

Workforce diversity: from a literature review to future research agenda

Future
research
agenda

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Received 5 August 2019
Revised 27 February 2020
Accepted 26 March 2020

Abstract

Purpose – Workforce diversity is widely believed to enhance the knowledge and perspectives of organizations. The purpose of this study is to synthesize the existing diverse literature on workforce diversity and to enlighten the avenues for future research in managing workforce diversity.

Design/methodology/approach – This study performs a comprehensive review of empirical and conceptual studies published on workforce diversity and its outcomes in the top 13 peer-reviewed leading management journals between 1990 and 2019.

Findings – The assessment of diversity literature reported mixed and inconsistent results that are the critical challenges of diversity management. Furthermore, most studies have not individually identified the problems of diversity dimensions. To understand the problems, this study has divided the different dimensions of diversity (e.g. age, gender, race, education, functional background and tenure) and their results, supported by various theories. The findings of this study suggested a different reason for existing conflicts and proposed a future research agenda.

Originality/value – To overcome the challenges of diversity, this study has proposed the future research agenda for future research. To take optimum advantage of workforce diversity, this study contributes a theoretical perspective that enhances the understanding of existing diversity in organizations and develops diverse organizations.

Keywords Literature review, Diversity management, Workforce diversity, Diversity dimension

Paper type Literature review

1. Introduction

Workforce diversity is an important collective research phenomenon of different aspects of diversity such as demographic diversity, cultural diversity, informational diversity, organizational diversity and cognitive diversity. Workforce diversity refers to the composition of work units in terms of cultural or demographic characteristics that are salient and symbolically meaningful in the relationships among group members (DiTomaso *et al.*, 2007). Changing demographic dynamics in the workforce has led many organizations to re-think and re-design their organizational cultures, values, norms and belief systems (Sung and Choi, 2019). The research in diversity is gaining considerable attention because of socio-cultural changes, economic transformation, globalization and migration of people in search of better opportunities (Roberson, 2019). Moreover, the merger and acquisition of companies for long-term sustainability in international markets has resulted the necessary need to build the global workforce.



The authors would like to express their gratitude to the anonymous reviewers and Editor for their valuable suggestions.

Why is diversity essential in organizations? It is widely believed that diversity broadens the knowledge, perspectives, and skills that results in creativity, innovation and decision-making power (McLeod and Lobel, 1992). Diversity is essential in creativity, innovation and growth in organizations because it may be very difficult to obtain innovative ideas from homogeneous teams who have the same thought and similar way of working attitude. To achieve the growth and innovations, organizations are required to develop such policies and programs that can be helpful in alliances, mergers and acquisitions of companies without any boundary conditions. Further, these organizations need a diverse workforce to efficiently run the business and that can be targeted by hiring, training and retaining the employees from diverse backgrounds regardless of race, gender, age, ethnicity, nationality, language, religion, functional, educational and disability.

Diversity is a very broad topic comprising many dimensions of diversity such as age, gender, race/ethnicity, educational diversity, functional, tenure, sexual orientation and physical disability. In fact, diversity has always been synonymous with gender or racial/ethnic diversity (Knight *et al.*, 1999). Researchers have investigated the effects of different types of diversity variables on firm performance (Kirkman *et al.*, 2004; Williams and O'Reilly, 1998). However, there are several dimensions of diversity, which have been encountered in organizations, but their implementation in organizations is a major challenge. It is very difficult to identify which diversity is more beneficial because neither all forms of diversity are applicable in each organization nor every dimension of diversity has a positive impact. Thus, to understand the individual effects of diversity, we conducted an extensive review of literature by categorizing the diversity separately. Before proceeding to this review paper, we reviewed a recent literature paper (Jonsen *et al.*, 2011; Roberson *et al.*, 2017; van Knippenberg and Mell, 2016) in which a systematic review of literature has not found. This study systematically categorizes the literature based on diversity attributes and their inconsistent results, which has not done earlier. In this study, we identified the different operationalization of diversity dimensions and the most encountered methods of diversity measures considered in research. Conclusively, this study addressed the existing reasons for the inconsistent results and proposed the future research agenda to overcome the inconsistencies.

2. The methodology adopted to classify the literature

A systematic review of relevant literature has been conducted to assess the different types of diversity such as age, gender, race, education, functional and tenure diversity, as well as its outcomes published in leading journals. This study has selected the top 13 leading journals in the discipline of human resource management and organizational behavior (Milliken and Martins, 1996). The name of 13 leading journals are *Academy of Management Journal*, *Academy of Management Review*, *Journal of Management*, *Administrative Science Quarterly*, *Human Relations*, *Journal of Organizational Behavior*, *Group and Organization Management*, *Organizational Behavior and Human Decision Processes*, *Strategic Management Journal*, *Journal of Public Administration Research and Theory*, *Human Resource Management*, *Journal of Applied Psychology*, and *International Journal of Human Resource Management*. The inclusion criteria of these listed journals were ABDC (Australia Business Development Council) rated A* and A journals, which have contributed studies in the diversity management discipline while the rest of the journals are excluded. A systematic search from the year 1991 to 2019 was conducted using the following keywords such as diversity management, workforce diversity, dimensions of diversity, heterogeneous workforce, workplace diversity and demographic diversity in the titles, abstract and keywords of studies. Moreover, references cited in the retrieved studies were reviewed and

some new relevant studies were included for this study. We selected 1990 as a starting year in our study because the term diversity management was coined in 1990 by R. Roosevelt Thomas. In sum, a total of 65 studies were selected for this final study.

This study further organizes the review in different types of diversity and its results because we believe this can help in detail to understand the inconsistent results of each diversity. This review has grouped the studies by the types of diversity, nature of dependent variables, its effect and supported theories.

3. Definitions and significance of diversity in theoretical perspectives

Diversity refers to differences between individual characteristics and attributes that lead to a perception among others that next person is different from self (Williams and O'Reilly, 1998). Basically, diversity varies with different dimensions in terms of age, gender, race/ethnicity, nationality, religion, tenure, educational background, functional background, task skills, knowledge, attitude and finally ranging from local preferences to boundary-crossing preferences. However, diversity research has primary emphasized on age, gender, race/ethnicity, tenure, functional background and educational background (Milliken and Martins, 1996; Pelled, 1996; Williams and O'Reilly, 1998). Furthermore, Jehn *et al.* (1999) explored three specific types of workgroup diversity:

- (1) social category diversity;
- (2) informational diversity; and
- (3) value diversity.

Social category diversity refers differences in readily detectable attributes such as age, gender and race/ethnicity, whereas informational diversity refers differences in knowledge and perspectives related to job oriented attributes such as tenure, functional and educational background (Jehn *et al.*, 1999; Tsui *et al.*, 1992). While value diversity occurs when group members differ in terms of values, beliefs and thought processes about their real task and goal (Jehn *et al.*, 1999).

In an extensive review of 40 years of literature, Williams and O'Reilly (1998) justified the significance of two main perspectives in diversity research and performance: one is social categorization perspective and the other is the information decision-making perspective. Social categorization perspectives focus on relational aspects (age, gender, and race) and support the social category diversity, whereas the information decision-making perspective supports informational diversity. The consistent result in diversity research claims that social category diversity is negatively associated with group performance; however, informational diversity is positively associated with group performance because more diverse groups are more likely to have a wide range of task-relevant knowledge (van Knippenberg *et al.*, 2004). Thus, one could argue that social identity theory and social categorization theory are negatively associated with diversity because categorization process may produce subgroups in relational aspects within the workgroup (i.e. us and them on the basis of race and gender) and create issues in inter-subgroup relations (van Knippenberg *et al.*, 2004). Moreover, functional conflicts and information-rich diversity enhances firm performance while dysfunctional activities such as discrimination and personality differences reduce performance.

4. Dimensions of diversity

This study conducts a systematic review of the literature to examine the different dimensions of diversity and their results. Several researchers have proposed their own

typology for categorizing diversity attributes. For instance, Milliken and Martins (1996) differentiated diversity between observable attributes (age, gender and race) and underlying attributes (education, functional background and tenure). Pelled (1996) distinguished among diversity attributes such as high visibility and low visibility, whereas Harrison *et al.* (1998) categorized them as surface-level diversity and deep-level diversity. Moreover, their categorization of diversity was similar but attributed with different names. Based on the above classifications of diversity dimension, and drawing on past research (Webber and Donahue, 2001) who classified diversity into two categories relations-oriented (age, gender, racial/ethnic) and task-oriented diversity (tenure, functional and educational background). Conclusively, this study has segmented diversity into two main categories: social categorization diversity and informational diversity; hence, these two forms of diversity are referred to as relations oriented and task-oriented diversity. It has been found from the previous literature that most of the researchers have primarily focused on social categorization diversity and informational diversity has received less attention (Webber and Donahue, 2001). To support these diversity variables and their inconsistent results in diversity research, several researchers have acknowledged different theoretical perspectives such as social identity theory (Tajfel and Turner, 1979), self-categorization theory (Turner, 1985), similarity attraction theory (Byrne, 1971), upper echelon theory (Hambrick and Mason, 1984) and information decision-making theory (Williams and O'Reilly, 1998). These underlying theories provide the conceptual understandings and logical reason behind the inconsistent findings. To know the significance of these theories in diversity research, this study has categorized the different forms of diversity and their results are supported by various theories. Therefore, a detailed discussion was conducted to identify different dimensions of diversity and its consequences. Please refer to Figure 1 for different dimensions of diversity.

4.1 Age diversity

Age diversity is a highly recognized and explored dimension in the diversity management literature. Age diversity varies in different countries such as India, which has about 70 per cent of youth in the workforce; however, age-related diversity is not a matter of concern in India, although countries such as China, America and Japan have more experienced employees, which shows that there is considerable difference in the age from one country to another country. To bridge this gap of age differences among employees, various studies have been conducted on the age diversity in the workforce. Basically, age diversity has been

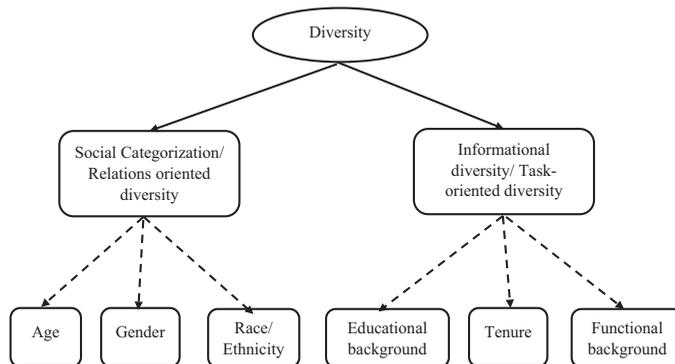


Figure 1. Dimensions of diversity

supported by social categorization, social identity and similarity attraction theory, which claims that age diversity has an inconsistent effect on organizational outcomes. As such, these theoretical perspectives possibly influence workplace dynamics and may experience relatively negative outcomes for older employees in comparison to younger ones (Shore *et al.*, 2009). For example, one of the results suggests that a group having more diversity in terms of age are more likely to have high turnover rates (Jackson *et al.*, 1991). Similarly, the other finding from a meta-analysis of 39 studies Joshi and Roh (2009) concluded that age diversity was negatively associated with performance outcomes. Moreover, Williams and O'Reilly (1998) reported that groups with a high level of age diversity have a slightly lower level of group process and performance. Because of these equivocal findings, Joshi and Roh (2007) conducted an extensive review of the literature and findings, which suggested that contextual variables in diversity research do matter because the role of these intervening variables changes the shape of outcomes. Ely (2004) reported the negative relationship between age diversity and work outcome when the quality of the team process moderated the relationship because it suppresses the negative results and enhances the work outcome. However, Kearney and Gebert (2009) argued that age diversity is negatively related to team performance because of low transformational leadership, but age diversity was not related to team performance when transformational leadership was high. To understand the nature of other results, this study has conducted a systematic review of literature on the relationship between age diversity and performance outcomes, which has delineated in Appendix 1.

4.2 Gender diversity

Prior to 1990s, gender diversity and status of women at the workplace have been widely ignored by both employers and management practitioners because the majority of the organizations were focused on the themes of affirmative action programs, discrimination and cultural bias, highlighting the very less representation of women in the workforce (Shore *et al.*, 2009). But, after the 1990s, researchers had shown more interest in the representation of women in the workplace regardless of gender discrimination. Several extensive types of literature have been conducted, especially on gender diversity in management literature. A large body of studies has examined the impact of gender diversity on a firm's performance (Richard *et al.*, 2004; Gonzalez and DeNisi, 2009). Some studies have reported a positive relationship, some have reported negative relationships (Jehn *et al.*, 1999) and finally others have identified non-significant relationships (Williams and O'Reilly, 1998). In several studies, researchers have shown the positive impact of gender diversity on firm performance and competitiveness. For instance, the effect of organizational level gender diversity on firm performance was reported an inverted U relationship (Frink *et al.*, 2003). Richard *et al.* (2004) reported the non-linear relationship between gender diversity and firm performance moderated by high innovativeness and low risk-taking perspectives. However, some researchers have been reported that men have high turnover and more negative attachment toward organizations than women, i.e. gender diversity negatively affected men but it positively affected women (Tsui *et al.*, 1992). In an experimental study, Cox *et al.* (1991) indicated that diversity within workgroups increases their effectiveness by incorporating value-in-diversity perspectives. Although in laboratory research, the effects of gender diversity on performance have reported mixed results (Williams and O'Reilly, 1998). In these studies, different researchers have incorporated several theoretical perspectives that attempted to identify the reason behind inconsistent relationships between gender diversity and performance. Most of the published studies highlight the different theories in support of diversity literature. The theories are largely explored in almost every study in which some

are positively associated and some are negatively associated. The theoretical perspectives of social identity theory (Tajfel and Turner, 1979), self-categorization theory (Turner, 1985) and similarity attraction theory (Byrne, 1971) report that gender diversity was negatively associated with performance. These theories broadly suggest that increasing men at the workplace has a negative impact, whereas a balanced workforce of men and women has positive effects on gender diversity. However, some of the theories such as upper echelon theory (Hambrick and Mason, 1984) and resource dependence theory (Pfeffer and Salancik, 2003) have suggested that gender diversity has positive effects on the top management team.

Because of inconsistencies in outcomes, this study has conducted an extensive review of literature related to gender diversity and supporting theories. Please refer to [Appendix 1](#) for an extensive glimpse of past studies on gender diversity.

4.3 Racial diversity

Racial diversity may result in the individual feeling different from their group members in terms of values, beliefs, color and language barriers. Racial diversity is the central variable of interest in diversity research since the beginning because the problems rose in the USA because of discrimination with people of color and race by white people in the USA. There has been a lot of research conducted on racial and ethnic diversity. Almost all research in both laboratory and field studies suggest a strong positive relationship between racially diverse team and performance. For example, in an experimental study, ethnically diverse teams produced more creative and innovative ideas in a brainstorming task compared to homogeneous teams (McLeod and Lobel, 1992), whereas Watson *et al.* (1993) reported that over a period of time high culturally diverse teams offered a wide range of perspectives on both process and performance rather than homogeneous teams. In a similar vein, an empirical study concluded that racial diversity was positively associated with firm performance because firms adopted a growth strategy (Richard, 2000). In an additional study, Richard *et al.* (2004) reported a positive relationship between racial diversity and firm productivity in a high innovativeness firm, while non-significant results were reported in the low innovativeness firms.

However, Tsui *et al.* (1992) reported that individuals who were different from their group members in racial or ethnic background tend to be less intent to stay, less psychologically committed with the organization and more likely to be absent in the group. In a comprehensive review of literature, Joshi and Roh (2007) concluded an equal number of studies reporting positive and negative impacts of racial or ethnic diversity on three outcomes (process, performance and affect/attitude). However, the more interesting result was that there were more null findings (58 per cent) compared to positive and negative put together (42 per cent). In a similar vein, a meta-analysis of 24 studies reported that race/ethnic diversity had no relationship with cohesion and performance (Webber and Donahue, 2001).

Although the results are inconsistent in the previous literature, it has been claimed that if diversity is effectively managed, it may have a positive impact such as creativity and idea generation in the group (McLeod and Lobel, 1992). In sum, the results of research on racial or ethnic diversity report two opposing views: optimistic view and pessimistic view (Milliken and Martins, 1996). In an optimistic view, there are several benefits of increased diversity in groups such as group productivity and financial performance, both of which are thought to be enhanced by having broader resources and multiple perspectives. Pessimistic perspectives typically have demonstrated negative effects on social integration and communication, conflict in the group and high turnover in the organizations because of

increased ethnic diversity. Please refer to [Appendix 1](#) for a number of previous studies on racial diversity and its relationship.

4.4 Educational diversity

Educational diversity has frequently been considered as a job-related diversity because researchers perceive education as a set of experiences, information, and knowledge relevant to cognitive skills (Pelled, 1996). Age, gender and racial diversity have been classified as less job-oriented diversity because these variables constitute a small portion of experiences (Joshi and Roh, 2009). Having more knowledge and experience from one's colleagues in terms of education acknowledges the chance to switch from one job to another, which may also increase the turnover (Jackson *et al.*, 1991; Milliken and Martins, 1996). Educational diversity has been measured by the level of education (Kearney and Gebert, 2009; Simons *et al.*, 1999), i.e. degree of education levels such as under graduation, graduation, post-graduation and doctoral degree. The empirical findings of educational diversity on organizational performance were reported mixed. For example, Jackson *et al.* (1991) reported that highly educated employees in top management teams have more likely to switch the job resulting in high turnover. Similarly, Joshi and Roh (2009) reported that education diversity in a team has a negative impact on team performance.

In contrast, a study of 62 research and development teams found that educational diversity was positively associated with team performance in the presence of high transformational leadership (Kearney and Gebert, 2009). While Simons *et al.* (1999) reported that top management team diversity in terms of education positively influenced the firm's financial performance. In a meta-analysis of 24 studies, Webber and Donahue (2001) suggested no relationship between educational diversity and group performance. Conclusively, this section has analyzed previous studies and the results have led many researchers to conclude that different dimensions of diversity yield different results. Hence, to understand the clear picture of educational diversity, there is a requirement for more research to be carried out. A closer look at mixed results concerning the impact of educational diversity on outcomes has been revealed in [Appendix 2](#).

4.5 Tenure diversity

Researchers have identified two main types of diversity: relations-oriented diversity and job-oriented diversity in which tenure diversity is highly job-oriented diversity (Pelled *et al.*, 1999). Tenure may be either organizational or group tenure. Group tenure is the length of time spent with group members in working together, whereas the whole length of duration used in an organization can be defined as organizational tenure (Knight *et al.*, 1999). The group tenure diversity in the top management team has measured the profitability and productivity of team performance (van Knippenberg *et al.*, 2011), while diversity in organizational tenure has been reported to affect the overall organizational performance (Milliken and Martins, 1996). Tenure diversity has been considered as a continuous interval variable and it has been measured by Allison's (1978) coefficient of variation; it can be calculated as the standard deviation divided by the mean (Pelled *et al.*, 1999). The results suggest that an organization that comprises employees with a long tenure may have greater understanding and knowledge about the organization's culture and system. Some studies have empirically linked group tenure to group performance (Joshi and Roh, 2009; Schippers *et al.*, 2003) and organizational tenure to organizational performance (Joshi *et al.*, 2006; Milliken and Martins, 1996). A study reported that being different from the other members in terms of organizational tenure was positively associated with psychological commitment and intention to stay and negatively related to present in the organization (Tsui *et al.*, 1992).

In group tenure, van Knippenberg *et al.* (2011) reported a negative relationship between tenure diversity and team performance when shared objectives were low, while there was no relationship when the shared objective was high. Similarly, Wiersema and Bird (1993) reported that group tenure has a significant effect on turnover in controlling retirement in the top management team of Japanese firms. In a meta-analysis of 39 studies, Joshi and Roh (2009) reported a positive and significant relationship between tenure diversity and team performance. In a review studies Milliken and Martins (1996) argued no effects for team tenure diversity on team performance. Conclusively, to understand these results, Appendix 2 showed all previous articles related to tenure diversity.

4.6 Functional background diversity

In reviewing the research on functional background diversity, very few researchers have endeavored to determine the effects of functional background diversity on various firm outcomes. Functional diversity can be identified as differences in knowledge basis and perspectives that different members bring into the group (Jehn *et al.*, 1999). The differences among group members may be in their functionality such as finance, human resource, marketing, operations, strategic planning, research, and development or general management (Simons *et al.*, 1999). Such differences are likely to raise functional differences among group members in terms of experience, knowledge and area expertise. Thus, the existence of different functional perspectives within a group can potentially lead to enhanced team functioning via knowledge sharing and information elaboration (Homan *et al.*, 2007). Very few studies have empirically tested the effects of functional background diversity. According to Simons *et al.* (1999), functional diversity can be measured using Blau's index ($1 - \sum P^2$, where P is the proportion of respondents in the Pth category). For example, in a top management team, the study found that the people from a different functional background in a group had negative effects on strategic consensus but because of the mediation of two intervening group process variables, interpersonal conflict and agreement seeking improved the consensus within teams (Knight *et al.*, 1999). Similarly, Pelled *et al.* (1999) initially reported that functional background diversity creates task conflict; however, over a specific period, it has been reported that task conflict has a more favorable impact on cognitive task performance because a number of employees worked together in the group. In a meta-analysis of 39 studies, Joshi and Roh (2009) reported that functional background diversity was most positively related to team performance. Moreover, research on diversity in functional backgrounds focuses only on top management teams (TMT) at the organizational level; therefore, very few studies have focused on functional diversity. In sum, the research on TMTs has concluded both positive and negative relationships between functional background diversity and organizational performance and null findings (Knight *et al.*, 1999). A small number of studies on functional background diversity are represented in Appendix 2.

5. Measurement and outcomes of workforce diversity

Several researchers have researched workforce diversity, and generally they have used two approaches to measure diversity. First, the Euclidean distance measure at the individual level, which is appropriate for examining individual outcomes such as behavior and attitudes. Second, entropy measures and coefficient of variation measures have been used to measure the group level diversity outcomes. The major difference between these two approaches that Euclidean distance does not provide an overall measure of group diversity (Williams and O'Reilly, 1998). The first approach has treated diversity in two broad categories such as demographic similarity and demographic dissimilarity, rather than about

a particular type of diversity (e.g. race diversity or gender diversity). Individual similarity and dissimilarity have measured by D-score (difference score) approach (Jackson *et al.*, 1991; Tsui *et al.*, 1992). D-score or Euclidean distance formulas have been used to measure the difference between an individual's dissimilarity and the other individuals in the work-unit on a specific demographic attribute (Tsui *et al.*, 1992):

$$D = \sqrt{\frac{\sum_{j=1}^n (S_i - S_j)^2}{n-1}}$$

where n is the total number of members in work-unit, S_i is the i th individual's value on a specific demographic attribute and S_j is the j th individual's value on the same attribute within the workgroup

In the second approach, there are several diversity indexes that have been used for measuring an overall diversity index. The coefficient of variation, Blau index of heterogeneity and entropy index are the most frequently used diversity measures. Researchers used these mentioned measures depending on the attributes of variables. Basically, two categories of diversity measures have been widely used in past studies (Jehn *et al.*, 1999; Pelled *et al.*, 1999): one is for continuous variables (age, tenure) and another is used for categorical variables (race, gender, level of education and functional background). Teachman's (1980) entropy index and Blau's (1977) index of heterogeneity are the common methods used for measuring the variation of categorical variables, whereas Allison's (1978) coefficient of variation is used for continuous variables such as age and tenure. In some studies, age was considered as categorical variables (Kirkman *et al.*, 2004; Kearney and Gebert, 2009) and level of education was considered as continuous variables (Jehn and Bezrukova, 2004) depending on the categorization of researchers. However, a majority of the researchers have used the Blau index of heterogeneity. The Blau index ranges vary from 0 to 1, where 0 represents a perfectly homogenous group and 1 represents a group of heterogeneous people with an infinite number of categories. Perhaps, Blau index is easy to understand, simplest and most straightforward way to compute the impact of diversity on organizational performance.

5.1 The formula of Teachman's (1980) entropy-based index:

$$H = - \sum_{i=1}^l P_i * \ln P_i$$

where l and P_i denote the number of category and proportion of group members falling in the i^{th} category, respectively.

5.2 Blau's (1977) index of heterogeneity:

$$H = 1 - \sum_{i=1}^l P_i^2$$

where P_i is the proportion of group members in the i^{th} category and l is the number of possible categories for an attribute.

6. Reasons for mixed and inconsistent findings

This study has majorly focused on the relationship between empirical findings of past research between diversity and performance outcomes, which has found disparate and equivocal findings with evidence of positive, negative and non-significant effects on performance. There may be several reasons for these equivocal and mixed findings.

First, researchers have addressed the mixed findings with the support of different theories in the literature of diversity management. Theories such as self-categorization (Turner, 1985), social identity (Tajfel and Turner, 1979) and similarity-attraction theory (Byrne, 1971) address the negative effects of diversity such as increased conflict, miscommunication and reduced cohesiveness (Olsen and Martins, 2012). The self-categorization theory suggests that an individual shows affiliation towards a group based on a social comparison such as status, education and income. Based on this premise, diverse members in the group form subgroups, and these members have strong emotional bonding and interpersonal relationship because of similar interests towards their group, which may cause conflicts and leads to decrease cohesiveness and increase turnover (Tsui *et al.*, 1992). Similarly, social identity theory is another influential theory, which states that individuals classify themselves into social groups based on salient attributes such as age, gender, race, religion and nationality. Based on this logic, individuals develop a sense of identity to recognize themselves as a member of certain groups or community resulting in discrimination, stereotypes and intergroup bias. This type of bias typically carries a negative impact in the workplace; therefore, this theory supports that a group of homogenous people have positive impacts rather than diverse groups. The same logic has been drawn for similarity attraction theory, which suggests that individuals feel comfortable in interacting with similar values and attributes and are likely to be connected in the same work units. Conclusively, these theories predict negative effects in the workplace such as decreased commitment, satisfaction, cohesiveness and increased turnover (Schippers *et al.*, 2003).

Furthermore, optimistic researchers have approached resource-based (Richard, 2000), upper echelon (Hambrick and Mason, 1984), which argued that diversity in terms of knowledge, ideas, and perspectives enhances decision-making and problem-solving skills as a result enhanced organizational performance (Pelled *et al.*, 1999). Decision-making theory highlights that diversity is beneficial for organizations because group members having diverse knowledge, skills and expertise in different areas lead to creativity, innovation and optimizing organizational efficiency (Williams and O'Reilly, 1998). The next resource-based theory supports the positive effects of racial diversity on the financial performance of organizations from the resource perspectives (Richard *et al.*, 2004), while upper echelon theory positively supports the top management team diversity in the organization.

Despite these theoretical underpinnings, some researchers have focused on various diversity management approaches to manage diversity. Some conceptual studies have proposed that the relationship between diversity and organizational outcomes can be moderated by diversity management practices (Dietz and Petersen, 2006). While Lee and Kim (2019) have validated the moderating impact of two diversity practices structural empowerment and multisource feedback between workforce diversity and performance. The study reported that the effective management of diversity with the help of diversity practices can lead the firm's performance. Conclusively, diversity management approaches such as education programs, diversity training, fair recruitment and inclusion policies in multicultural organization can be helpful to manage conflicts, tensions and cohesiveness

because of diversity, as well as maximize the cooperation to enhance the organizational outcomes such as performance, satisfaction and commitment (Dietz and Petersen, 2006).

Second, researchers have individually examined the different dimensions of diversity that produce mostly either negative results or non-significant, whereas faultline theory proposed by Lau and Murnighan (1998) suggests that negative effects of individual diversity can be better understood and mitigated by considering the effects of each dimension of diversity in together rather than each dimension separately. Thus, future studies can perform the effects of each dimension of diversity in conjunction rather than individual basis.

Third, different researchers have operationalized diversity constructs differently. For instance, some researchers have measured diversity index together all variables equally (Jackson *et al.*, 1991; Riordan and Shore, 1997; Tsui *et al.*, 1992), while most researchers separately measured diversity index such as gender, age and race/ethnicity (Harrison *et al.*, 1998; Richard *et al.*, 2004; van Knippenberg *et al.*, 2011; Ely, 2004). Therefore, mixed results could occur because of the different operationalization of diversity variables.

Fourth, several studies have examined the different kinds of data and concluded the results. Some have used longitudinal data (Kirchmeyer, 1995; Klein *et al.*, 2011; Kearney and Gebert, 2009; Richard *et al.*, 2007), while most studies have used cross-sectional data (Gonzalez and Denisi, 2009; Jehn *et al.*, 1999). Although a causal relationship cannot be established in longitudinal study design (van Dick *et al.*, 2008), the cross-sectional study is a feature that renders causal interpretation to identify the cause and effect relationship (Pelled *et al.*, 1999).

Fifth, the performance outcomes of diversity have been measured in a different way at a different level. For instance, in the case of top management teams, performance is measured by the financial performance of the organization in terms of sales growth and return on investment. In lower level teams, the outcome is calculated based on the team's overall performance (e.g. quantity and quality of work), including production and project teams based on the rating done by a supervisor or group leader (Webber and Donahue, 2001). Thus, different studies have adopted different variables at different levels, which leads to contradiction in results.

Sixth, in the literature review, Joshi and Roh (2007) reported that contextual variables matter in the empirical results because these variables work as intervening variables that can change the outcomes of team diversity. In a meta-analysis of 24 studies, Webber and Donahue (2001) reported that differences in contextual variables may lead to different results. A few of the contextual variables are group tasks, group tenure, group leadership, task complexity, task interdependence, organizational strategy and organizational culture.

Seventh, researches have hypothesized different shapes of the relationship between diversity and organizational performance. Several researchers have examined the linear relationship (Tsui *et al.*, 1992; Ely, 2004; Jehn *et al.*, 1999); however, very few of the researchers have examined non-linear relationships (Riordan and Shore, 1997), while others have examined a curvilinear relationship (Richard *et al.*, 2004; Richard *et al.*, 2007). In continuation, Jackson *et al.* (2003) argued that diversity researchers typically examined only linear relationships between diversity and performance outcomes and ignored possible non-linear relationships.

Last but not least, researchers have used different parameters to measure the performance in empirical studies. For instance, Ely (2004) derived three measures of customer satisfaction, sales productivity and customer referrals to determine the total

performance in the retail bank branches. In the same banking industry, [Richard \(2000\)](#) used three other parameters such as productivity, return on equity (ROE) and market performance to derive a clearer picture of the impact of racial diversity on a firm’s financial performance. While in another study, top management team performance has been measured by two performance indicators: organizations’ productivity and profitability ([van Knippenberg et al., 2011](#)). Thus, different authors have used different parameters in different studies, which leads to conflict in the results.

7. Final synthesis and future research agenda

This section has represented several opportunities in future diversity research that has considerable potential to solve the conflicting results and mitigate the negative effects of diversity. Accordingly, [Figure 2](#) provides nine research opportunities and several new avenues for future research in diversity.

7.1 Research agenda 1: Cross-country study

Workforce diversity is one of the emerging topics to be conducted for future research because it has great potential to play a vital role in the international market. Nowadays, our contemporary world is full of international markets and characterized by diverse products and managed by a group of diverse people. Nevertheless, workplace diversity is mostly studied in the context of developed countries (e.g., USA, Canada, Germany, UK, Netherlands, and Australia) and only a few studies were reported in developing countries (e.g. China and India). This represents the past research that has studied diversity in the context of migration and globalization in developed countries but the growth in emerging markets indicates that research could no longer remain in the USA ([Nkomo et al., 2019](#)). Furthermore, in empirical studies, primary data have been collected from the firms established in developed nations; therefore, in general, such results may not extend to other countries. This is attributed to the different cultural environment, social status and vast differences that exist between developing and developed nations. Thus, this study

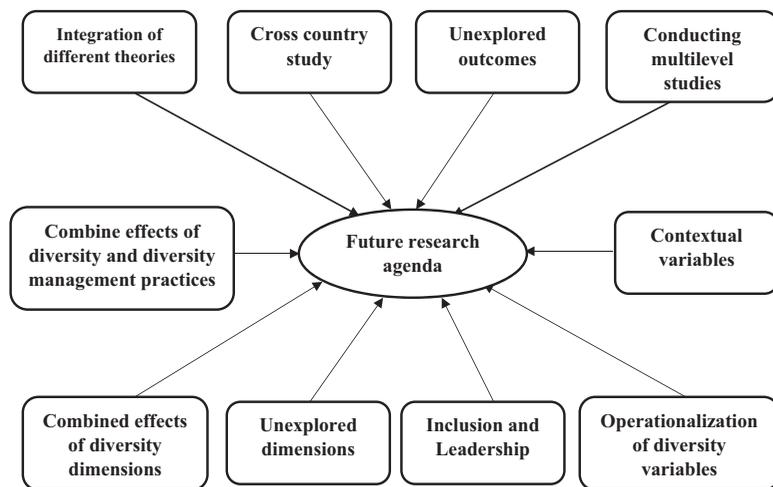


Figure 2.
Future research agenda on workforce diversity

proposes that there is a requirement to conduct more diversity research in different industries and countries.

7.2 Research agenda 2: Integration of different theories

From the existing literature, this study has reported several theories such as self-categorization theory, social-identity, similarity-attraction, upper echelon and decision-making theory. Some of them have positively supported and some have negatively supported, which creates equivocal and conflicting results. For example, [Richard *et al.* \(2004\)](#) have reported that resource-based theory has positive outcomes of racial diversity, while [Williams and O'Reilly \(1998\)](#) discussed the negative effects of social identity and social-categorization theory. Thus, this study proposes that future researchers may investigate the relationship between workforce diversity and performance by integrating various competing theories that can be effectively fruitful in managing diversity.

7.3 Research agenda 3: Unexplored outcomes

It has found from existing literature that some results such as organizational performance, group performance and top management team performance have repeatedly investigated the relationship between diversity and performance, whereas some key outcomes such as employee turnover, absenteeism, organizational commitment, social cohesion and communication have not received considerable attention. [Webber and Donahue \(2001\)](#) have reported a lack of relationship between workgroup diversity with cohesion. Therefore, this study proposes that future studies may explore the relationship between diversity and unexplored outcomes. Moreover, this study proposes that future researchers may investigate a non-linear and curvilinear relationship between diversity and these outcomes to reconcile the conflicting results.

7.4 Research agenda 4: Other unexplored dimensions

[Harrison *et al.* \(1998\)](#) categorized the diversity into two ways, i.e. surface-level diversity and deep-level diversity in which surface-level diversity (such as race, age and gender) have highly explored but deep-level diversity (such as values, attitudes and beliefs) have very limited literature. This study proposes that future studies can investigate the effects of deep-level diversity. Moreover, very few recent studies have endeavored to explore the unexplored dimensions of diversity such as LGBT ([Ozturk and Tatli, 2016](#); [Webster *et al.*, 2018](#)) and language ([Kulkarni, 2015](#)). Therefore, future researchers can determine the effects of rarely examined variables such as disability, sexual orientation, LGBT, languages and religion. Furthermore, future studies may compare the effect of social categorization diversity together with job-oriented diversity.

7.5 Research agenda 5: Contextual variables influence diversity outcomes

Contextual variables can shape the diversity outcomes in empirical studies. For example, in a meta-analysis, [Webber and Donahue \(2001\)](#) suggested that researchers should examine the moderating and mediating role of process variables. In a literature review, [Joshi and Roh \(2007\)](#) argued that contextual factors play a significant role to diminish the negative impacts of diversity. Contextual factors such as organizational culture ([Chatman *et al.*, 1998](#)), diversity beliefs ([van Dick *et al.*, 2008](#)), diversity climate ([Gonzalez and Denisi, 2009](#)), business strategy ([Richard, 2000](#); [Richard *et al.*, 2004](#)), team leadership ([Kirkman *et al.*, 2004](#); [Mohammed and Angell, 2004](#)), task

interdependence (Williams and O'Reilly, 1998), team longevity (Pelled, 1996; Pelled *et al.*, 1999) and social context (Jackson and Joshi, 2004) may reduce the negative effects of diversity experienced at moderate levels of diversity and can increase the positive effects via better coordination, interaction and knowledge-sharing process. This study recommends that future studies should continue to investigate the more contextual variables in diversity research to reduce the inconsistency in the findings.

7.6 Research agenda 6: Combined effects of several dimensions

One of the most limitations has been reported in several studies that researchers and academicians included only one or two types of diversity variables (such as gender and race or age and race or only racial diversity or cultural diversity). Combined effects of diversity along with multiple dimensions have been ignored in previous studies (Pelled (1996)). Hence, this study recommends for future researchers to explore the combined effects of several dimensions of diversity on performance outcomes.

7.7 Research agenda 7: Conducting multilevel studies

The outcomes of diversity research has been classified at the individual, group, and organizational level. Most of these outcomes are related to the group level, and relatively few studies have focused on individual and organizational level outcomes. Moreover, there are very limited studies that have been conducted at multilevel together, including individual level employees, team managers and top management teams. For example, Richard *et al.* (2007) suggested that conducting a multilevel study would be ideal for future research to understand the dynamics of diversity. Next, Jackson and Joshi (2004) proposed a model that formulates the multilevel composition of demographic teams, team managers and work units to shape the team cooperation and performance. Hence, this study believes that multilevel and cross-level studies will improve the dynamics of diversity management in the future.

7.8 Research agenda 8: Explore the combine effects of diversity and diversity management practices

It has been reported that very little attention has been paid to find the relationship between diversity management practices and organizational performance (Pitts *et al.*, 2010). Moreover, existing literature has focused on age, gender and race diversity, but only a few studies have endeavored to find the effects of diversity management practices between diversity dimensions and organizational performance. For example, Choi (2008) examined the moderating effects of diversity management on job satisfaction and turnover intentions. The study reported that diversity management practices positively moderated job satisfaction in an ethnically diverse group while it did not affect turnover intentions. Similarly, Lee and Kim (2019) tested the moderating effects of diversity management practices on firm performance in Korean companies and reported significant results. Conclusively, this study proposes for future researchers to explore the effects of diversity management approaches and diversity dimensions together to mitigate the negative impacts of diversity.

7.9 Research agenda 9: Operationalization of diversity variables

Pitts *et al.* (2010) recommended that future research should use multiple approaches and measures to tap into a variety of measurements. It has been found that previous studies have frequently used the Blau index, coefficient of variation and Teachman's (1980) entropy-

based index to measure the diversity index. Using a similar approach, the results may return similar results. Thus, this study suggests that, in future, researchers can use alternative approaches to measure the differences by operationalizing the diversity in terms of separation, variety and disparity, as proposed by [Harrison and Klein \(2007\)](#).

7.10 Research agenda 10: Inclusion, leadership and diversity practices

Very few studies have explored the importance of leadership, leader behavior ([Klein et al., 2011](#); [Nishii and Mayer, 2009](#)) and inclusion of employees irrespective of discrimination ([Ozturk and Tatli, 2016](#)) in diversity management literature, while a few of the studies have investigated the moderating role of transformational leadership on team diversity to enhance the team outcomes ([Shin and Zhou, 2007](#); [Kearney and Gebert, 2009](#)). Moreover, the presence of diversity management approaches such as diversity perspectives and programs will foster the equality and inclusion of people in organizations while leadership can play a vital role in managing the teams ([Nkomo et al., 2019](#)). As a result, incorporating diversity practices in organizations can reduce negative barriers such as conflicts, tensions, absenteeism and turnover. [Peretz et al. \(2015\)](#) examined the moderating effects of national cultural practices on the relationship between diversity programs and organizational outcomes. The study reported that cultural practices have a significant impact on absenteeism and turnover, which positively influenced organizational innovative performance. However, organizational culture and cultural perspectives such as cooperative culture can be contextual factors for future studies. Conclusively, this study suggests that future researchers can explore the importance of diversity practices as a parameter for the effective management of diversity.

8. Implications

Despite the decades of research on diversity, researchers have neglected some key topics. Therefore, this study highlights the operationalization of diversity, reasons for inconsistencies and proposed future research agenda. This study has contributed in different ways. First, forthcoming researchers can easily select the proposed research agenda and diversity measures for future research. Second, practitioners and academicians can focus more on diversity management practices such as inclusion of people and team building activities, which diminish the challenges of diversity and increase cooperation, communication and knowledge sharing. Conclusively, the practical relevance of the study motivates the managers and academicians to promote diversity management practices in the organization context for organizational benefits.

9. Conclusion

The novelty of this paper is to conduct a systematic literature review on workforce diversity. This study provides an important avenue for future research and integrating theory development. In summary, our review includes the definitions of diversity, dimensions of diversity, operationalization of diversity variables and the findings of the workforce diversity on performance outcomes. Further, this study elaborates several reasons for inconsistent results in diversity research and explains the necessity of future studies. This kind of literature review contributes to the widening of the existing knowledge on a particular theme and formulates research opportunities for future studies. We understand that this review would be helpful for future researchers to get a holistic understanding of the current state of existing research and future avenues on diversity and our recommendations would encourage conducting more research in the areas of diversity and diversity management.

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Further reading

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Appendix 1

Future research agenda

Author(s)	Country	Nature of Sample	Dependent variable	Age	Relationship of diversity with Gender	Race	Supporting Theory
Cox <i>et al.</i> (1991)	USA	136 undergraduate and graduate students from a large public university	Cooperative behavior in problem-solving			Positive	NA
Jackson <i>et al.</i> (1991)	USA	93 top management team in bank holding companies	Increased Turnover	Positive			Attraction selection
McLeod and Lobel (1992)	USA	137 undergraduate and graduate students from Midwestern university	Idea generation			Positive	NA
Tsui <i>et al.</i> (1992)	USA	A sample of 151 groups, comprising 1705 respondents in 3 organizations	Absenteeism, commitment and Intent to stay	Inconsistent	Negative	Negative	Self-categorization
Watson <i>et al.</i> (1993)	USA	36 different students workgroups in a large southwestern university	Overall Group performance			Positive	NA
Riordan and Shore (1997)	USA	1584 employees from 98 workgroups in the life insurance company	Group cohesiveness		Non-significant	Positive	Relational demography
Jehn <i>et al.</i> (1999)	USA	92 work teams in the household goods moving industry	Workgroup performance		Negatively	Negative	Social identity
Knight <i>et al.</i> (1999)	USA, Ireland	83 high technology firms in the US and a group of subsidiaries located in Ireland	Strategic consensus	Non-significant			Upper Echelon, Group process
Pelled <i>et al.</i> (1999)	USA	317 employees sample from 45 teams in electronics firms	Task Performance	Negative	Non-significant	Positive	Intervening process
Simons <i>et al.</i> (1999)	USA	TMT's of 57 electronic manufacturing firms	Firm's financial performance	Non-significant			NA
Richard (2000)	USA	Sample collected from 63 banks	Financial performance			Positive	Resource-based

(continued)

Table A1. Overview of diversity literature pertaining to age, gender, and race diversity

Table A1.

Author(s)	Country	Nature of Sample	Dependent variable	Age	Gender	Race	Supporting Theory
Webber and Donahue (2001)	Canada	Meta-analysis	Group performance	Inconsistent	Inconsistent	Inconsistent	NA
Harrison <i>et al.</i> (2002)	USA	144 teams of graduate and undergraduate students	Team performance	Positive	Positive	Non-significant	NA
Frink <i>et al.</i> (2003)	USA	291 organizations from national organization survey	Organizational performance		Inverted U shaped relationship		Social categorization and social identity NA
Jackson <i>et al.</i> (2003)	USA	A review paper (SWOT analysis)	Team Diversity				
Kochan <i>et al.</i> (2003)	USA	4 different study from different organizations	Organizational performance	Non-significant		Non-significant	NA
Richard <i>et al.</i> (2003)	USA	177 Bank presidents and HR managers selected from different banks	Firm performance			Positive	Resource-based, Contingency theory NA
Ely (2004)	USA	Employees from 486 retail branches in the Bank	Financial Performance	Negative	Non-significant	Non-significant	NA
Jackson and Joshi (2004)	USA	365 sales teams selected from 42 districts in the US	Sales team performance		Positive	Inconsistent	NA
Jehn and Bezrukova (2004)	USA	1528 workgroups in large information-processing firm	Performance outcomes	Negative	Negative	Negative	No theory
Kirkman <i>et al.</i> (2004)	USA	111 intact work teams in 4 different organizations	Team effectiveness	Non-significant	Non-significant	Negative	Social categorization and social identity Blau theory
Richard <i>et al.</i> (2004)	USA	153 HR executives of the banking industry	Firm performance		Inverted U shaped	Nonlinear	

(continued)

Author(s)	Country	Nature of Sample	Dependent variable	Age	Relationship of diversity with Gender	Race	Supporting Theory
Green et al. (2005)	USA	279 HR professionals employed in large US manufacturer firm Conceptual paper	Org commitment and Job satisfaction Group effectiveness Sales Performance	Non-significant	Non-significant		Social identity and self-categorization Social identity
Hopkins et al. (2005)	USA					Positive	
Joshi et al. (2006)	USA	Sales employees of 437 large company teams in 46 units of a			Positive	Positive	Social identity
Richard et al. (2007)	USA	6-year longitudinal analysis of Fortune listed 50 best minorities US firms	Financial performance			U shaped relationship	Blau Theory Knowledge-based theory
Choi (2008)	USA	67 sub-agencies under Federal Human capital survey	Employee turnover intention Firm performance		Non-significant	Positive	Similarity attraction theory
Gonzalez and Denisi (2009)	USA	271 employees from 26 restaurants chain			Inversed U shaped relationship Negative	Positive	Social identity
Joshi and Roh (2009)	USA	A meta-analysis conducted on 8757 teams in 39 studies	Team Performance	Negative		Negative	Social identity and social categorization
Kearney and Gebert (2009)	Germany	62 R and D teams in the German pharmaceutical industry Transformational leadership	Team performance	Not significant			
Nishii and Mayer (2009)	USA	348 department in a large supermarket chain	Turnover	Positive			Social categorization, Leader-member exchange
Pitts et al. (2010)	USA	Public school in Texas	Diversity management programs				

(continued)

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Table A1.

Table A1.

Author(s)	Country	Nature of Sample	Dependent variable	Age	Relationship of diversity with Gender	Relationship of diversity with Race	Supporting Theory
van Knippenberg <i>et al.</i> (2011)	UK	42 top management team from UK manufacturing companies	Team performance		Negative		Faultline Theory
Hoever <i>et al.</i> (2012)	The Netherlands	231 students from a Dutch university	Team creativity				NA
Olsen and Martins (2012)	Japan	Conceptual Paper					
Pieterse <i>et al.</i> (2013)	The Netherlands	312 students from Dutch business school	Team performance		Positive		Goal orientation
Richard <i>et al.</i> (2013)	USA	535 bank institutions	Financial Performance		Positive	Positive	NA
Shen <i>et al.</i> (2014)	China	716 respondents from 37 firms	Knowledge sharing	Positive			Equity theory
D'Netto <i>et al.</i> (2014)	Australia	Qualitative approach, 92 employees from 9 large global companies	Turnover				NA
Leung and Wang (2015)	Hong Kong	Review paper	Team Creativity		Positive	Cultural diversity	Social categorization, Categorization and elaboration model Social Identity
Kulkarni (2015)	India	38 respondents from IT companies					NA
Ozturk and Tati (2016)	UK	14 in-depth interviews from the transgender community					
Guillaume <i>et al.</i> (2017)	UK	Conceptual paper	Social integration, performance				
Leslie (2017)	USA	743 employees nested with 131 bank branches	Work unit performance			Negative	Categorization and elaboration model Blau theory Social identity

(continued)

Author(s)	Country	Nature of Sample	Dependent variable	Age	Relationship of diversity with Gender	Relationship of diversity with Race	Supporting Theory
Webster <i>et al.</i> (2018)	USA	Review paper (LGBT)					
Li <i>et al.</i> (2018)	The Netherlands	Conceptual paper	Team performance				Dynamic team diversity theory
Sung and Choi (2019)	South Korea	178 Korean companies	Firm Innovation	Positive			Contingency Theory
Roberson (2019)	USA	Review Paper					Social categorization
Lee and Kim (2019)	South Korea	189 Korean manufacturing company	Firm Performance	Negative			Relational coordination theory
Nkomo <i>et al.</i> (2019)	South Africa	Review Paper					

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Table A1.

Table A2.
Overview of diversity literature pertaining to educational, functional background, and tenure diversity

Author(s)	Country	Sample	Dependent variable	Relationship of diversity with				Supporting Theory
				Educational background	Functional background	Tenure	Supporting Theory	
Jackson <i>et al.</i> (1991)	USA	93 top management team in bank holding companies	Increased Turnover	Negative		Non-significant	Attraction selection	
Tsui <i>et al.</i> (1992)	USA	A sample of 151 groups, comprising 1705 respondents in 3 large organizations	Absenteeism, commitment and Intent to stay	Positive		Non-significant	Self-categorization theory	
Wiersema and Bird (1993)	Japan	220 executives from 40 firms listed in the Tokyo stock exchange	Turnover			Significant	Organizational demography theory	
Smith <i>et al.</i> (1994)	USA	230 response from 53 high technology firms	Organization performance	Positive	Negative	Positive	Upper Echelon	
Hambrick <i>et al.</i> (1996)	USA	Large sample from 32 airlines	Financial performance	Positive	Positive	Non-significant	Behavioral theory	
Riordan and Shore (1997)	USA	1584 employees from 98 workgroups in the life insurance company	Group commitment			Positive	Relational demography theory	
Jehn <i>et al.</i> (1999)	USA	92 work teams in the household goods moving the industry	Workgroup performance	Positive			Social identity theory	
Knight <i>et al.</i> (1999)	USA, Ireland	83 high technology firms in the US and a group of subsidiaries located in Ireland	Strategic consensus	Negative	Negative	Positive	Upper Echelon Group process theory	
Pelled <i>et al.</i> (1999)	USA	317 employees sample from 45 teams in electronics firms	Performance	Positive	Positive	Positive	Intervening process theory	
Simons <i>et al.</i> (1999)	USA	TMTs of 57 electronic manufacturing firms	Firm's financial performance	Positive	Positive	Positive	No theory	
Webber and Donahue (2001)	Canada	Meta-analysis	Group performance	Inconsistent	Inconsistent	Inconsistent	No theory	

(continued)

Author(s)	Country	Sample	Dependent variable	Relationship of diversity with			Supporting Theory
				Educational background	Functional background	Tenure	
Schippers <i>et al.</i> (2003)	The Netherlands	406 respondents from 54 teams in 13 different organizations	Team outcomes (Satisfaction, performance)	Inconsistent			Similarity attraction, Social categorization, Information decision Making theory, No Theory
Ely (2004)	USA	Employees from 486 retail branches in the Bank	Financial Performance			Negative	No theory
Jackson and Joshi (2004)	USA	365 sales teams selected from 42 districts US company	Sales team performance			Positive	No theory
Jehn and Bebrukova (2004)	USA	1528 workgroups in large information-processing firm	Performance outcomes	Negative	Positive	Positive	No theory
Kirkman <i>et al.</i> (2004)	USA	111 intact work teams in 4 different organizations	Team effectiveness			Non-significant	Social categorization and social identity
Joshi and Roh (2009)	USA	A meta-analysis conducted on 8757 teams in 39 studies	Team Performance	Negative	Positive	Positive	Social identity and social categorization
Kearney and Gebert (2009)	Germany	62 R and D teams in the German pharmaceutical industry	Team performance	Positive			Transformational leadership
Nishi and Mayer (2009)	USA	348 department in a large supermarket chain	Turnover			Negative	Social identity, Leader-member exchange
van Knippenberg <i>et al.</i> (2011)	UK	42 top management team from UK manufacturing companies	Team performance			Negative	Faultline Theory
Lee and Kim (2019)	South Korea	189 Korean manufacturing company	Firm Performance	Positive			Relational coordination theory

Table A2.