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# Role balance and team development: A study of team role characteristics underlying high and low performing teams

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**ABSTRACT**

Research into teams primarily focused on the characteristics of individuals that predispose them to assume certain roles required for team performance. This paper provides an alternative view by defining team characteristics collectively from scores in predefined roles. The characteristics of 33 teams comprising 342 individuals and the teams' performance in a management simulation are analysed. The results indicate that team roles characteristics defined by creativity, co-ordination and co-operation are positively correlated with team performance. There appears to be no strong relationship between team 'balance', measured by the number of team roles represented in a team, and team performance. However, there is a difference in team members' role behaviours when they are classified into performance groups. These behaviours are associated with the different stages of development a team goes through. The result of this study indicates that amongst more developed teams the Specialist role is associated with better performance. While characteristics associated with the Co-ordinator role are generally positively correlated with performance, this can impede performance of teams that have not reached a certain stage of development.

Key words: Team roles, team performance and team development

# ROLE BALANCE AND TEAM DEVELOPMENT: A STUDY OF TEAM ROLE CHARACTERISTICS UNDERLYING HIGH AND LOW PERFORMING TEAMS

## INTRODUCTION

The individual's characteristics determine behaviour, which results in varying levels of performance in a task. In the case of a team, the team members' characteristics, and resulting behaviours, coming together can either facilitate or negate team performance. Combinations of individuals have been shown to be 'desirable' for team performance (Belbin, 1993). However, the classification of individuals into their 'natural' and 'secondary' roles applies to relatively small teams of up to six persons. A study of larger teams requires an analysis of the collective characteristics of team members (i.e. the number and intensity of characteristics individuals add to the team pool) as a possible determinant of team performance. This is done by scoring individuals on their team role characteristics and aggregating the scores within a team. Langbein and Lichtman (1978), Hofstede (1980), and Leung and Bond (1989) established precedence for this in their use of aggregate data for culturally diverse groups. Hofstede et al. (1993) believe that the study of collective or 'ecological' data could produce valuable insight that data on individuals could not. Although the aggregate scores do not describe individuals they are useful as indicators distinguishing one group from another. The mean scores from groups are also more stable and independent of the odd individual score apparent in heterogeneous groups. This study explores team roles and performance using aggregate data.

## TEAM ROLES AND TEAM PERFORMANCE

The concept of team roles is not new. Benne and Sheats (1948) studied small discussion groups that were engaged in problem-solving activities. They observed the emergence of task and maintenance roles of group members. The task roles were identified by behaviours such as facilitating and co-ordinating group activities and suggesting new ideas and ways of solving problems. The maintenance roles were related to behaviours that 'encouraged' group members such as praising, agreeing and accepting the contribution of others within the group. Bales (1950) built on the research into team roles by analysing the interaction between members of small groups and categorising the types of behaviour into task-oriented and socio-emotional. These early studies centred on the individual's behaviours within a group and the classification of these into broader roles.

The interest in teams gained momentum in the 1980s with the publication of Belbin's (1981) work on successful teams. The research into teams and teamwork followed two lines of inquiry. Writers such as Belbin (1981, 1993), Woodcock (1989), Margerison and McCann (1990), Davis et al. (1992), Parker (1990) and Spencer and Pruss (1992) focused on team roles and how these affected team performance. There were variations in the types of roles and in the suggested optimal number of roles team members ought to play. The maximum number suggested was 15 (Davis et al., 1992) and the minimum was four (Parker, 1990). This variation has been attributed to how roles were defined. Lindgren (1997) believed that, in a social psychological

sense, ‘roles’ were behaviours one exhibited within the constraints assigned by the outside world to one’s position e.g. leader, manager, supervisor, worker etc. Personality traits, on the other hand, were internally driven and relatively stable over time and across situations. These traits affected behavioural patterns in predictable ways (Pervin, 1989) and, in varying degrees, become part of ‘role’ definition as well. The other line of inquiry focused on measuring the ‘effectiveness’ of teams. Writers such as Deihl and Stroebe (1987), Gersik (1988), Evenden and Anderson (1992), Furnham et al. (1993), Cohen and Ledford (1994) and Katzenbach (1998) were concerned with high performing teams and the objective measurement of their effectiveness. McFadzean (2002) believed that the appearance of a number of models of team effectiveness was indicative of the variety of variables such as personality, group size, work norms, status relationships, group structure etc. that impact on team ‘effectiveness’ and its measurement.

## BELBIN’S TEAM ROLES

Belbin’s (1981) seminal work identified eight team roles, which were redefined and increased to nine roles in Belbin (1993), that occurred ‘naturally’ and had to be spread or ‘balanced’ amongst team members for the team to be high performing. He defined team performance in his early research in terms of the achieved outcomes of a management simulation the teams were put through. Belbin believed that a management team of six persons was ideal for working on complex problems. This meant that team members would have to take on more than one of the nine role characteristics listed in Table 1.

**Table 1: Belbin’s Role Characteristics**

| | |
|---|---|
| Plant (PL) | Creative, imaginative, unorthodox. Solves difficult problems |
| Resource Investigator (RI) | Extrovert, enthusiastic, communicative. Explores opportunities. Develops contacts. |
| Co-ordinator (CO) | Mature, confident, a good chairperson. Clarifies goals, promotes decision-making, delegates well. |
| Shaper (SH) | Chellenging, dynamic, thrives on pressure. The drive and courage to overcome obstacles. |
| Monitor Evaluator (ME) | Sober, strategic and discerning. Sees all options. Judges accurately. |
| Team Worker (TW) | Co-operative, mild, perceptive and diplomatic. Listens, builds, averts friction. |
| Implementer (IMP) | Disciplined, reliable, conservative and efficient. Turns ideas into practical actions. |
| Completer-Finisher (CF) | Painstaking, conscientious, anxious. Searches out errors and omissions. Delivers on time. |
| Specialist (SP) | Single-minded, self-starting, dedicated. Provides knowledge and skills in rare supply. |

Source: Belbin Associates, 2004 e-Interplace IV material

Belbin's Self Perception Inventory (SPI) used in his research consisted of seven sections. Each section had a heading and ten statements. Respondents had ten points for each section to distribute amongst the statements. They were required to allocate more points for statements they felt more accurately reflected their character and less points or zero to those that were less reflective of their character or totally irrelevant. Furham et al. (1993) questioned the psychometric properties of the SPI. It was seen as inaccurate, firstly, because respondents were asked to assess themselves, which were prone to subjectivity and, secondly, its ipsative nature meant that high scores in several or most roles were not possible. Researchers have made comparisons of other established theoretical models with Belbin's original SPI and the Belbin Team Role Self-Perception Inventory (BTRSPI) developed in 1993. These comparisons with 16PF and OPQ (Dulewicz, 1995), the Big 5 (Lindgren, 1997) and Honey and Mumford's, Learning Style Questionnaire (Jackson, 2002) have, at best, produced only ambiguous support for BTRSPI and Belbin's underlying model (Anderson and Sleap, 2004).

However, in spite of the criticisms of Belbin's Team-Role theory and the relative absence of empirical validation, Belbin's ideas have been widely used by many UK organisations and management consultancies in both training and team development (Prichard and Stanton, 1999). The continuing research in Belbin's work is testimony to its influence in the study of team performance. Sustaining this has been evidential support in the literature for the link between team role balance and team performance (Senior, 1997). Watkins and Gibson-Sweet (1997) established the link between role balance and successful project teams and Fisher et al. (1998) showed that dividing team roles into either a 'task' or 'relationship' orientation could be used as a basis to predict team harmony and productiveness.

## RESEARCH AIM

The aim of this paper is to build on the empirical research in Belbin's team roles. It attempts to contribute to the team roles and team performance lines of inquiry researchers have pursued. The predominance of roles in a team is quantified by aggregating the individual role scores of its members. It is then possible to examine relationships between team roles 'tendencies' and team performance. However, teams evolve over time and there is no reason to believe that all teams are at the same stage of development at the time their performances are measured. This study takes cognizance of this in distilling the research aims into seeking answers to two questions:

1. Is there a relationship between number of roles represented in a team and the team's overall performance?

2. Is there a requirement for different roles in teams at different stages of development and performance?

## TEAM ROLE BALANCE AND TEAM DEVELOPMENT

Belbin (1993) maintains that high performing teams need to have a spread of 'natural' occurring roles. These roles are identified in individuals with a score of 70 or above in the SPI. According to Belbin the degree of 'balance' in a team is the extent all nine 'natural' roles are represented. A team member could have more than one 'natural' role. Senior (1997) believes that, while most team role theorists agree on the link between team diversity and team performance, the measurement of Belbin's team 'balance' is contentious. In an attempt to quantify 'balance' Partington and Harris (1999) formulated Team Balance Indices calculated from the aggregate score of team members spread across all roles. They defined the degree of team balance, firstly, by the deviation from an ideal index (the maximum score per team role that could be achieved with a given number of team members), secondly, where a least one person scored high or very high in as many as possible of the team roles and, thirdly, where only one person scored high or very high in as many as possible of the team roles. The result of the use of these indices was a strong negative correlation ($p<0.01$) between the Co-ordinator (CO) Role and team performance. The researchers attributed this to the negative effects that COs have on teams. The presence of a strong CO led to dependency and the lack of preparation by others and COs tended not to contribute creatively in the team's operational processes.

The performance of teams has also been attributed to the level of team development within the group. Researchers have hypothesised that teams develop in a linear and progressive way. Notably one of the most well known team development model is Tuckman's (1965) four-stage (Forming – Storming – Norming – Performing) model. A fifth stage (Adjourning) was later added in Tuckman and Jensen (1977) and Maples (1988). A fuller discussion on team development literature and research can be found in Smith (2001). One of the aims of this study is to examine the relationship between team development and performance. McFadzean (2002) described a five-level model of team development associated with group performance in problem solving and decision-making. Team development was measured in their focus or 'attention' to task (level one), to the meeting process (level two), to team structure (level three), to team dynamics (level four) and to team trust (level five). This model suggests that differing team performance can be associated with differences in team development. While this does not tell the direction of the causal relationship, it is interesting to see if observed variations in performance is indicative of differences in team processes, structure or activities associated with the stages of team development or vice-versa?

## METHOD

### Questionnaire

The Belbin Team Role Self-Perception Inventory was used in this research. There were seven sections each with one of the following headings:

- What I believe I can contribute to a team
- If I have a possible shortcoming in team work, it could be that…
- When involved in a project with other people…

- My characteristic approach to group work is that…
- I gain satisfaction in a job because…
- If I am suddenly given a difficult task with limited time and unfamiliar people…
- With reference to the problems I experience when working in groups…

There were ten behavioural statements under each heading and respondents were asked to indicate their individual preferences by distributing ten points amongst these statements allocating more points to statement that reflected more strongly how they felt. They were asked to avoid allocating all ten points to one statement or one point to each statement in any section. Each statement was associated with a particular team role, which was unknown to the respondents. The number of times a team role statement was selected and the allocation points would determine the respondent's team role preference.

**Sample**

A sample of 342 out of a cohort of 851 management students from Victoria University of Wellington participated in the survey. The ethnic composition of students were 48.8% European, 37.0% Asian, 14.2% New Zealand Maori or Pacific Islanders. The gender distribution was 48% female and 52% male. These students were organised into 33 teams that participated in a management simulation conducted over two weeks.

**Data collection**

The questionnaire was administered prior to the start of the management simulation. Teams members were assigned to their teams randomly without consideration of their natural or secondary roles. Each team operated as a management group planning the production of custom-made paper bags that had to be sold to customers (trained role players). The teams were given a limited budget and had to plan the purchase of supplies from a supplier (trained role player), hire workers (played by other students) and negotiate a loan, if necessary, from a banker (trained role player). The timing of the simulation was fixed for each group and their performance were measured by the profit the teams made by the end of the exercise. The team's performance formed a percentage of their management course marks.

The data from the questionnaire indicated the individual scores for each team role as well as the number of times a team role statement was selected in all seven sections. The latter was used in the analysis to minimise the effects of spurious data from respondents who had either placed all ten points on one statement or distributed their point equally amongst all statements.

In this study the role scores of team members were added for each team and the average role scores determined for all teams. The number of roles in which teams achieved an above average score was recorded. The higher the number of roles the more 'balanced' the teams were. The team performance data was in dollar profit secured at the end of the simulation. Teams were divided into four performance

categories based on the team's ranking – low, low average, high average and high. This categorisation was to facilitate analysis by equalising the effects of minor variations in the profit figures.

Each team was required to attend a focus group after the simulation. Trained facilitators captured the discussion points on a set format recording responses to these questions: *What went well and worked? What particular behaviours helped?* (These were recorded in the positive column). *What did not go well? What difficulties did you face? What behaviours hindered progress?* (These were recorded in the negative column). The focus groups provided qualitative data for this study.

## ANALYSIS AND RESULTS

The correlation analysis of team performance and team roles revealed significant positive relationships in the team performance ranking and the team's average role scores in PL, CO and TW. The results are in Table 2.

**Table 2: Correlation between average team role scores and team performance ranking**

| Belbin Team Roles | Spearman's *rho* | Significance *p < .05 |
|---|---|---|
| PL: Plant | .373 | **.033*** |
| RI: Resource Investigator | .293 | .098 |
| CO: Co-ordinator | .419 | **.015*** |
| SH: Shaper | -.089 | .625 |
| ME: Monitor Evaluator | .174 | .332 |
| TW: Team Worker | .360 | **.040*** |
| IMP: Implementer | .025 | .892 |
| CF: Completer-Finisher | .238 | .182 |
| SP: Specialist | .010 | .955 |

However, this result does not indicate whether there is a relationship between team 'balance' and team performance. In order to do this, the number of roles teams scored above the average was compared with their performance ranking. The correlation analysis showed a one-tailed non-statistically significant relationship (*rho* = .258, p = .073) between the number of roles represented in a team (its balance) and its performance ranking. This result should be interpreted with caution given the small sample of 33 teams coupled with p < .10 result. No conclusion can be drawn as to whether more balanced teams appear to be advantaged or disadvantaged in their performance.

The second research question concerns the stages of development teams go through and whether team role requirements remain the same throughout. The assumption was made that higher performing teams were at different stages of development than lower performing ones. Support for this assumption was in the analysis of behaviours in teams categorised by performance. The 33 teams were classified into four categories

of team performance – High (ranking 1-8), High-average (ranking 9-16), Low-average (ranking 17-24) and Low (ranking 25-33).

All teams were required to attend a facilitated focus group after the simulation. They were asked to described behaviours that assisted or hindered their group's performance during the planning and operating phases of the management simulation. The teams were classified a priori into four performance groups and data from the focus group were recorded. The information are summarised in Tables 3 - 6 into perceived events or behaviours that positively or negatively affected performance in the four performance categories.

**Table 3: Observations of High Performing Teams**

| **Events or behaviours affecting team performance** | |
|---|---|
| Positive | Negative |
| ▪ Team members take on management roles enthusiastically<br>▪ A committed core group of managers emerges<br>▪ Good communication between team members<br>▪ Control over team activities<br>▪ All information channelled to and disseminated from the leader<br>▪ Managers' roles defined by the leader<br>▪ Managers were responsible over their own areas<br>▪ Team members work well under pressure<br>▪ The least time was spent on the least important matters | ▪ Argument amongst managers<br>▪ Team members rushed through the planning phase<br>▪ Leader faced difficulty in delegating<br>▪ Workers were seen as inefficient (slow and lazy) |

In the High performing teams, members reported enthusiasm in taking on management roles that were defined by a leader. They managed their time effectively working within their own areas of remit. As a group, they worked well under pressure. These groups were hindered by argument amongst themselves, which could have precipitated from them being delegated work that was seen as inappropriate. They also reported insufficient time being allocated to planning the production process especially when the workers were seen as being inefficient and needing extra guidance and control.

**Table 4: Observations of High-Average Performing Teams**

| Events or behaviours affecting team performance | |
|---|---|
| Positive | Negative |
| ▪ Leader influenced others to reach goals<br>▪ Reassurances were provided to team members that they were on the right track<br>▪ Team members were encouraged to speak in meetings<br>▪ How other teams performed was observed in order to learn<br>▪ Attempts were made to increase group morale<br>▪ Activities were monitored to ensure compliance with plans<br>▪ Clear explanations were provided to convince others<br>▪ Natural leader stood in when the appointed leader was absent<br>▪ Training of workers was done effectively | ▪ Decision-making time consuming<br>▪ Risks were avoided<br>▪ Decisions are forced upon the group<br>▪ Team members lacked enthusiasm<br>▪ Team member were overruled when they disagreements with the leader<br>▪ Leader did not provide direction<br>▪ Information was only obtained by chance<br>▪ Team members were not clear on what to do |

The High-average performing teams appeared to be people-centred. There was an emphasis on securing consensus, morale building and effective training. The outcome of this approach was more disagreements with the leader and more time required for decisions. The decisions that were eventually made were seen as being forced upon team members by their leader. The leadership of these groups were characterised as being risk-averse and lacking in direction.

The recorded observations in Low-average performing teams indicate consultation in determining managerial roles. In some cases members were selected to perform roles based on their work experience. Plans that had been made were followed closely with the view of optimising the used of resources and, where possible, learning from the experience of other teams. The poor performance was attributed to reluctance to take on the leadership role, a lack of commitment of managers to their jobs, a lack of communication amongst members and insufficient time and resources to get the job done.

**Table 5: Observations of Low-Average Performing Teams**

| Events or behaviours affecting team performance | |
|---|---|
| Positive | Negative |
| ▪ Team members were consulted on their role preferences<br>▪ Managers were chosen based on their past experiences<br>▪ Plans were followed closely step by step<br>▪ When faced with an indecision the assertive few pushed the team to agree<br>▪ All available resources were optimised<br>▪ Leader encouraged alternative ideas<br>▪ The experience of other teams were considered | ▪ Appointed leader was reluctant to take on the leadership role<br>▪ There were arguments over managerial roles members wanted<br>▪ Appointed managers did not know their jobs<br>▪ Leader did not control group discussion<br>▪ Leader asked for ideas at an inappropriate time (during the operating phase)<br>▪ Too much time was taken to get consensus<br>▪ Team members did not work well under pressure<br>▪ It was difficulty in getting team members to meet<br>▪ Changes made were not communicated to key persons<br>▪ Insufficient - time, number of workers and amount of resources |

**Table 6: Observations of Low Performing Teams**

| Events or behaviours affecting team performance | |
|---|---|
| Positive | Negative |
| ▪ Leader volunteered as well as appointed the other managers<br>▪ Team was divided into functional groups<br>▪ Team members looked to the leader for guidance<br>▪ Leader attempted to teach team members on production process<br>▪ Team members on their own initiative, clarified instructions on the simulation<br>▪ Plans were made to the smallest detail | ▪ Person asked to be leader refuses<br>▪ Team members were unenthusiastic about their role<br>▪ Disagreements with the leader were summarily dismissed<br>▪ Members lost confidence in leader and talked of a coup d'etat<br>▪ Team members struggled to learn from leader<br>▪ It was difficult to fix time to meet<br>▪ Many members did not attend key meetings<br>▪ Plans were changed at the last minute<br>▪ Workers were not as efficient as they could be<br>▪ Controlling workers was hard when managers were stressed<br>▪ The was poor support for the leader<br>▪ Team members confused about their roles |

The Low performing teams appeared to have members who took the initiative in assuming leadership roles as well as in securing crucial information from outside the group. There was evidence that these teams initiated 'training' of team members and had done detailed planning of activities. However, team members seemed to lack confidence in their leaders as well as in themselves to manage workers.

Were the team role requirements different for teams at different stages of development as indicated by the behaviours in their performance categories? The average team role scores in each team roles were compared between the four performance categories. Each category was compared with the others. The results from six comparisons revealed statistically significant results in two comparisons. Table 7 shows the comparison of High and High Average performing teams. The High performing teams had a significantly higher SP score than the High Average performing teams.

**Table 7: Difference in team role scores between high and high-average performing teams**

| **Belbin Team Roles** | High (N=8) | | High Ave (N=8) | | t-value (df=14) | t-test significance *p < .05 |
|---|---|---|---|---|---|---|
| | Mean | Std Dev | Mean | Std Dev | | |
| PL: Plant | 3.241 | .651 | 3.271 | .640 | -.093 | .927 |
| RI: Resource Investigator | 4.012 | .639 | 4.035 | .820 | -.060 | .953 |
| CO: Coordinator | 3.432 | .368 | 3.670 | .805 | -.758 | .461 |
| SH: Shaper | 4.125 | 1.100 | 3.788 | .559 | .773 | .453 |
| ME: Monitor evaluator | 4.036 | .781 | 3.917 | .470 | .370 | .717 |
| TW: Team worker | 3.997 | .871 | 4.145 | .692 | -.373 | .713 |
| IMP: Implementer | 4.312 | .697 | 4.164 | .550 | .471 | .645 |
| CF: Completer-finisher | 3.940 | .922 | 3.864 | .708 | .184 | .856 |
| SP: Specialist | 4.596 | .787 | 3.925 | .375 | 2.175 | .047* |

The comparison between High and Low performing teams also revealed a significant result (Table 8). The Low performing teams had a significantly higher CO score than the High performing teams.

**Table 8: Difference in team role scores between high and low performing teams**

| **Belbin Team Roles** | High (N=8) | | Low (N=9) | | t-value (df=15) | t-test significance *p < .05 |
|---|---|---|---|---|---|---|
| | Mean | Std Dev | Mean | Std Dev | | |
| PL: Plant | 3.241 | .651 | 3.737 | .810 | -1.381 | .188 |
| RI: Resource Investigator | 4.012 | .639 | 4.265 | .542 | -.881 | .392 |
| CO: Coordinator | 3.432 | .368 | 4.114 | .639 | -2.647 | .018* |
| SH: Shaper | 4.125 | 1.100 | 3.534 | .660 | 1.361 | .194 |
| ME: Monitor evaluator | 4.036 | .781 | 4.228 | 1.109 | -.408 | .689 |
| TW: Team worker | 3.997 | .871 | 4.392 | .646 | -1.068 | .302 |
| IMP: Implementer | 4.312 | .697 | 4.301 | .877 | .027 | .978 |
| CF: Completer-finisher | 3.940 | .922 | 4.157 | .893 | -.493 | .629 |
| SP: Specialist | 4.60 | .787 | 4.451 | .858 | .361 | .723 |

## DISCUSSION

The quantitative analysis in this study was done using aggregate data to measure Belbin's team roles. While no attempt will be made to generalise the findings in this study to roles individual play in contributing to team performance, the results provide insight into team performance where there appeared to be a group propensity towards behaviours characterised by established roles.

There were significant correlations between PL, CO and TW score and team performance. This suggests that teams that were more creative, had clear goals, co-ordinated activities and had members who were generally more co-operative achieved better results. However, this meant that any one of these characteristics represented by the PL, CO and TW roles could be associated with differences in team performance.

There was no significant relationship between the more 'balanced' teams, measured by the number of roles represented, and their performance in the management simulation. The classification of teams into four performance categories moved the analysis to the next stage by providing the basis for comparisons between teams at varying stages of development.

High performing teams were characterised by trust, good communication, high commitment and good time management amongst team members. This appears to support McFadzean (2002) assertion that better developed high performing teams reported trust between their leaders and team members ('attention to team trust'- level five development). There was a high level of commitment amongst team members

through participation ('attention to team dynamics' – level four development). High Average team members in this research appeared to require more reassurances, encouragement and closer supervision. The comparison of these two groups revealed a significant difference in the SP role. This suggests that well developed teams could do better by having the appropriate specialist knowledge that could increase performance.

Low performing teams were characterised by mistrust, a lack of commitment, and poor leadership. At this stage of development teams were significantly higher in their CO role. This is an interesting finding because it is contrary to the significant ($p < .015$) positive correlation had been established between teams CO scores and performance ranking. This provides empirical evidence that suggests teams require different role set at different stages of development. It is conceivable that more goal clarification, delegation and coordination for teams at a 'lower' stage of development would be inappropriate to increase performance. This observation supports Partington's and Harris' (1999) assertion that the predominance of COs led to dependency and a lack of preparation from others who had characteristics that were essential for team performance.

## CONCLUSION

Team roles characteristics defined by creativity (PL role), good co-ordination (CO role) and good co-operation (TW role) measured collectively are correlated with team performance. There does not appear to be statistically significant relationship between team 'balance' and team performance. However, there is a difference in behaviours of team members when classified according to team performance. These can be associated with the stages of team development. The high performing teams are associated with the 'team trust' and 'team dynamics' stages of development. Further research is required to establish definitive behaviours characterising team development stages. This was not pursued in this study. The examination of the aggregate scores in relation to the level of team performance reveals that amongst more developed teams higher SP scores, which can be translated into having more relevant expertise in the completing a task, are associated with better performance. While the CO characteristics are generally positively associated with performance, this can impede performance of teams that have not reached a certain stage of development. More research is required into team role characteristics, the stages of team development and the association between the two with regards to team performance.

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