

The Effects of Team Diversity on Team Outcomes: A Meta-Analytic Review of Team Demography

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ABSTRACT: *A lot of study has been done over the last several decades to look at the complicated connection between team diversity and team results. The effect of team diversity on team results, as well as moderating factors that may influence this connection, are yet unknown. In the literature, there are mixed results. As a result, these research concerns were resolved. Analysing existing research and providing estimations of the link between team diversity and team results. The impact of task-related and bio-demographic diversity at work, in particular. The notion of synergistic performance arising from collaboration was tested using meta-analysis at the group level. Employee groups with a variety of backgrounds. The beneficial effect of task-related diversity on team performance was shown to be supported. Despite the fact that bio-demographic diversity has little effect on team performance, in the same way, there was no apparent impact of team diversity on social integration. The review's implications for future research and practices are also addressed.*

KEYWORDS: *Team Diversity; Group Diversity; Team Performance; Meta-Analysis*

1. INTRODUCTION

Companies are utilizing work teams comprised of workers with different experiences, skills, and expertise to enhance their competitive advantage by enhancing their internal operations as the U.S. workforce becomes more diverse as a result of increased globalization and intense market rivalry[1]. Although forming diverse teams with a wide range of skills seems to be a good human resources strategy in principle, in reality, it presents unique difficulties and often results in poor performance. Although team diversity has the ability to foster good organizational synergy, the same unique knowledge and experience that results in benefits may also result in major problems due to coordination, friction, and intra/intergroup conflict[2]. In modern organizational theory, diversity is often seen as a "double-edged sword." Proponents of team variety emphasize the beneficial impacts of member heterogeneity on team results, while opponents argue that numerous irreconcilable divisions among diverse members lead to dysfunctional team interaction and poor performance. These conflicting views of team diversity have also resulted in varied empirical results in the field of management research, maintaining a lack of agreement on how members' compositional characteristics affect team processes and outcomes. Given the contradictory results in contemporary team research, it's no surprise that some argue that team diversity has no consistent primary impact on organizational success[3].

Although teams are often made up of people with different levels of demographic and cognitive skills, it is uncertain whether such diversity composition leads to groups that outperform homogenous teams. The direction and degree of team diversity's impacts on team results, in particular, has been a key issue that has yet to be answered. As a result, we try to quantify the usage of team diversity by analysing empirical research[4]. This research also adds to prior metaanalyses on team diversity from a methodological and philosophical standpoint. First and foremost, the effect of team diversity on group-level outcomes, such as team performance and social integration, is the focus of our research. When data was available, we additionally looked at the moderating effects of the theoretical and methodological moderators to further

investigate the shaky connection between bio-demographic diversity and team performance. However, task difficulty had no effect on the connection[5]. In the same way, there was no apparent impact of team type on the null association between biodemographic diversity and performance. However, since some of the subgroup analyses are based on a small number of correlations, this result should be taken with care[6]. For example, only four associations were investigated in the work team subgroup when testing the team type moderator, while ten were studied in the project team subgroup. As many scholars have pointed out, subgroup studies in meta-analysis based on a limited number of correlations may be inaccurate and reduce the power to identify moderating effects, making it impossible to draw firm conclusions from such analyses [7].

As a result, rather than a lack of theoretical importance, the negligible moderating impact of team type may be attributed to a lack of statistical power. Finally, we were unable to run a complete set of moderation tests on the link between bio-demographic diversity and team performance due to a lack of data on low task dependency[8]. We hypothesize that the substantial absence of low task interdependence in team research is due to the fact that team activities, by their very nature, are more interdependent than solo tasks. We discovered that criteria report type, out of the three methodological moderators, influenced the association between bio-demographic diversity and team performance. In self-reported surveys, there was a tendency to exaggerate evaluations on team results, as anticipated, compared to manager/rater-reported assessments.

As a result, the analysis level was rigorously kept at the group level, which differs from prior meta-analyses. TMT research addressing firm-level success (e.g., return on investment or equity) were omitted since these kinds of archival financial data depend on long-term measurements rather than the intermediate impacts of shared group results[9]. This study exclusion was considered essential because mixing correlations from various levels may possibly confuse findings (. We think that by maintaining the level of analysis, we were able to capture the constructs existing in collective-level group perceptions more precisely than prior research. We further refined team outcome factors by separating them into three strategic areas that are often linked with workforce diversity: the quantity of performance evaluating the subjective and narrative aspects of team performance; the quality of performance assessing the subjective and story aspects of team performance

Team performance's objective character; and social integration, which delves into the sociopsychological elements of team results. Although previous studies have aggregated different constructs of team outcomes into one broad category in order to measure team outcomes, this aggregation makes the mistake of assuming that different outcome categories are equivalent with similar (if not equal) distributions, potentially confounding results. As a result, the main goal of our research is to conceptually and methodologically supplement and build on current models of team diversity in order to offer more accuracy in estimations of the connections between team diversity and team results. We examine the factors of interest in the section below, as well as hypotheses generated from a literature review.

2. LITERATURE REVIEW

A multitude of theories and models exploring collaboration have been propagated, reflecting the increase in interest in teamwork in modern companies. A few prominent paradigms of team/group work that have influenced the team literature include sociotechnical theory, group process and productivity theory, input–process–output models, and antecedent–outcome

paradigms. The current study's constructs and hypotheses, on the other hand, are primarily derived from two competing perspectives frequently cited in the team literature, namely, the cognitive diversity hypothesis and the similarity–attraction paradigm, because they provide the most insight into team diversity variables and their potential effects on team outcomes. The following section delves into the main aspects of the cognitive diversity hypothesis as well as similarity–attraction theory's counterarguments.

Which is better: Heterogeneity or Homogeneity in the Case of Team Diversity?

The degree to which team members differ in terms of expertise, experiences, and perspectives is defined as cognitive diversity in the team context. Several researchers have argued that team diversity has a positive impact on performance because of the unique cognitive attributes that members bring to the team, based on the theoretical arguments of the cognitive diversity hypothesis. Finally, cognitive diversity among heterogeneous members encourages creativity, innovation, and problem solving, resulting in superior performance when compared to cognitively homogeneous teams.

However, there have been counter-arguments to the cognitive diversity perspective's claims about the effects of team diversity. In particular, researchers who examine teamwork using either the similarity–attraction paradigm or the social identity theory frequently conclude that member heterogeneity has a negative impact on team outcomes. Individual member characteristics such as age, ethnicity, and expertise, according to proponents of such perspectives, can be easily categorized by individual members and are negatively associated with team outcomes[10]. The similarity–attraction perspective, in particular, has Individuals have a tendency to choose people who are similar to themselves when given the chance to engage with others in a group, according to. Furthermore, due of their common qualities, homogenous teams function well together, improving team cohesiveness and performance.

We focus on the arguments of both views and further integrate them to create a foundation for comprehending the multifaceted nature of team diversity, rather than adhering to a single perspective. In exploring the possible effect of team diversity on social integration, most of the theoretical foundation in this article is based on the cognitive diversity hypothesis, while balancing this with the counterarguments provided by the similarity–attraction paradigm. As a result, in order to investigate the possible impacts of team diversity on team results, we conceive different aspects of team diversity as a parsimonious classification.

Task-related vs. bio-demographic diversity: a dichotomization of team diversity

A number of categories evolved as academics established frameworks in their study of team diversity. For example, Jackson et al. (1995) differentiated between easily visible and less observable team diversity, the former representing bio-demographic indicators and the latter indicating aptitude, cognitive resources, and personal traits in a narrative review. Extended on this idea by dividing team diversity into two main themes: degrees of visibility and job-relatedness. According to her model,

The degree to which a characteristic reflects experience was operationally defined as job-relatedness. relevant talents or perspectives for completing jobs Harrison, Price, and Bell, on the other hand, (1998) looked at how surface level (demographic) and deep level (attitudinal) diversity influenced the outcome. On teamwork and social integration the researchers defined "surface-level" variety as "differences on the surface of things. "In terms of readily visible biological traits, such as age, gender, and race, team members differ significantly.as well as race/ethnicity "Deep-level diversity," on the other hand, was defined as distinctions at the

individual level. That were not immediately apparent but over time among members' attitudes, beliefs, and values as a result of member interactions. Similarly, Milliken and Martins (1996) divided variety into two categories: "observable individual differences" and "underlying characteristics." In this case, to make the differences clearer, team diversity was divided into two groups in the research. Bio-demographic diversity and task-related diversity were taken from the team literature. Bio-demographic Individual diversity refers to inherent member traits that can be seen and classified right away (e.g., age, gender, and race/ethnicity), while task-related diversity is developed through time. Functional expertise, education, and organizational tenure are examples of characteristics that have been proposed to be more relevant to task completion than bio-demographic variety.

Team Performance in Multiple Dimensions

Team performance is a multifaceted concept that includes many outcome indicators such as quantitative output, qualitative team outcomes, and team cohesiveness. Team research, according to Dunphy and Bryant, tends to concentrate on measures of performance. As team results, such as volume of sales/outputs and returns on equity, businesses' operational and quantitative goals are measured. Although they have progressively received greater attention in recent team investigations, there is still a scarcity of study connecting team effectiveness to other strategic and qualitative goals. To evaluate the overall operational, strategic, and psychological results of team diversity, we looked at three major areas of team outcomes: quality, quantity, and social integration.

Cox and Blake's Diversity Outcomes: Team Performance Quality

Cox and Blake listed many competitive advantages of employing diverse workers in companies in their study of the benefits of workforce diversity. According to the study, having a diverse workforce improves organizational flexibility, creativity, and problem-solving, improves resource acquisition, improves marketing benefits, and lowers costs. Despite the popularity of variety in team structures, there have been few empirical studies that have systematically verified Cox and Blake's claimed competitive benefits from team diversity. As a result, in accordance with Cox and Blake's conceptualization, we utilize the dimensions of decision making, creativity/innovation, and problem solving as performance-related metrics for evaluating outcome quality in our research. With a review of the relevant research, the section below discusses the three outcome factors of performance quality taken from Cox and Blake's diversity paradigm.

3. DISCUSSION

To incorporate existing studies on team diversity and give estimates of the link between team diversity and team results, we used a meta-analysis. Our meta-analytic project has a number of important consequences. First, as predicted, task-related variety was shown to be positively linked to both the quality and quantity of team performance. Horwitz, Horwitz / Effects of Team Variety on Team Outcomes 1005 this research shows that task-related diversity in team members promotes team performance despite numerous variables affecting team outcomes by showing this beneficial connection between task-related diversity and team performance. This result provides empirical support for the concept of "value in variety" in team situations. We think that the present research takes another step toward understanding the complex nature of member diversity and team outcomes by reconnecting this often-missed connection between task-related diversity and team performance. However, no link was found between bio-demographic diversity and team performance. As a result of the lack of a connection in our

research, we were unable to investigate the differential impacts of team diversity on team performance. However, the lack of a link between bio-demographic diversity and team performance indicates that various kinds of team diversity do have distinct impacts on team performance.

4. CONCLUSION

There are conflicting findings in the literature. As a consequence, these worries about research were addressed. Evaluating current data and estimating the relationship between team diversity and team performance. In particular, the effect of task-related and bio-demographic diversity at work. At the group level, meta-analysis was used to evaluate the concept of synergistic performance resulting from cooperation. Employee groupings having a range of backgrounds. The positive impact of task-related diversity on team performance has been shown. Despite the finding that bio-demographic diversity has minimal influence on team performance, there was no evidence of a social integration effect from team variety. Due to the increased interest in cooperation in contemporary businesses, a plethora of ideas and models investigating collaboration have been promoted. Sociotechnical theory, group process and productivity theory, input–process–output models, and antecedent–outcome paradigms are a few major team/group work paradigms that have impacted the team literature.

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