into the limelight only in the late 1900s. In the late 1900s, diversity predominantly meant diversity in gender and race. In this period, the percentage of women and minority races increased in the labour force in the United States (Bolick and Nestleroth, 1988). Later, the concept of diversity has developed further to include surface-level factors like gender, demographics, race, etc., as well as deep level factors like values, attitudes, personalities, etc. Factors like gender, age, race and others are easily identifiable, while underlying factors like attitude, knowledge, personality and others are not easy to identify (Jackson et al., 1995).

Diversity and Inclusion are the legal and ethical obligations for all organisations. Diversity is sometimes seen as a challenge in certain scenarios where there may be a lack of sensitivity and understanding towards minorities. At other times diversity is seen as a major strength that brings to an organisation fresh perspectives. Contemporary organisations are increasingly organising their employees into teams as the nature of work is becoming more complex and requires employees from multiple areas of expertise to collaborate. In this scenario of workplace diversity being encouraged, a question that comes to the forefront is that of how this diversity affects work-team performance or work-team outcomes.

Literature Review

Gauging the impact of various surface-level factors on team performance, one at a time -

Gender diversity and Team performance

Heterogeneous composition in terms of gender helps increase the effectiveness of team processes and improve team outcomes to a lesser extent (Julia B Bear and Anita Williams Woolley, 2011). But in managerial teams of three each, it was found that certain combinations like that of two males and one female result in the maximum outcome, but certain other combinations like one male and two females may not perform at the same level (Jose Apesteguia et al., 2012). This leads to inconclusive evidence on how gender diversity affects team outcomes.

Cultural diversity and Team performance

Though cultural diversity may not be directly related to ultimate team outcomes, it may improve intermediate outcomes. Cultural diversity leads to process losses through task conflict and decreased social integration. On the other hand, the process gains through increased creativity and satisfaction (GK Stahl et al., 2010). Cultural diversity affects teamwork in different ways. Multi-national teams can have informational advantages as they use a broader source of information and tend to be better in organising the information that determines effective decision-making, especially when dealing with complex problems (Ricarda Bouncken et al., 2016). Again, the evidence is inconclusive on the definite effects of cultural diversity on team performance. But the fact remains that teams across most big organisations are becoming more and more culturally diverse.

Age diversity and Team performance

Team's mean organisational tenure is related to team performance in terms of increased efficiency. But age diversity as such is unrelated to team performance (Suzanne Bell et al., 2011). With a general lack of clarity on how surface-level diversity affects the work-team performance or work-team outcomes, looking at deeper level factors could give some direction and clarity. As a team works together for a longer period, deep-level factors start playing out more than surface-level diversity. Thus, in the long run, what matters is the deep-level composition of the teams.

As deep level factors are latent constructs and not inherently observable, we will be looking at deep level factors from the perspectives of multiple popular psychological models.

Five-factor model:

The five-factor model of personality is one of the widely accepted personality models. A study of the personality profile of members of product development teams (as per the Five-Factor Model) revealed that heterogeneity in the personality of team

members is positively related to team performance for teams working on radical innovation products but negatively related to team performance in case of teams working on incremental innovation products (Reilly et al., 2002).

MBTI Model:

Another popular model for personality assessment has been the Myers-Briggs Type Indicator (MBTI) model. In the case of cross-functional teams, MBTI types show a partial correlation with team performance. The presence of all personality types and balance between the dyads Sensing-Intuition, Thinking-Feeling, Introversion-Extraversion and Perception-Judging is linked to better team performance (Bradley et al., 1997).

Cognitive styles:

The cognitive styles of team members have a big impact on team performance. Teams that were heterogeneous on thinking styles (as per Creative Problem-Solving Profile inventory) scored better on team performance (Basadur et al., 2001). When there is cognitive diversity in the team, their performance shows improvement in accelerated learning (Reynolds et al., 2017).

With so many approaches to a deeper level composition of teams, it would be impractical to use all these approaches together for team building in organisations. This is where the concept of team role comes in. Team role is a concept distinct from the functional role, and it describes an individual's preferred ways of interacting and interrelating with others when in a team setting. Team-role models provide a better context to determine the deeper level composition of teams as these models are specific to team settings.

Team Roles:

The most popular team role model has been that of Belbin, which proposes nine team roles, namely Implementer, Shaper, Plant, Monitor-Evaluator, Coordinator, Resource Investigator, Team Worker, Completer-Finisher, and Specialist. The balanced representation of these team roles in a team is seen as the key to optimum team performance (Meredith Belbin, 1981, 1993).

According to Benne & Sheats's model, there are 19 functional and eight dysfunctional roles. Again presence and balance in roles are considered the way to maximise team outcomes (Benne & Sheats, 1948). Another model by Parker suggests that there are four team player styles, and each of the four styles can be played either effectively or ineffectively. Again, the effective presence of all four styles is considered the key to optimum team performance (Parker, 1996). According to another model by Mumford, there are ten team roles, and their adequate representation in a team is the key to maximising team outcomes (Mumford et al., 2006).

Most of the above team-role models have a varying number of teams roles ranging from four roles to twenty-seven roles. There is too much overlap between the different models, yet no single model is comprehensive. This led to conceptualising of a new model with six different team roles. This model supposes that a balanced presence of all six roles would yield optimum team outcome. (Divya Nair and N Meena Rani, 2020).

List of Team Roles and their short description as per the model:

1) Creative Brain- The role is the creative epicentre of the team and has good domain knowledge in the area of the team's goals. It creates high-quality ideas.

2) External In-charge- The role plays a vital part in connecting the team with the external world and integrating it with the organisation as a whole.

3) People's person- The role is very empathetic towards the problems of team members and resolves them and motivates self and others to do their best.

4) **Administrator-** The role delegates task and manages the project's time and budget. It makes others stay on track.

5) **Perfectionist-** The role dwells on minor details and ensures the goal is achieved par excellence. It also makes sure that the ideas and actions of others are practical and will lead towards the best results.

6) **Ethicist-** The role makes sure that, in the whole saga of achieving the goals of the team, the ethical standards and values of the organisation are not forgotten. It Reinforces sustainable development.

Source: Divya Nair and N Meena Rani, 2020

Research Gap

There is inconclusiveness with regards to effects heterogeneity in terms of surface-level factors on team outcomes. It is understood from prior studies that deep level factors have an impact on team outcomes beyond surface-level factors in the long run. As deep level factors are latent constructs that cannot be easily observed or measured, different psychological models are used to operationalise and measure these deep level factors. With too many different psychological models with varying configurations for a successful team, it is impractical for routine teambuilding usage by organisations. This is where a comprehensive team-role model was conceptualised, which is specifically for team building and team development. But, there is a need for further study on how this team-role model can be used and how certain combinations of different team roles could lead to improved or impaired team outcomes.

Research Questions

1. To understand how the perceived effectiveness (as perceived by team members) varies with different deep level configurations of teams (with distinct combinations of team roles)?
2. To study how patterns of interacting and interrelating with others vary based on the most preferred team roles of the individuals involved?
3. To understand how certain combinations of team roles can be deemed compatible/ incompatible and thus improve/hinder team performance?

Methodology

This study explores how individual team members interact and interrelate with others in their team as they perform a simple team task. Different teams were configured with distinct combinations of team roles.

This study uses a Phenomenological approach and draws from the subjective experience of research participants. As per the approach, depth of understanding of behaviours was given priority over the quantity of information collected. Thus, the study had fewer percipients to enable maximum attention to each participant and facilitate deeper conversations between the researcher and the participants. The study involved 30 post-graduate students of business management as research participants. The students were chosen from the same institute so as to match them on ability levels and age group.

A quasi-experimental procedure was followed. Whereby each research participant was profiled into one of the six-team roles, and then the experimental intervention involved forming the participants into teams of six, each with a specific configuration for team-role combinations. Firstly, the participants were assessed to determine their most preferred team role. The participants self-reported their behavioural and thought preferences in work/team settings from their previous experiences. Then, the researcher assessed the most preferred team role in consensus with the participant. However, the participants do not know about the nomenclature, team role descriptions, or the team role theory at this stage.

Once each participant's most preferred team role was identified, they were formed into five different teams of six members each. Below table 1 shows the team role configuration of the five teams.

Table 1

Team No. → / Member No. ↓	Team 1	Team 2	Team 3	Team 4	Team 5
1	PP	E	P	PP	EI
2	P	P	PP	PP	EI
3	CB	P	EI	PP	EI
4	EI	P	E	PP	EI
5	E	P	CB	PP	CB
6	CB	E	A	PP	EI

Abbreviations:
PP- People's Person CB- Creative Brain P-Perfectionist EI- External In charge E- Ethicist A- Administrator

Semi-structured conversations with each participant as well as observation during team-task completion were used to understand how each of the participants was interacting and interrelating with other team members. The team task was to complete a 60-piece jig-saw puzzle in the shortest time period possible. Participants' subjective experience of working in a particular team was explored through elaborate

conversations with a focus on amicability, conflicts, cooperation and perceived effectiveness. During this conversation, the participants were also debriefed on the team-role model and specific team role they preferred the most.

Observations and Interpretations

Here, each team's time to complete the puzzle was observed as a proxy for 'objective measure of team effectiveness. It was assumed that certain teams would complete quicker as there was team-role compatibility amongst members creating synergy in performance, while certain other teams may compete slower as there was team-role incompatibility amongst members creating conflicts and incoordination.

Rather than the absolute time to complete the puzzle, the relative order of completion by different teams was more important as this gives the relative team effectiveness. The order of completion of puzzles by the teams-

1st- Team 3
2nd- Team 2
3rd- Team 4
4th- Team 1
5th- Team 5

Various patterns of interaction and interrelation emerged in the semi-structured conversations with the participants. Team-wise observations and patterns of behaviours from the perspective of participants themselves-

Team 1- All the members of Team 1 reported that they perceived their team as effective. All could also confirm a feeling of cooperation and synergy. All the team members could pick at behaviours associated with their most preferred team roles in themselves and likewise observe other team members playing out behaviours associated with their respective most preferred team roles. It was observed that this team had split up the puzzles into multiple chunks and put these chunks together whenever appropriate. Members of this team reported that they were enjoying the task and felt no time pressure.

Team 2- All the members of Team 2 reported that they perceived their team as effective. Also, members confirmed that there was mutual coordination as everyone had the same approach to the task. In this team, all the members felt that systematic implementation was the key to their team's performance. Also, the researcher observed how this systematic approach was when this team started working at the jig-saw puzzle from one corner and worked continually without splitting it into multiple chunks.

Team 3- All the members of Team 3 reported that they perceived their team as highly effective. They had expressed feelings of cooperation, coordination and synergy. All the team members could pick at behaviours associated with their most preferred team roles in themselves and likewise observe other team members playing out behaviours associated with their respective most preferred team roles. It was observed that this team had split up the puzzles into multiple chunks and put these chunks together whenever appropriate. The whole team reported feeling driven to perform and needing to be the first to complete, which was instigated by member number 6.

Team 4- All the members of Team 4 reported that they perceived their team as highly effective. This team expressed how they felt the mutual cooperation and coordination. Every member of this team reported that the team had a cordial atmosphere, and everyone else in the team was amicable. It was observed that this team split up the puzzles into multiple chunks and put these chunks together whenever appropriate. Team members in this team were accommodating even when one or the other member would actually be slowing down work due to confusion. They didn't let any conflicts in their team escalate.

Team 5- Members of team five were divided on their perception of team effectiveness. None of the members could agree to call their team highly effective. Member number 5 reported that other members were mostly distracted, which slowed down their work. Member 5 felt the need to continually bring others back to the task at hand. Other members could report that they felt uncomfortable focussing on the task and felt urges to check what other teams were up to. They also reported feeling bored towards the end of the task. Member 5 felt like the one taking the majority of the responsibility and work.

Discussion

Team 3 was the team that was the fastest to complete the puzzle. This team also had an equal balanced representation of all the six-team roles. The team members had all reported feelings of cooperation, coordination and synergy. This pattern of interaction amongst team members is in support of propositions being made by the team-role model. The team with a balanced representation of all team roles was more likely to experience the synergy and get maximum team outcomes.

Next in terms of time to completion of the puzzle were teams 2 and 4, in that order. Team 2 had the majority representation of the 'Perfectionist' role and two members with the 'Ethicist' role. Here, the members perceived their team to be an effective team. There was cooperation on account of a similar mindset and approach among everyone. There were no incompatibilities observed in the configuration of the team. But if the team task was any more complex than the linear-systematic approach of the team could cause further slowing down. This type of team configuration could be ideal for teams working on projects with a high emphasis on procedures, systems and accuracy.

Team 4 had all the members who identified their preferred team role as 'People's Person'. This team reported an intense feeling of amicability, cooperation and coordination. There were no incompatibilities observed in this configuration of the team. All the members showed tendencies to support each other and not let any differences lead to conflict while performing the tasks. But if the team task was any more complex, this team would have slowed down because of trying to accommodate everyone's different approach to the task at hand. Nobody would push their approach on task as they try to remain amicable even though most tasks would have the most apt and efficient approach. This type of team configuration could be ideal for projects which don't have very strict timelines and where relation-building with external parties or community development activities are involved. As the model proposes, 'People's Person' is the role that shows the most empathy and warmth towards others.

Team 1 was the next team in order of completion of the puzzle. Team 1 has almost equal balanced representation except for someone with 'Administrator' as the most preferred team role. This team reported feelings of cooperation and synergy. But they also reported a lack of drive to complete the task in the shortest possible time. This pattern of interaction amongst team members is in support of propositions being made by the team-role model. 'Administrator' is a team role which has tendencies to take on for organising the activities of a team like allocating works and maintaining adherence to time schedules and budgets. The absence of any member with 'Administrator' as their most preferred team role would impact the efficiency of such a team. Though this team configuration does not exhibit any incompatibilities, it is better to have some representation of the 'Administrator' role added to the team to maximise team effectiveness.

Team 5 was the last team in order of completion of the puzzle. This team had the majority representation of the 'External Incharge' role, with just one member with the 'Creative Brain' role. This team showed dissatisfaction with their team performance, and there were incompatibilities observed between members. As the team-role model proposes, 'External Incharge' is the role that has an outward focus. They tend to focus on getting outside data, connections and resources for the team. The perception of member five that others are distracted comes from their tendency to focus outward. This team configuration is to be avoided as too much focus outwards would actually result in a lack of focus on the task at hand.

Conclusion

This study finds that equal and balanced representation of all team roles results in maximum objectives and perceived team effectiveness. Though there are other combinations of team roles that are compatible, these combinations don't reach the same levels of objective as well as perceived team effectiveness as well-balanced teams. Equal and balanced representation of all roles creates a feeling of synergy in a team. This study finds that individuals with the same most preferred team role tend to interact and interrelate positively with each other because of similar perspectives. But this mutual cooperation may not always result in the best team outcomes as all members think similarly, and other

more efficient approaches to task completion will never be explored.

Limitations and Future Directions

This study took a phenomenological approach, which provides an understanding of the phenomena but is prone to subjectivity and lacks empirical backing. This study can set a context for further empirical studies to validate the findings. Also, a quasi-experimental procedure was used. This needs to strengthen external validity with either a field experiment or archival data of intact teams.

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