



# Developing diverse teams to improve performance in the organizational setting

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## Abstract

**Purpose** – The use of teams in organizations given the current trend toward globalization, population changes, and an aging workforce, especially in high-income countries, makes the issue of diverse team building critical. The purpose of this paper is to explore the issue of team diversity and team performance through the examination of theory and empirical research. Specifically, the paper seeks to answer the question: “How might individuals with diverse characteristics such as culture, age, work experience, educational background, aptitude and values, become successful team members?”

**Design/methodology/approach** – A review of theories that are pertinent to individual differences and team formation, including social identity theory, mental models, inter contact theory, social comparison theory, and chaos theory, was conducted. Team formation and diversity literature were reviewed to identify ways of developing diverse and effective teams.

**Findings** – It is a truism that working together in teams is a smart way of achieving organizational performance goals. This paper discusses the theories, research and practices that underlie the development of efficient and effective teams. It demonstrates that recognizing the underlying individual differences, mental models, and assumptions that team members bring to the organization can help build teams that are able to overcome dysfunctional barriers and ensure performance improvement of the individuals, teams and organizations.

**Research limitations/implications** – The approach used to review the literature is a limitation of this study as the authors may have missed a discussion surrounding an important concept or theory related to team diversity and performance.

**Practical implications** – Human resource development interventions that target team building, team work and team learning include modules that raise awareness of the perspectives of team members’ individual differences and appropriateness of actions. Training at the team level should focus on the interaction between factors that shape the identity of individuals. Procedures and work design systems should be redesigned to insure that the development of strong and functional teams is supported from a holistic and organizational perspective.

**Originality/value** – This paper highlights diversity issues related to individual differences that underlie team formation and suggests strategies needed to develop effective teams.

**Keywords** Diversity, Culture, Globalization, Human resource development, Teams, Performance

**Paper type** Literature review



## Introduction

Organizations continue to rely on teams within the workplace to achieve goals through task performance (Garrison *et al.*, 2010; Jackson *et al.*, 2003; Klein *et al.*, 2011; Mannix and Neale, 2005; van Knippenberg and Schippers, 2007). Teams and work groups have been noted as organizational building blocks (van Knippenberg, 2003). Organization

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expansion into global markets challenges companies to form teams with culturally diverse employees (Cooper *et al.*, 2007). Companies must address team dynamics to meet performance goals with team members who are physically dispersed as well as culturally diverse (Muethel and Hoegl, 2010). Even on the domestic front, shifts in world populations provide opportunities for people with diverse cultural backgrounds to work together in diverse organizational settings (Chao and Moon, 2005). In addition, the aging of the workforce in high income countries is creating a situation where multiple generations must work in harmony for company success (Chao and Moon, 2005; Gursoy *et al.*, 2008; Twenge, 2010).

The meaning of diversity within the workplace is not limited to those attributes which are observed but also include invisible characteristics such as differences in educational background, creativity, comprehension, learning style, and problem-solving ability (Nafukho *et al.*, 2011). Multiple categories of diversity within the workplace may influence individual, group and organizational performance and processes (van Knippenberg and Schippers, 2007). As a consequence, a broader definition of diversity underpins the development of this article. Diversity is defined as “any dimension that can be used to differentiate groups and people from one another” (Giovannini, 2004, p. 22).

One line of research on this topic seeks to identify the effect of team diversity on team effectiveness and performance (Joshi and Roh, 2009; Klein *et al.*, 2011). Performance relates to the team’s ability to achieve goals or a specific mission (Devine and Philips, 2001). In other words, performance is an outcome which is the result of some purposeful activity (Swanson and Holton, 2009). As teams strive to accomplish goals or tasks, conflict may arise within teams resulting from diversity challenges that inhibit team performance (e.g. Garrison *et al.*, 2010; Jehn and Bezrukova, 2010; Klein *et al.*, 2011; Østergaard *et al.*, 2011). Research further demonstrates that the development of shared mental models through team learning may improve team performance (van den Bossche *et al.*, 2011; van Emmerik *et al.*, 2011).

Since performance is a foundational theme within the field of HRD (Weinberger, 1998), human resource development scholars and practitioners alike should respond to the needs of the workplace that arise from the issues of diverse teams. Given the continued trend for companies to use diverse work groups and teams for task completion (De Dreu and Weingart, 2003; Earley and Mosakowski, 2000; Garrison *et al.*, 2010; Jehn and Bezrukova, 2004) and the potential for disruptive conflict which can derail organizational effectiveness (Klein *et al.*, 2011), it is essential that HRD scholars and practitioners explore the issue of functional team formation and development. Knowledge of how to build high performing productive teams of diverse individuals will make a positive contribution to the overall viability of organizations (Garrison *et al.*, 2010; Klein *et al.*, 2011; Vos and van der Zee, 2011).

### **Problem statement**

Successful teams are comprised of individuals who are aligned by a shared vision and are able to act together to create desired results (Senge, 1990). Unique individuals within organizations who have different cultural and educational backgrounds or process information differently are often asked to work together in teams to accomplish tasks. Differences often create barriers to performance and hinder team and organizational success. Further, Gilley *et al.* (2010) noted that organizations often fail to

emphasize effective team building as the frequency with which managers display effective team facilitation skills is very low.

According to Senge (1990), the ability for team members to align with one another and share mental models is foundational for team learning and goal achievement. As noted, team learning is the “microcosm for learning throughout the organization” (Senge, 1990, p. 236). Team learning and performance have been shown to improve with the development of shared mental models (van den Bossche *et al.*, 2011). There is often a misunderstanding of how underlying differences can undermine the success of teams, even though organizations understand the importance of teams (Gilley *et al.*, 2010). Mannix and Neale (2005) identified organizations as irresponsible when there is an attempt to increase diversity without having an understanding of the challenges that come with having a diversified workforce and or diversified work teams.

HRD professionals should accept the challenge to design interventions for individuals and teams which facilitate learning and improve performance for the entire organization (Swanson and Holton, 2009). A holistic, systems view of the organization is the best position from which to examine team effectiveness as conflict may occur at multiple levels of the organization (Gibson *et al.*, 2009; Korsgaard *et al.*, 2008). The purpose of this article is to explore the issue of team diversity and team performance through the examination of empirical research and theory. Specifically, the key question to be answered is: How might individuals with diverse characteristics such as culture, age, work experience, educational background, aptitude and values, become successful team members? Based on this review, suggested areas for training and development interventions to strengthen team building at the individual, group, process, and the organization levels are identified and discussed.

### Method

A search for empirical literature on diversity, teams, and team performance was conducted. To address the main research question, we asked:

- What theories underlie the development process of highly functional diverse teams in organizations?
- What are the various types of teams in organizations?
- What are the key empirical findings on characteristics of team diversity and performance?

To answer these questions, a review of literature regarding the issues of diversity and teams was conducted through a computerized search of accessible databases. The initial search was restricted to the words “team diversity” and “team performance” which produced 21,618 hits from the databases of Ebsco, PsycINFO, ScienceDirect, and Web of Science. Utilizing additional key words obtained from some of these articles, further refined searches were performed based on the key words of “culture”, “national culture”, “diversity”, “age discrimination”, “mental models”, “social identity theory”, “inter contact theory”, “social comparison theory”, “generations”, “team building”, “teams”, “team conflict”, “performance”, “globalization”, “global teams”, “work experience”, “workforce development”, and “human capital.”

Given the multitude of articles written on the topic of team diversity and team performance, it was not only necessary to review the relevant literature on this topic, but to also make a decision on what to include and not to include in this article. As

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correctly noted, “Although the literature review is a widely recognized genre of scholarly writing, there is no clear understanding of what constitutes a body of literature. Each reviewer must decide which specific studies to include or exclude from a review and why” (Kennedy, 2007, p. 139). In the case of this study, empirical studies that focused on diversity and issues related to team performance were found most relevant and hence included. A summary of sample empirical articles published in a five year period (2007-2011) are presented and discussed in this article. The approach used to review the literature is a limitation of this study as we may have missed a discussion surrounding an important concept or theory related to team diversity and performance. The summary of empirical articles included herein is a representative sample that identifies current issues related to team diversity and performance being investigated by researchers with interest in this topic.

### **Theories underlying team development in organizations**

The literature identifies various theories that underlie diversity and team research (e.g. Joshi and Roh, 2009; Pettigrew and Tropp, 2008; van den Bossche *et al.*, 2011; Vos and van der Zee, 2011). Sociologists, social psychologists, small group researchers, organizational development researchers, and practitioners are interested in the topic of teams and intergroup relations (van Knippenberg, 2003). This article draws on the theories of social comparison (Festinger, 1954), social identity (Tajfel, 1978; Tajfel and Turner, 1979), intergroup contact (Allport, 1954; Pettigrew, 1998), mental models (Senge, 1990), and the cultural mosaic theory which is comprised of chaos, systems, and network theories (Chao and Moon, 2005) to lend further understanding to the topic.

#### *Social comparison theory*

Social comparison theory plays a role in team development as individuals have an innate desire to evaluate their opinions and abilities against other references (Festinger, 1954). According to Festinger (1954), people choose comparative references that are not perceived as too dissimilar and are attracted to situations where others share the same abilities and opinions. In other words, if members of a group perceive too large a discrepancy in opinions or abilities, the group will take action to reduce the perceived differences. When discrepancies are large, individuals in the group may tend to stop the comparison with the outlying members which often leads to hostility or intolerable outcomes. The stronger the group’s attraction for the member, the harder the member will strive to be a part of the group (Festinger, 1954). Consequently, Festinger’s (1954) social comparison theory rests on the need of the individual to perform a comparative self-evaluation before joining or changing groups.

#### *Social identity theory and mental models*

Individuals enter organizations with established social identities derived from the social categories with which the individual perceives a personal alignment (Tajfel, 1978; Tajfel and Turner, 1979; van Knippenberg and Schippers, 2007). A person creates a social identity based on individual perception of self through associations and interactions with the world and the social relationships formed in groups (Tajfel, 1978). Similarity, proximity and situational context are used by members to initiate group comparisons. Individuals associate themselves with ingroups or those with who they positively identify (Tajfel and Turner, 1979). By contrast, outgroups are those social

groups from which individuals attempt to distinguish themselves. The goal of differentiation is to preserve or gain superiority over an outgroup, according to Tajfel and Turner (1979). Ingroup and outgroup alignment may appear in teams with the formation of subgroups which prohibit cooperative prosocial behavior between team members (Vos and van der Zee, 2011).

Similarly, mental models are used by individuals to understand what is happening around them (Senge, 1990). Mental models are internally created images that guide actions which limit subsequent responses “to familiar ways of thinking and acting” (Senge, 1990, p. 174). Personal observation and the interpretation of experiences are used to develop individual mental models. Senge (1990) suggested that people make categorizations and simplified generalizations that are below conscious awareness based on personal mental models. Unique individuals may develop different mental models observing the same event because each person draws different conclusions as the event is seen from different perspectives (Senge, 1990). Ingroup members develop mental models which substantiate their perceived differences from outgroup members (Pettigrew, 1982; Vos and van der Zee, 2011).

Shared mental models have been associated with team learning and improved team performance (van den Bossche *et al.*, 2011). Contrarily, strongly held mental models of certain outgroups can lead to the creation of prejudicial attitudes of members of the ingroup (Pettigrew, 1982). Turner *et al.* (2008) identified four independent variables that were foundational to overcoming prejudices and creating positive relationships between ingroup and outgroups:

- (1) Reduced intergroup anxiety.
- (2) Positive ingroup norms.
- (3) Positive outgroup norms.
- (4) Inclusion of the outgroup as part of self-categorization.

Further, team learning and development result when members are able to freely exchange information through dialogue so as to thoroughly explore issues and develop coherent meaning (Senge, 1990). Three basic conditions must be present to foster dialogue within a team:

- (1) The suspension of assumptions.
- (2) Collegiality among all participants.
- (3) A facilitator who guides the group through dialogue.

In order for teams to become skilled in the art of dialogue, individuals must be able to manage their mental models through reflection and become skilled at inquiry (Senge, 1990). Further, dialogue is key in helping teams develop an understanding of individual and team diversity issues (Nafukho, 2008).

Tajfel’s social identity theory and Senge’s adaptation of mental models lend insight into how individuals align themselves with groups and then subsequently draw conclusions about members of other groups. Social comparison is sometimes conducted of the entire outgroup by the individual (Tajfel, 1978). These perceptions create a category of outgroup which can lead to over generalizations and prejudices towards all members of this group which can be particularly detrimental to performance if these individuals are required to function as a team in the workplace

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(Pettigrew, 1982; Phills *et al.*, 2011; Tsui *et al.*, 1992). Conversely, strong social identity within a group can help maintain commitment to a project (Haslam *et al.*, 2006).

### *Intergroup contact theory*

Utilizing the groundbreaking work of social scientist Allport (1954) who identified conditions under which prejudice can be reduced, Pettigrew (1998) outlined five interrelated processes that foster a change of attitude about people of a different group. Specifically, these processes involve:

- (1) Learning about the outgroup to reduce prejudice by changing negative views.
- (2) Changing individual behavior toward the outgroup members.
- (3) Generating affective, positive emotions, especially empathy, through intergroup contact to reduce anxiety and prejudice.
- (4) Reappraising customs and ingroup norms to help the ingroup see the outgroup in a different light.
- (5) Developing intergroup friendships as “optimal intergroup contact requires time for cross-group friendships to develop” (Pettigrew, 1998, p. 76).

Examining intergroup contact studies through a meta-analysis, Pettigrew and Tropp (2006) confirmed that contact within groups typically reduces prejudice. This study also revealed that all the conditions identified by Allport (1954) do not have to be present for groups to experience a reduction in prejudice. In addition, new lines of research identified in this area encompassed further exploration of relationships built on familiarity and liking and intergroup anxiety reduction brought about by intergroup interactions (Pettigrew and Tropp, 2006). Knowledge of the outgroup, anxiety reduction of intergroup contact, and the increase of empathy are the three mediators of intergroup contact most often studied by researchers (Pettigrew and Tropp, 2008). Of the three mediators, anxiety reduction and empathy have been found to have the highest mediating effect on reducing prejudice (Pettigrew and Tropp, 2008).

### *Cultural mosaic theory*

The cultural mosaic theory was developed under the premise that cultural behaviors can be unpredictable, complex and chaotic; as a consequence, the chaos, the complexity, and the network theories are foundational to the design of this “metatheory” (Chao and Moon, 2005). The systems approach utilized by this theory is appropriate as culture is a complex phenomenon like organizations are complex entities. Systems theory is foundational to HRD in that it is critical to the understanding of how organizations operate through the dimensions of the individual, the group, processes, and performance (Swanson and Holton, 2009). Systems thinking within an organization recognizes that complex problems can be addressed in multiple ways (Senge, 1990). A systemic approach is generative and takes a long-term view of potential solutions, thereby identifying underlying structural causes of behavior.

The chaos and network theories also lend explanation to the understanding of culture within organizations as the nonlinear and dynamic nature of culture can produce limitless points of interaction (Chao and Moon, 2005). Chao and Moon (2005) identified “mosaics” or “tiles” that represent each of the different characteristics which may interact in the development of an individual’s culture. This concept of “tile”

interaction aptly depicts the complex nature of the characteristics that make individuals unique. For instance, a person may claim a national culture but live in a region that promotes different values while possessing demographic characteristics that associate the individual with a particular age or gender group. Associative tiles might include group affiliations such as the family, church, political party, and profession (Chao and Moon, 2005).

### **Types of diverse teams**

Organizational teams are comprised of individuals who perform interdependently to accomplish tasks that are part of a larger system's goals (Cohen and Bailey, 1997). Four types of teams are identified by Cohen and Bailey (1997):

- (1) Work teams that are usually production oriented and associated with manufacturing or the service industry.
- (2) Parallel teams comprised of individuals from various locations within the organization who are assembled for a specific task such as quality improvement or problem-solving.
- (3) Project teams that have a finite life due to the nature of the project and are comprised of cross-functional members who may move from project to project within the company.
- (4) Management teams containing top-level executive who are responsible for the companies' overall performance.

Diversity within teams creates a paradox as it has been demonstrated that diverse teams have better performance; conversely, diversity on teams also increases the possibility of potential conflict (Garcia-Prieto *et al.*, 2003). Demographic characteristics have also been identified as surface-level differences as they are readily apparent to observers and include such attributes as race, age, or gender (Milliken and Martins, 1996; Østergaard *et al.*, 2011). Non-demographic or non-visible characteristics include deep-level differences such as values, attitudes, level of education, tenure, functional knowledge, and beliefs (Harrison *et al.*, 1998; Jarzabkowski and Searle, 2004; Jehn and Bezrukova, 2010; Mannix and Neale, 2005; Østergaard *et al.*, 2011). Deep-level factors are conveyed and received by others through verbal and non-verbal communications (Harrison *et al.*, 1998; Milliken and Martins, 1996).

Surface level differences have been shown to carry less significance for groups than deep-level differences when the groups interacted more consistently over time (Harrison *et al.*, 1998). Information exchange was identified as the mediating variable that apparently changed the perceptions of people through frequent interactions. Similarly, Harrison *et al.* (1998) demonstrated that the interpersonal exchanges permitted group members to develop more accurate information about each other over time. Likewise, frequent contacts or collaborations might reduce the effects of surface level or demographic differences and improve team learning (Harrison *et al.*, 2002; van Emmerik *et al.*, 2011). For instance, in teams where deep-level similarity was higher, team learning was also higher (van Emmerik *et al.*, 2011). These findings substantiate support for the intergroup contact theory which indicates that time is necessary for friendships to develop (Pettigrew, 1998, 2008; Pettigrew and Tropp, 2008).

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One of the first studies to separately examine the potential impact of the individual categories of diversity (e.g. informational, social category, and value) on workgroup performance indicated variations in the types of differences among group members (Jehn *et al.*, 1999). Informational diversity related to the knowledge and educational differences between individuals while social category corresponded to race and gender diversity and value diversity was associated with the task, goals and mission of the group (Jehn *et al.*, 1999). As confirmation to the different classifications, Klein *et al.* (2011) found that value diversity among team members could cause team conflict and stifle individual creativity and team effectiveness. Similarly, training to approach a different social category was found to lead to a decrease in prejudice (Phills *et al.*, 2011).

Within the social category lie cultural differences which exist at the national, group, and individual level (Chao and Moon, 2005). National culture is a factor that warrants consideration in the context of globalization because one of the struggles of multinational companies is fostering the creation of relationships between employees of different national origins (Cooper *et al.*, 2007). Individuals identify with the overall cultural values but may express them in different ways so as to produce interactions between values (Chao and Moon, 2005). Chao and Moon (2005) proposed that cultural values of the individual are shaped by the social identities driven by age, ethnicity, gender and race. Likewise, a region's climate, location, population, and the geographic area where the individual resides can play a role in shaping culture. Associative characteristics such as family relationships, religion, profession, and politics may likewise contribute to the cultural attitude of the person.

Culture has been identified as "collective mental programming: it is that part of our conditioning that we share with other members of our nation, region, or group but not with members of other nations, regions, or groups" (Hofstede, 1983, p. 76). Hofstede's body of research work identified five dimensions of national culture that address common problems in all societies: power distance, individualism-collectivism, masculinity-femininity, uncertainty avoidance, and long-term versus short-term orientation (Minkov and Hofstede, 2010). While Hofstede's conceptual framework represents these dimensions as stable differences across nationalities, the application of the dimensions at the individual or organizational level are questioned by Hofstede due to the variation across individual studies (Minkov and Hofstede, 2010).

However, multinational companies have discovered that employees have a particularly difficult time making the necessary personal adjustments to work with individuals of different national cultures (Cooper *et al.*, 2007). One such issue that might arise is based on the cultural judgment of the appropriateness of actions and behaviors (Cooper *et al.*, 2007). Cooper *et al.* (2007) suggested that appropriateness may take on a mediating role between the diversity and conflict which may exist between groups. For instance, cultural differences exist regarding acceptable personal distance and how soon the business topic should be introduced within a conversation. A person's assessment of the appropriateness of the action will determine whether there is a disruption in communication within the team. When a behavior is perceived as inappropriate, interactions within the group suffer (Cooper *et al.*, 2007).

Yet another individual perspective for some teams is related to age diversity (Kogan, 2001). Generational categories are defined by the time period in which they are born and are influenced by the societal attitudes, economic times, and public policy as well as their collective world views, values, attitudes, and behaviors (Kupperschmidt,



2000). In the USA, three generations of workers (Baby Boomer, Generation X, and Millennial) populate the employment landscape, setting the stage for intergenerational teaming relationships (Kupperschmidt, 2000).

The oldest of the Baby Boomers is eligible for retirement, however, economic decline and the evaporation of financial resources is forcing an estimated 60 percent of those over 45 years of age to postpone retirement plans (Schoen, 2008). Younger generations possess different technical skills than older workers; consequently, there may be situations where a person from the younger generation is the supervisor of older adults (Gursoy *et al.*, 2008; Kogan, 2001).

Characteristic differences that shape interactions and communications styles between the generations can present problems for team development and cohesion, if the differences are not recognized (Gursoy *et al.*, 2008). For example, the work of Gursoy *et al.* (2008) suggested that Baby Boomers expect that commitment will be rewarded through promotion while Generation X-ers expect immediate recognition, promotions, and pay. The characteristic differences lead the generations to develop perceptions of each other (Abrams *et al.*, 2008; Gursoy *et al.*, 2008) which can shape team formation and interactions.

### **Team diversity and team performance**

The plethora of studies examining the relationship between diversity and team performance that have been conducted over the past few decades have often produced mixed and sometimes contradictory results (Stahl *et al.*, 2010). Perspectives surrounding diversity and team performance are often focused on individual attributes explained through social categorization, social identity, similarity-attraction, and information processing perspectives (Joshi and Roh, 2009; Lane *et al.*, 2009; Stahl *et al.*, 2010; van Knippenberg and Schippers, 2007). Other researchers suggested that factors other than individual attributes should be taken into consideration when studying diversity and its effect on teams and performance (Jackson *et al.*, 2003). To gain a better understanding of the empirical research conducted on this topic, Table I has been created to summarize 17 recent empirical articles related to diversity, teams, and performance.

As demonstrated in Table I, the 2011 articles suggest that teams may experience performance improvement from interventions such as those associated with creating jointly held mental models or team learning when there is deep-level similarity (van den Bossche *et al.*, 2011; van Emmerik *et al.*, 2011). The benefits of improved performance may accrue to teams that implement measures to align values (Klein *et al.*, 2011) or overcome task and relationship conflict (Shaw *et al.*, 2011). Conversely, teams that were unable to align values or overcome task or relationship conflict may see increases in overall team conflict to the detriment of team performance (Klein *et al.*, 2011; Shaw *et al.*, 2011). Similarly, performance innovation may be positively associated with individual education and gender (Østergaard *et al.*, 2011) while the organization's working climate might improve when personal information is shared (Lauring and Selmer, 2011).

With regards to the individual perspective, building new relationships with outgroup members through association training may decrease implicit prejudice (Phills *et al.*, 2011). In addition, highly relational individuals may be more likely to cooperate with outgroup members (Vos and van der Zee, 2011). In other words, an

Authors	Question/hypothesis	Team relevance	Sample	Key findings
Klein <i>et al.</i> (2011)	Team leadership moderates the effects of values diversity on team conflict and effectiveness	Diversity in team member values may lead to an increase in conflict and a decrease in team effectiveness	Longitudinal study of community service teams: 97 teams (diversity, leadership and conflict) 79 teams (effectiveness)	Team conflict may arise from values diversity and stifle team effectiveness The effect of team value diversity on team effectiveness is mediated by team conflict Leader behavior may either intensify or ease harmful effects of value diversity on teams Social working climates may be positively impacted when personal information sharing occurs Knowledge sharing may be an antecedent for the group's openness to diversity
Lauring and Selmer (2011)	Examines the effect of sharing informal personal knowledge on the diversity climate as measured by the openness to linguistic, visual, value and informational diversity	Identification of antecedents that aid in the creation of a good diverse climate within a university setting	489 teachers in a Danish university	Identified a positive association between education and gender diversity and the likelihood of achieving innovative performance A negative effect was observed for age diversity and no significance observed for ethnic diversity Systematically building new self-association training may decrease implicit prejudice Interventions targeted to teach individuals how to approach people in a different social category may improve relations between races Team performance declined in the presence of high relationship conflict and high task conflict in both studies
Østergaard <i>et al.</i> (2011)	Investigates the relationship of employee diversity (gender, age, ethnicity and education) as it relates to innovation	Understanding the influence of diversity on innovation will provide guidance for team development	A 2006 questionnaire survey on innovation collected from more than 1,600 Danish manufacturers The Integrated Database for Labour Market Research containing detailed information on all Danish companies	
Phills <i>et al.</i> (2011)	Will training in approaching a particular social category of individuals increase the association between the individual and the targeted social category?	Intergroup relations might be improved if members receive association training	Four individual studies with 50, 76, 27, and 61 non-Black undergraduates	
Shaw <i>et al.</i> (2011)	Conflict in relationships moderates the relationship between task conflict and team performance	A decline in team performance puts the quality, quantity, and completion of projects at risk	Study 1: 87 work teams in seven Taiwan companies Study 2: 127 work teams in 14 Indonesian companies	

(continued)

**Table I.**  
Sample of empirical studies investigating diversity in teams and team performance and development

Authors	Question/hypothesis	Team relevance	Sample	Key findings
van den Bossche <i>et al.</i> (2011)	How does team learning lead to the development of shared mental models?	Shared mental models establish the development of shared cognitions for teams	27 teams of three first-year university students pursuing international business economics degrees participating in a skills development program	Shared mental model development is related to the learning behaviors of teams Team performance improved as the team developed stronger mental models Shared cognition of the task environment lead to improved team performance Team learning is higher in teams which demonstrate deep-level similarity
van Emmerik <i>et al.</i> (2011)	Team learning behaviors mediate the positive association between deep-level similarity and personal networks with team efficacy and team potency. Higher deep-level similarity will enhance the association of team learning behaviors and personal networks	Individual perception influences deep-similarity and how team learning is shaped when team members interact	221 teachers in 33 teams in Dutch secondary schools	For diverse teams with lower deep-level similarity, stronger personal networks translated to the appearance of more team learning behaviors The influence of social capital on team effectiveness and strength were mediated by team learning behaviors
Vos and van der Zee (2011)	What extent are members of the same work group willing to cooperate with members of their ingroup or outgroup? When primed to assume a collective identity, will individuals be more willing to help someone from their own ingroup?	Subgroups are present within workgroups along with individual frames of references through which individuals operate in teams	Study 1: 69 (25 males, 44 females) Dutch college students Study 2: 169 female non-sorority members Study 3: 180 (51 males, 129 females, four no gender identification) undergraduate psychology majors without sorority or fraternity affiliation	Highly relational individuals are willing to cooperate with individuals both inside and outside their groups Individuals who score low relationally oriented were willing to cooperate only with their in group Individuals focused on interpersonal relationships are more likely to display prosocial behaviors (cooperation) during encounters with outgroup members

*(continued)*

Authors	Question/hypothesis	Team relevance	Sample	Key findings
Garrison <i>et al.</i> (2010)	Is individual performance effected by perceptions of differences?	Existence of diversity in a team can negatively influence performance	78 individuals in 18 global team projects	Diversity had a direct negative impact on individual performance Trust was shown to be a key factor in supporting group cohesion and individual performance
Jehn and Bezrukova (2010)	When are group outcomes influenced by objective demographic group alignments?	Dormant group differences might be activated to influence group processes	160 undergraduate business students in 40 four person teams	Strong team and workgroup identity decreased the likelihood of coalition formation which produces conflict
Puck <i>et al.</i> (2010)	Is there a link between team diversity and intra-team conflict? Does context of the organization moderate conflict within the team?	Organizational context may improve the understanding of the relationship between diversity and conflict	27 teams in ten different countries	Organizational openness to social category diversity moderated all types of conflict Organizational supportiveness did not moderate the relationship between diversity and conflict
Stahl <i>et al.</i> (2010)	Cultural diversity results in process losses and gains due to increased divergence and decreased convergence. Task complexity and team structure moderate the effects of team diversity	Meta-analysis of research on multicultural work groups to reconcile conflicting reports on the impact of cultural diversity on team performance	108 process and performance empirical studies representing 10,632 teams	Cultural diversity may lead to process losses in the presence of task conflict and decreased social integration Gains in process may be experienced through increased satisfaction and creativity
Joshi and Roh (2009)	Focused on identifying a comprehensive picture of how context shapes performance for teams diverse with respect to task and relationships	Meta-analysis to examine whether context of the team may provide insight to improve management practices with respect to the implementation of diversity	Literature search drawing on lower team studies that included either task-oriented or relations-oriented diversity, performance outcomes, sample size, and statistical analysis	No direct effect of diversity on performance was identified When moderating variables were considered, diversity effects were present The industry setting of the team influenced whether relation-oriented diversity had a positive or negative effect on the team
Turner <i>et al.</i> (2008)	Are extended group contact and outgroup attitude influenced by intergroup anxiety, awareness of in and outgroup norms, and identification of the self with the outgroup?	Improved outgroup attitudes might reduce negative fears and challenge prejudices	Study 1: 142 White British undergraduates 120 White participants with a mean age of 15.4 years of age	Four independent variables were responsible for a positive relationship between extended contact and outgroup attitude Reduced intergroup anxiety Positive ingroup norms Positive outgroup norms Inclusion of the outgroup as part of self-categorization

(continued)

Table I.

Authors	Question/hypothesis	Team relevance	Sample	Key findings
van Dick <i>et al.</i> (2008)	Does the influence of an individual's beliefs about diversity moderate the individual's response to ethnic diversity as a member of a group?	Individual beliefs about diversity may influence the individual's ability to identify with the group and maintain group membership	Two longitudinal studies surveyed 316 and 214 part-time and full-time MBA and MSc students after students were divided into syndicate study program groups	Individual beliefs about diversity moderated the relationship between the perception of ethnic diversity of the group and identification with the group Early identification with the group increases the perception of positive group functioning Cognitive conflict and affective conflict were positively related Cognitive conflict was positively related to the team's size, the functional diversity of team members, and member turnover Cognitive conflict triggers affective conflict due to social judgment and attribution processes invoked by team members
Mooney <i>et al.</i> (2007)	Does cognitive conflict trigger affective conflict?	Effectiveness of team decision making can be diminished as well as personal satisfaction and performance	612 individuals on 94 project teams in New York Metropolitan area representing 8 industries	Cognitive diversity was important to executive the decision making process as it permitted the inclusion of diverse perspectives through constructive disagreement Cognitive diversity was more strongly associated with task conflict than relationship conflict The higher the team based trust, the greater the task conflict Task conflict may lead to relationship conflict; however, task conflict can increase understanding, commitment, and quality of the decision
Olson <i>et al.</i> (2007)	Do cognitive diversity, task conflict and competence-based trust impact strategic decisions?	Understand how different viewpoints affect the decision making process	85 top management teams representing 85 hospitals from various regions of the US	

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increase in innovation and a better organizational climate may be directly connected to the organization's performance improvement while a decrease in implicit prejudice may improve team relationships (Lauring and Selmer, 2011; Østergaard *et al.*, 2011; Phills *et al.*, 2011; Vos and van der Zee, 2011).

The sample articles from 2010 highlight the role that conflict plays in stifling performance at the individual and organizational level. Individual performance may suffer in the absence of team member trust, thereby making the team a liability to the organization (Garrison *et al.*, 2010). Individuals unable to bond with the group to develop a team identity may look to form coalitions that are contrary to the teams goals and create conflict (Jehn and Bezrukova, 2010). In a meta-analysis, Stahl *et al.* (2010) demonstrated that teams with diverse membership may experience process losses and decreased social integration in the presence of task conflict. Organizations may counter the detrimental effects of conflict on performance by creating an atmosphere that is open to diversity (Puck *et al.*, 2010). While the meta-analysis of Joshi and Roh (2009) found no direct effect of diversity on team performance, the analysis of team performance of 8,757 teams in 39 studies produced a very small but significant direct effect size. Specific variables were examined at multiple levels, including industry, occupation, and team level context for moderating effects on performance. Joshi and Roh (2009) found that the situational context and task focus within which the team operates may influence team performance. Understanding the context of the situation within an organization helps answer when, where, and how diversity might appear within the workplace to the detriment of performance (Joshi and Roh, 2009).

The studies in 2008 examine an individual's perspectives and beliefs related to outgroup members. It is revealed that extended contact might improve the individual's attitude toward members of an outgroup (Turner *et al.*, 2008). Likewise, the individual's beliefs about diversity may influence the perception of ethnic diversity for the entire group (van Dick *et al.*, 2008). A member's early identification with the groups increases the perception of positive group functioning based on the research of van Dick *et al.* (2008). Understanding that other factors might influence interaction within the team as well as how outgroups might be perceived will help professionals design interventions with greater specificity to improve relationships and performance.

The 2007 sample studies also focus on the individual perspective, the role of conflict, and its effect on performance. Mooney *et al.* (2007) found that individuals activated social judgments and attribution processes when negative affective conflict increased cognitive conflict. The presence of cognitive conflict was tied to the team's size, functional diversity of members, and member turnover (Mooney *et al.*, 2007). Cognitive conflict, associated with task conflict, may be a positive influence in teams to facilitate the decision making process, especially for top management teams (TMTs) (Olson *et al.*, 2007). Specifically, an increase in trust signals that the team can handle greater task conflict. The result of this interaction is a better quality decision, greater understanding and team commitment (Olson *et al.*, 2007). On the other hand, task conflict may produce relational conflict which is more destructive to the team according to Olson *et al.* (2007). These findings indicate that conflict may emerge from team member interactions at various points.

The research highlighted here demonstrates the complex connections between diversity, teams, and performance. Individuals with varying characteristics, attributes, aptitudes, and perspectives are called to interact within the teams which are situated

within the context of the organization and environment to achieve performance. Performance improvement might be achieved by targeting specific interventions to the individual, team, group, or the organization.

### **Interventions and implications**

The foundational theories and empirical research discussed in this article provide a framework for the development of training interventions that might overcome team issues of diversity, alleviate conflict, and improve performance. Specifically, interventions that help develop deep-level similarity may improve team learning and performance (van Emmerik *et al.*, 2011). Team shared mental models and shared task cognition may also contribute to team improvements (van den Bossche *et al.*, 2011). Likewise, understanding others and self may reduce intergroup anxiety and prejudice (Phills *et al.*, 2011; Turner *et al.*, 2008).

Companies should work to give teams composed of diverse individuals adequate time to get to know one another as research demonstrated that team members should be given an opportunity to build relationships with each other and identify deep-level differences that might be mitigated over time (Harrison *et al.*, 1998; Harrison *et al.*, 2002; Laurant and Selmer, 2011; Olson *et al.*, 2007; Pettigrew, 1982; Pettigrew and Tropp, 2006; Tsui *et al.*, 1992; van den Bossche *et al.*, 2011; Vos and van der Zee, 2011). Further, it is suggested that functionally diverse teams which maximize different knowledge, skills, and abilities and simultaneously minimize differences in values, beliefs, and attitudes about their jobs might be particularly effective (Harrison *et al.*, 2002; Jehn *et al.*, 1999; Mannix and Neale, 2005; Olson *et al.*, 2007; Østergaard *et al.*, 2011). From a systems and process perspective, organizational rewards might be structured so as to reward teams collectively for performance which might help mitigate surface-level differences and encourage greater cooperation (Harrison *et al.*, 2002; Swanson and Holton, 2009).

Training individuals to understand the perspective of others has been shown to aid group formation (Williams *et al.*, 2007). Empathy was revealed to mitigate differences between the outgroup and ingroup members, suggesting that mere contact and commonality might not be enough to overcome surface-level differences. As a result, HRD developed training interventions can be designed to include a module that incorporates role playing or other interactive activities for individuals to learn to see the perspective of others.

The appropriateness of an individual's behavior and actions is also noted as being a point of perceptual judgment within groups of different multinational people (Cooper *et al.*, 2007). Action and appropriate behavior should be included in the training interventions to address the three assessment points identified by Cooper *et al.* (2007):

- (1) The behavior (actions or words) that is unique to the particular country of origin for the group members.
- (2) The action to be taken in particular situations.
- (3) The creation of an understanding that each member sees actions differently.

Diversity training is typically geared toward individual interventions (Jackson *et al.*, 2003). However, Jackson *et al.* (2003) suggested that greater emphasis should be placed on team interventions, given the increasing use of work teams. HRD intervention at the team level might include examination of issues that directly affect team performance.

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The training modules should be designed to recognize the potential interaction of the demographic, geographic, and associative factors that shape the team members' identities (Chao and Moon, 2005). Likewise, companies should also utilize HRD resources to examine systems and processes to modify policies and procedures as well as cultural norms that might inhibit or discourage diversity (Jackson *et al.*, 2003).

As reported by Herdman and McMillan-Capehart (2010), while the implementation of HR practices to promote diversity within work teams shapes the perceptions of employees, an organizational climate that is supportive of diversity has been demonstrated to be an antecedent to successful implementation of diversity within organizations. As a consequence, a direct relationship was found between managerial relational values and the successful implementation of diversity initiatives. In other words, the employees' perceptions of diversity within organizations may also be directly influenced by the work environment's diversity climate (Herdman and McMillan-Capehart, 2010; Luring and Selmer, 2011).

Within the workplace, mentoring relationships between young and old employees have been shown to create positive team outcomes and protect the team from disintegration (Balkundi *et al.*, 2007). While Gen X-ers demonstrated a tendency to be drawn to companies with mentoring programs, Millennials looked specifically for these companies because of the value placed on the opportunity for professional development (Gursoy *et al.*, 2008). Organizations can support team development by fostering mentoring programs created through HRD interventions for deployment through formal channels as well as by encouraging informal relationships through the organization's cultural norms.

Organizations might also consider implementing a 360 degree feedback mechanism to create a forum where honest feedback is provided to team members in a safe environment. The feedback could be used as part of the learning process to develop an understanding of the issues facing team members (Garvan *et al.*, 1997). People often have a different perception of their actions as compared to how they are seen by others. Feedback is foundational for performance improvement to effectuate learning (Garvan *et al.*, 1997). This form of feedback will be a valuable tool to identify areas for communication and performance improvement to strengthen team interaction.

## Conclusion

A multitude of demographic and non-demographic differences should be considered by companies when building teams to maximize performance. Individuals within groups utilize social comparison (Festinger, 1954) within the group setting to identify individuals with who they are most similar. In the global, multinational organizational setting, these comparisons will more than likely result in differences between the individual's self-evaluation and the assessment of others in the group, making team formation difficult.

Social Identity Theory (Tajfel, 1978; Tajfel and Turner, 1979) helps develop an understanding of the individual's identity with particular groups. Cultural factors for individuals categorized as demographic, geographic and associative differences globally interact and can affect performance for the entire organization (Chao and Moon, 2005). Conflict between groups may be intensified by the type of diversity present between group members and ultimately impact the performance and commitment of the group (Jehn *et al.*, 1999). Strong team identity decreased the



likelihood of conflict (Jehn and Bezrukova, 2010). When a team shares a mental model, team performance may be improved in light of shared team cognitions (van den Bossche *et al.*, 2011). At the intersection of diversity and team performance, team members must be ready to enter relationships where individual differences are set aside and respect is fostered for the individual uniqueness of others in order for teams to perform at optimum capacity (Nafukho, 2008).

Team conflict and dysfunction attributed to diversity may be driven by a multitude of factors including over generalized perspectives regarding invalid stereotypes (Pettigrew and Tropp, 2006, 2008), task conflicts (Shaw *et al.*, 2011), and differences in values (Klein *et al.*, 2011). Team integration focusing on similarities of deep-level characteristics such as core values, beliefs, and attitudes, and maximizing individual differences of knowledge, skills, and abilities may produce successful teams and be a strong predictor of team performance (Harrison *et al.*, 2002). Teams that overcome diversity barriers are able to communicate through dialogue and grow, learn, and pursue a common vision (Senge, 1990). As a result, the impacts of a diverse workforce on performance might be mitigated utilizing HRD developed interventions based on sound theory and practice that take into account unique individual characteristics, social identity, group interaction, and cultural development theories. Interventions should target the individual relationships, the team, the process, and the organization as a holistic approach for the best likelihood to produce improved, long-term improved performance results.

## References

- Abrams, D., Crisp, R., Marques, S., Fagg, E., Bedford, L. and Provias, D. (2008), "Threat inoculation: experienced and imagined intergenerational contact prevents stereotype threat effects on older people's math performance", *Psychology and Aging*, Vol. 23 No. 4, pp. 934-9.
- Allport, G. (1954), *The Nature of Prejudice*, Addison-Wesley Publishing, Cambridge, MA.
- Balkundi, P., Kilduff, M., Barsness, Z. and Michael, J. (2007), "Demographic antecedents and performance consequences of structural holes in work teams", *Journal of Organizational Behavior*, Vol. 28 No. 2, pp. 241-60.
- Chao, G. and Moon, H. (2005), "The cultural mosaic: a metatheory for understanding the complexity of culture", *Journal of Applied Psychology*, Vol. 90 No. 6, pp. 1128-40.
- Cohen, S. and Bailey, D. (1997), "What makes teams work: group effectiveness research from the shop floor to the executive suite?", *Journal of Management*, Vol. 23 No. 3, pp. 239-90.
- Cooper, D., Doucet, L. and Pratt, M. (2007), "Understanding 'appropriateness' in multinational organizations", *Journal of Organizational Behavior*, Vol. 28 No. 3, pp. 303-25.
- De Dreu, C. and Weingart, L. (2003), "Task versus relationship conflict, team performance, and team member satisfaction: a meta-analysis", *Journal of Applied Psychology*, Vol. 88 No. 4, pp. 741-9.
- Devine, D. and Philips, J. (2001), "Do smarter teams do better: a meta-analysis of cognitive ability and team performance", *Small Group Research*, Vol. 32 No. 5, pp. 507-32.
- Earley, P. and Mosakowski, E. (2000), "Creating hybrid team cultures: an empirical test of transnational team functioning", *Academy of Management Journal*, Vol. 43 No. 1, pp. 26-49.
- Festinger, L. (1954), "A theory of social comparison processes", *Human Relations*, Vol. 7 No. 2, pp. 117-40.

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- Garcia-Prieto, P., Bellard, E. and Schneider, S. (2003), "Experiencing diversity, conflict, and emotions in teams", *Applied Psychology: An International Review*, Vol. 52 No. 3, pp. 413-40.
- Garrison, G., Wakefield, R., Xu, X. and Kim, S. (2010), "Globally distributed teams: the effect of diversity on trust, cohesion and individual performance", *The Data Base for Advances in Information Systems*, Vol. 41 No. 3, pp. 27-48.
- Garvan, T., Morley, M. and Flynn, M. (1997), "360 degree feedback: its role in employee development", *Journal of Management Development*, Vol. 16 No. 2, pp. 134-47.
- Gibson, C., Cooper, C. and Conger, J. (2009), "Do you see what we see? The complex effects of perceptual distance between leaders and teams", *Journal of Applied Psychology*, Vol. 94 No. 1, pp. 62-76.
- Gilley, A., Gilley, J., McConnell, C. and Veliquette, A. (2010), "The competencies used by effective managers to build teams: an empirical study", *Advances in Developing Human Resources*, Vol. 12 No. 1, pp. 29-45.
- Giovannini, M. (2004), "What gets measured gets done: achieving results through diversity and inclusion", *The journal for quality and participation*, Vol. 27 No. 4, pp. 21-7.
- Gursoy, D., Maier, T. and Chi, C. (2008), "Generational differences: an examination of work values and generational gaps in the hospitality workforce", *International Journal of Hospitality Management*, Vol. 27 No. 3, pp. 448-58.
- Harrison, D., Price, K. and Bell, M. (1998), "Beyond relational demography: time and the effects of surface- and deep-level diversity on work group cohesion", *Academy of Management Journal*, Vol. 41 No. 1, pp. 96-107.
- Harrison, D., Price, K., Gavin, J. and Florey, A. (2002), "Time, teams, and task performance: changing effects of surface- and deep-level diversity on group functioning", *Academy of Management Journal*, Vol. 45 No. 5, pp. 1029-45.
- Haslam, S., Ryan, M., Postmes, T., Spears, R., Jetten, J. and Webley, P. (2006), "Sticking to our guns: social identity as a basis for the maintenance of commitment to faltering organizational projects", *Journal of Organizational Behavior*, Vol. 27 No. 5, pp. 607-28.
- Herdman, A. and McMillan-Capehart, A. (2010), "Establishing a diversity program is not enough: exploring the determinants of diversity climate", *Journal of Business & Psychology*, Vol. 25 No. 1, pp. 39-53.
- Hofstede, G. (1983), "The cultural relativity of organization practices and theories", *Journal of International Business Studies*, Vol. 14 No. 2, pp. 75-89.
- Jackson, S., Joshi, A. and Erhardt, N. (2003), "Recent research on team and organizational diversity: SWOT analysis and implications", *Journal of Management*, Vol. 29 No. 6, pp. 801-30.
- Jarzabkowski, P. and Searle, R. (2004), "Harnessing diversity and collective action in the top management team", *Long Range Planning*, Vol. 37 No. 5, pp. 399-419.
- Jehn, K. and Bezrukova, K. (2004), "A field study of group diversity, workgroup context and performance", *Journal of Organizational Behavior*, Vol. 25 No. 6, pp. 703-29.
- Jehn, K. and Bezrukova, K. (2010), "The faultline activation process and the effects of activated faultlines on coalition formation, conflict, and group outcomes", *Organizational Behavior and Human Decision Processes*, Vol. 112 No. 1, pp. 24-42.
- Jehn, K., Northcraft, G. and Neale, M. (1999), "Why differences make a difference: a field study of diversity, conflict, and performance in workgroups", *Administrative Science Quarterly*, Vol. 44 No. 4, pp. 741-63.
- Joshi, A. and Roh, H. (2009), "The role of context in work team diversity research: a meta-analytic review", *Academy of Management Journal*, Vol. 52 No. 3, pp. 599-627.

- Kennedy, M.M. (2007), "Defining literature", *Educational Researcher*, Vol. 36 No. 3, pp. 139-47.
- Klein, K., Knight, A., Ziegert, J., Lim, B. and Saltz, J. (2011), "When team members' values differ: the moderating role of team leadership", *Organizational Behavior and Human Decision Processes*, Vol. 114 No. 1, pp. 25-36.
- Kogan, M. (2001), "Human resources management: bridging the gap", available at: [www.govexec.com/features/0901/0901s1.htm](http://www.govexec.com/features/0901/0901s1.htm) (accessed 3 January 2011).
- Korsgaard, M., Jeong, S., Mahony, D. and Pitariu, A. (2008), "A multilevel view of intragroup conflict", *Journal of Management*, Vol. 34 No. 6, pp. 1222-52.
- Kupperschmidt, B. (2000), "Multigeneration employees: strategies for effective management", *Health Care Manager*, Vol. 19 No. 1, pp. 65-76.
- Lane, H., Maznevski, M., DiStefano, J. and Dietz, J. (2009), *International Management Behavior: Leading with a Global Mindset*, 6th ed., Blackwell Publishers, Oxford.
- Lauring, J. and Selmer, N. (2011), "Social climate in diverse university departments: the role of internal knowledge sharing", *Educational Research*, Vol. 53 No. 3, pp. 347-62.
- Mannix, E. and Neale, M. (2005), "What differences make a difference? The promise and reality of diverse teams in organizations", *Psychological Science in the Public Interest*, Vol. 6 No. 2, pp. 31-55.
- Milliken, J. and Martins, L. (1996), "Searching for common threads: understanding the multiple effects of diversity in organizational groups", *Academy of Management Review*, Vol. 21 No. 2, pp. 402-33.
- Minkov, M. and Hofstede, G. (2010), "The evolution of Hofstede's doctrine", *Cross Cultural Management: An International Journal*, Vol. 18 No. 1, pp. 10-20.
- Mooney, A., Holahan, P. and Amason, A. (2007), "Don't take it personally: exploring cognitive conflict as a mediator of affective conflict", *Journal of Management Studies*, Vol. 44 No. 5, pp. 733-58.
- Muethel, M. and Hoegl, M. (2010), "Cultural and societal influences on shared leadership in globally dispersed teams", *Journal of International Management*, Vol. 16 No. 3, pp. 234-46.
- Nafukho, F. (2008), "Consensus building, dialogue and spirituality principles of the learning organization paradigm: implications for Kenya's public service reform agenda", *Journal of Third World Studies*, Vol. 25 No. 2, pp. 153-75.
- Nafukho, F., Wawire, N. and Lam, P. (2011), *Management of Adult Education Organizations in Africa: African Perspectives on Adult Learning*, UNESCO, Hamburg.
- Olson, B., Parayitam, S. and Bao, Y. (2007), "Strategic decision making: the effects of cognitive diversity, conflict, and trust on decision outcomes", *Journal of Management*, Vol. 33 No. 2, pp. 196-222.
- Østergaard, C., Timmermans, B. and Kristinsson, K. (2011), "Does a different view create something new? The effect of employee diversity on innovation", *Research Policy*, Vol. 40 No. 3, pp. 500-9.
- Pettigrew, T. (1982), *Prejudice*, Harvard University Press, Cambridge, MA.
- Pettigrew, T. (1998), "Intergroup contact theory", *Annual Review of Psychology*, Vol. 49 No. 1, pp. 65-85.
- Pettigrew, T. (2008), "Future directions for intergroup contact theory and research", *International Journal of Intercultural Relations*, Vol. 32 No. 3, pp. 187-99.
- Pettigrew, T. and Tropp, L. (2006), "Meta-analytic test of intergroup contact theory", *Journal of Personality and Social Psychology*, Vol. 90 No. 5, pp. 751-83.

- Pettigrew, T. and Tropp, L. (2008), "How does intergroup contact reduce prejudice? Meta-analytic tests of three mediators", *European Journal of Social Psychology*, Vol. 38 No. 6, pp. 922-34.
- Phills, C., Kawakami, K., Tabi, E., Nadolny, D. and Inzlicht, M. (2011), "Mind the gap: increasing associations between the self and Blacks with approach behaviors", *Journal of Personality and Social Psychology*, Vol. 100 No. 2, pp. 197-210.
- Puck, J., Neyer, A. and Dennerlein, T. (2010), "Diversity and conflict in teams: a contingency perspective", *European Journal of International Management*, Vol. 4 No. 4, pp. 417-39.
- Schoen, J. (2008), "As nest eggs shrink, many defer retirement", available at: [www.msnbc.msn.com/id/27700954/](http://www.msnbc.msn.com/id/27700954/) (accessed 3 January 2011).
- Senge, P. (1990), *The Fifth Discipline: The Art and Practice of the Learning Organization*, Currency/Doubleday, New York, NY.
- Shaw, J., Zhu, J., Duffy, M., Scott, K., Shih, H. and Susanto, E. (2011), "A contingency model for conflict and team effectiveness", *Journal of Applied Psychology*, Vol. 96 No. 2, pp. 391-400.
- Stahl, G., Maznevski, M., Voight, A. and Jonsen, K. (2010), "Unraveling the effects of cultural diversity in teams: a meta-analysis of research on multicultural work groups", *Journal of International Business Studies*, Vol. 41 No. 4, pp. 690-709.
- Swanson, R. and Holton, E. (2009), *Foundations of Human Resource Development*, 2nd ed., Berrett-Koehler, San Francisco, CA.
- Tajfel, H. (1978), *Differentiation between Social Groups: Studies in the Social Psychology of Intergroup Relations*, Academic Press, London.
- Tajfel, H. and Turner, J. (1979), "An integrative theory of intergroup conflict", in Austin, W. and Worchel, S. (Eds), *The Social Psychology of Intergroup Relations*, Brooks/Cole, Monterrey, CA, pp. 33-47.
- Tsui, A., Egan, T. and O'Reilly, C. (1992), "Being different: relational demography and organizational attachment", *Administrative Science Quarterly*, Vol. 37 No. 4, pp. 549-79.
- Turner, R., Hewstone, M., Voci, A. and Vonofakou, C. (2008), "A test of the extended intergroup contact hypothesis: the mediating role of intergroup anxiety, perceived ingroup and outgroup norms, and inclusion of the outgroup in the self", *Journal of Personality and Social Psychology*, Vol. 95 No. 4, pp. 843-60.
- Twenge, J. (2010), "A review of the empirical evidence on generational differences in work attitudes", *Journal of Business Psychology*, Vol. 25 No. 2, pp. 201-10.
- van den Bossche, P., Gijsselaers, W., Segers, M., Woltjer, G. and Kirschner, P. (2011), "Team learning: building shared mental models", *Instructional Science*, Vol. 39 No. 3, pp. 283-301.
- van Dick, R., van Knippenberg, D., Hägele, S., Guillaume, Y. and Brodbeck, F. (2008), "Group diversity and group identification: the moderating role of diversity beliefs", *Human Relations*, Vol. 61 No. 10, pp. 1463-92.
- van Emmerik, H., Jawahar, I., Schreurs, B. and de Cuyper, N. (2011), "Social capital, team efficacy, and team potency: the mediating role of team learning behaviors", *Career Development International*, Vol. 16 No. 1, pp. 82-99.
- van Knippenberg, D. (2003), "Intergroup relations in organizations", in West, M., Tjosvold, D. and Smith, K. (Eds), *International Handbook of Organizational Teamwork and Cooperative Working*, John Wiley & Sons, Chichester, pp. 381-99.
- van Knippenberg, D. and Schippers, M. (2007), "Work group diversity", *Annual Review of Psychology*, Vol. 58 No. 1, pp. 515-41.

- Vos, M. and van der Zee, K. (2011), "Prosocial behavior in diverse workgroups: how relational identity orientation shapes cooperation and helping", *Group Processes & Intergroup Relations*, Vol. 14 No. 3, pp. 363-79.
- Weinberger, L. (1998), "Commonly held theories of human resource development", *Human Resource Development International*, Vol. 1 No. 1, pp. 75-93.
- Williams, H., Parker, S. and Turner, N. (2007), "Perceived dissimilarity and perspective taking within work teams", *Group and Organization Management*, Vol. 32 No. 5, pp. 569-97.

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