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# Changing Diversity Beliefs: The Effects of Diversity Framing and Type of Learning 

## Changing Diversity Beliefs


#### Abstract

Despite previous research suggesting that the effects of diversity depend on team members' perceived value of diversity (i.e., diversity beliefs), little to no research has examined how diversity beliefs can best be changed. Drawing on Regulatory Focus Theory, Experiential Learning Theory (ELT), and the role of reflection on experience, we propose that diversity beliefs be manipulated and changed through team members' framing of diversity and way of learning about diversity. In a $2 \times 2$ experimental design comparing the effects of prevention and promotion framing on diversity beliefs on the one hand, and experience and knowledge on the other, we found that team members who were induced with a promotion framing of diversity based on their experiences with diverse others, compared to promoting a prevention framing based on research, developed more pro-diversity beliefs. In turn, pro-diversity beliefs predicted team information elaboration in a team charter task at the start-up of the team and two months after the intervention when these teams were engaged in a consulting project. Further distinguishing team-specific beliefs from general beliefs towards diversity, we confirm our theoretical assumptions that beliefs based on personal experiences with diverse others are more accurate and result in more long-lasting changes, compared to beliefs developed through knowledge. This was important as only team-specific diversity beliefs predicted information elaboration, while general diversity beliefs did not. The theoretical and practical implications of the findings are discussed throughout the paper.


Keywords: diversity beliefs, team information elaboration, diversity framing, leaning type, team diversity

## Changing Diversity Beliefs: The Effects of Diversity Framing and Type of Learning

The topic of diversity has become increasingly relevant as more organizations rely on teams composed of individuals from various demographics and functions. Diverse teams, however, do not always perform better than homogeneous teams (van Knippenberg, de Dreu, \& Homan, 2004). In fact, it has been shown that diversity is a double-edged sword due to its enhancing as well as detrimental effects on group performance (Hentschel, Shemla, Wegge, \& Kearney, 2013; Homan, Buengeler, Eckhoff, van Ginkel, \& Voelpel, 2015; Homan, van Knippenberg, van Kleef, \& de Dreu, 2007; van Knippenberg et al., 2004; van Knippenberg, Ginkel, \& Homan, 2013). It is thus essential that organizations and scholars alike learn how to manage diverse teams effectively in order to reap the beneficial outcomes of diversity and avoid its disruptive effects.

One important aspect that has been recently identified to impact the effects of diversity on team outcomes, is team members' diversity beliefs (van Knippenberg \& Schippers, 2006). Diversity beliefs refer to team member's beliefs about the value of diversity for group functioning (Homan et al., 2007). Pro-diversity beliefs have been shown to indirectly impact group identification (Hentschel et al., 2013; van Dick, van Knippenberg, Hägele, Guillaume, \& Brodbeck, 2008; van Knippenberg, Haslam, \& Platow, 2007), team creativity (Homan et al., 2015), decision-making (Homan et al., 2007), and relationship conflict (Hentschel et al., 2013) in a positive way. All these studies suggest that team members' positive diversity beliefs are optimal for predicting the beneficial effects of diversity.

Although there is great potential in altering individuals' diversity beliefs (van Knippenberg, Ginkel, et al., 2013), there are many different approaches used by trainers that vary in their way of changing participants' perceptions of minority groups in order to manage diversity in the workplace (Pendry, Driscoll, \& Field, 2007). Most of the trainings can be

## Changing Diversity Beliefs

categorized into focusing on informing participants about the existence of workplace bias (i.e., informative approaches), inducing negative emotional reactions by confronting participant's to their own bias (i.e., dissonance and guilt-inducing approaches), or increasing the salience of employees' common social identities to allow for categorization other than perceiving minority vs majority subgroups (i.e., social identity; Pendry, Driscoll, \& Field, 2007) . Empirically, the study of Homan et al., (2007) manipulated team members' diversity beliefs by asking participants to read research about the benefits of either working in a homogenous or heterogeneous team. There thus seems to be numerous beliefs about which approach is effective in changing individuals' perceptions of diversity. Some approaches provide knowledge through research while others incorporate the experiences of the participants. Similarly, some encourage participants to focus on avoiding the negative outcomes of diversity while others focus on approaching the positive outcomes. It is thus, still theoretically and practically unclear what is the most effective way to get individuals to change their diversity beliefs in order to reap the positive outcomes of diversity in teams.

To address this issue and contribute further to the diversity research, the first objective of the present research is to examine the most efficient way of changing team members' diversity beliefs. More specifically, the effects of four conditions - manipulating team members' learning type (i.e., experience vs knowledge) and diversity framing (i.e., promotion vs prevention) - on diversity beliefs were investigated. Because a promotion regulatory focus incites individuals to attain the positive outcomes of a goal, the sensitivity to cues that diversity is associated with positive outcomes is increased (van Knippenberg, Ginkel, et al., 2013). Thus, pro-diversity beliefs are more likely to develop compared to when adopting a prevention framing of diversity focused on avoiding the negative outcomes of diversity. Another aspect of effectively changing diversity beliefs is the source of knowledge of the value of diversity. Interaction with diverse others is essential when wanting to make meaningful changes in
peoples' diversity beliefs because accurate beliefs are primarily developed through experience with a team due to their team-specific nature (van Knippenberg, Ginkel, et al., 2013). This assertion is further supported by Experiential Learning Theory (ELT) as it views experience as an essential component for learning (Kayes, 2002; A. Kolb \& Kolb, 2009; D. Kolb, 1984). In this way, diversity beliefs are expected to change to a greater extent when relying on participants' personal experience than simply proving information about the effects of diversity on team performance.

Drawing on regulatory focus theory (Higgins, 1998), ELT (Kayes, 2002), and the role of reflecting on personal experience (van Knippenberg, Ginkel, et al., 2013) we propose that a brief manipulation that induces a promotion diversity framing and incorporates personal experiences results in greater pro-diversity beliefs change. By examining the conditions under which diversity belief change is most effective, our paper makes the theoretical contribution of shedding light on the underlying mechanisms of diversity belief change. Namely, the manner in which diversity is framed (i.e., promotion vs prevention) and the way the value of diversity was acquired (i.e., experience vs knowledge) are two aspects that we expect to demonstrate having an impact on the likelihood of revising diversity beliefs. From a practical perspective, these approaches are reflected by the different ways in which diversity, in general, is currently managed by organizations. Hence, the practical relevance of our paper lies in contributing to the effectiveness of diversity trainings used by organizations.

It is also in the interest of organizations and scholars that the trainings or manipulations used to address diversity in teams translate into better team performance. A key underlying process of the positive effects of diversity on group performance, according to the categorization-elaboration model (CEM), is the extent to which a team is able to elaborate on task-relevant information (i.e., information elaboration; van Knippenberg et al., 2004).

## Changing Diversity Beliefs

Moreover, Homan et al., (2007) showed that teams engaged in information elaboration when individuals held pro-diversity beliefs, providing evidence that through pro-diversity beliefs, teams are more likely to use and elaborate on their informational resources for better performance. Hence, the second objective of the present research is to establish the predictive validity of the proposed manipulation on information elaboration through diversity beliefs. By demonstrating the effects of diversity beliefs on important team processes, such as team level information-elaboration, we make a theoretical contribution to the diversity literature by showing how diversity beliefs can be used to reap the benefits of diversity in teams. Figure 1 provides an overview of the conceptual model and hypotheses.

## INSERT FIGURE 1 HERE

## Literature Review and Hypotheses

## Diversity Beliefs

Diversity beliefs are important because they can buffer the negative consequences of diversity in teams and thus, lead to more favorable team outcomes by influencing the degree to which individuals perceive that diversity can be good for task performance. To illustrate, (Hentschel et al., 2013) empirically showed that perceived diversity was positively associated with team identification and negatively associated with relationship conflict, only when individuals held pro-diversity beliefs. The opposite relationship appeared when members held negative diversity beliefs. Although previous research has demonstrated the impact of diversity beliefs on team outcomes (Hentschel et al., 2013; Homan et al., 2015; Homan, Greer, Jehn, \& Koning, 2010; Homan et al., 2007; Kauff \& Wagner, 2012; van Knippenberg et al., 2004, 2007), variability remains in the way diversity beliefs are conceptualized and measured.

## Changing Diversity Beliefs

According to the review by van Knippenberg, Homan, \& van Ginkel, (2013), variability in the diversity belief construct stems from disagreements of what it means to have favorable beliefs about diversity. Some measures examine beliefs concerning diversity in the workplace in particular (e.g., Homan et al., 2010), while others take a more general societal perspective on diversity (e.g., Stanley, 1996). Because a focus on conceptualizations and associated measurements referring to diversity as a group characteristic and understanding favorability as the positive effects of diversity are more adequate for understanding and managing team diversity (van Knippenberg, Homan, et al., 2013), we focus on the four-item diversity beliefs scale of Homan et al., (2010) in order to test the objectives of our study in a team setting.

One important issue that might deserve closer inspection in the conceptualization and measurement of diversity beliefs is the source from which such beliefs are developed. A diversity mindset refers to the mental representations that team members have of their own diversity (i.e., within the team; van Knippenberg, Ginkel, et al., 2013). In contrast to Homan et al.'s, (2010) measure of diversity beliefs, the more recent conceptualization of diversity beliefs (i.e., diversity mindset), for example, shifts to an emphasis on the goals and procedural knowledge embodied in such beliefs. In other words, diversity mindsets focus on beliefs specific to a team setting, while the current measure of diversity beliefs measures the beliefs coming from external knowledge or a collection of general experience. van Knippenberg, Ginkel, et al., (2013) highlight the value of targeting beliefs that are more rooted to teamspecific experience in order to develop more accurate and shared beliefs about the value of diversity. Although conceptually different from diversity beliefs, the team-specificity of diversity mindsets could be incorporated to diversity beliefs as well. In this way, we argue that Homan et al.,'s (2010) diversity belief scale can be improved by incorporating items that measure the beliefs that are particular to a team setting so as to develop more accurate diversity

## Changing Diversity Beliefs

beliefs. Thus, a case can be made for separating the items of Homan's measures so as to make the scale more team- and experience-specific for the purposes of our study.

A second reason why it is beneficial to target beliefs that are more team-specific and rooted in experience is their higher predictive validity diversity beliefs can have on subsequent behavior. Evidence from disciplines such as medicine, sociology, and psychology has shown that specific attitudes are a better predictor of subsequent behaviors compared to general attitudes (Ajzen \& Cote, 2011; Ajzen \& Timko, 1986; Weigel, Vernon, \& Tognacci, 1974). For example, in a study by Linn (1965) participants were asked to fill a questionnaire capturing their general attitudes towards blacks, and four weeks letter were asked to take a picture that would later be published with a black male. It was found that people's global attitudes towards blacks were not predictive of the willingness to release interracial photographs (Ajzen \& Cote, 2011). In another study, specific health-related attitudes (e.g., medical services, concern about illness, evaluations of health practices, and health locus of control) were found to be predictive of health behaviors while general health-related attitudes were not (Ajzen \& Timko, 1986). By adapting Homan et al., (2010) scale to make it specific to the team participants will be operating in, we believe that the predictive validity of the scale will improve.

## Diversity Framing, Type of Learning and Diversity Beliefs

According to Higgins (1998), individuals can engage in two regulatory systems, namely prevention regulatory focus and promotion regulatory focus, in order to regulate and achieve their goals. The latter is characterized by having a positive reference value which aims to reduce the discrepancy between the actual state of the goal and the desired reference goal, while the former relies on a negative reference value aiming at amplifying the discrepancy between the actual state of the goal and the undesired outcome (Higgins, 1998). In other words,
promotion regulatory focuses on attaining goals by approaching matches to the end goal, while prevention focus does so by avoiding mismatches to the goal.

Previous research has shown that promotion regulatory focus is more predictive of positive performance outcomes, compared to when individuals have a prevention regulatory focus. In examining whether an individual's regulatory focus influenced creativity, Friedman \& Förster, (2001) showed that a riskier, more explorative processing style elicited by promotion cues positively influenced creative thought while a more risk-averse perseverant processing style elicited by prevention cues did so in the opposite direction. Promotion focus rather than a promotion focus has also been found to be associated with higher trust and cooperation in social interactions when threat is perceived (Keller, Mayo, Greifeneder, \& Pfattheicher, 2015), as well as making better strategic decisions when facing difficult tasks decisions such as generating more solutions and being less likely to quit (Crowe \& Higgins, 1997).

According to van Knippenberg, Ginkel, et al., (2013) the predictive validity of regulatory focus on performance can also be applied to the relationship between diversity and performance. Because diversity-related promotion goals, rather than prevention goals, make individuals more sensitive to cues that diversity is associated with positive outcomes, a promotion regulatory focus is more likely to be effective at inciting individuals to actively pursue the benefits of diversity (van Knippenberg, Ginkel, et al., 2013). It is thus, proposed that whether individuals develop pro-diversity beliefs, compared to less favorable diversity beliefs, depend on their diversity framing (i.e., promotion or prevention). Subjecting participants to a manipulation which highlights the positive outcomes of diversity is predicted to guide participants to develop pro-diversity beliefs through a promotion regulatory focus that matches the individual's positive framing of the goal. Evidence from this assertion comes from

## Changing Diversity Beliefs

Homan et al.'s (2007) study in which team members developed pro-diversity beliefs when being provided information about the positive impact of diversity on team performance. On the other hand, common approaches that manage diversity by using confronting methods that elicit negative emotional reactions can sometimes even increase anger towards members of other groups (Pendry et al., 2007), suggesting that emphasizing the negative outcomes of diversity might have a harmful effect on individual's beliefs about the value of diversity. Hence, when the challenges of team diversity are accentuated, individuals are more likely to develop less positive diversity beliefs by trying to avoid the negative outcomes of team diversity.

Hypothesis 1: Diversity framing will change individuals' diversity beliefs such that teams in the promotion diversity framing condition will exhibit greater diversity beliefs, than those teams participating in the prevention diversity framing condition.

ELT provides a dynamic and comprehensive view of the process of human learning from experience (A. Kolb \& Kolb, 2009). According to ELT, learning is the "process whereby knowledge is created through the transformation of experience" (D. Kolb, 1984: 41). Experience thus acts as an impetus for acquiring knowledge and then transforming it in order for learning to result (Kayes, 2002). There are two ways in which knowledge can be acquired according to ELT; apprehension or comprehension. Apprehension requires the individual to accept new knowledge through sensory perception and direct experience, while comprehension occurs when gathering knowledge through abstract concepts and symbolic representations (Kayes, 2002). In other words, one can learn by being taught information or by acquiring it through experience. In order for the person to learn however, he or she must also transform and integrate the acquired knowledge. This can be done so by reflecting upon previously acquired knowledge or by directly interacting with the external environment (Kayes, 2002).

## Changing Diversity Beliefs

In line with the learning process proposed by ELT, van Knippenberg, Ginkel, et al., (2013) content that experiences with individuals from various racial and cultural backgrounds are essential when wanting to make meaningful changes in peoples' diversity beliefs because accurate beliefs are primarily developed through experience with a team due to their teamspecific nature. For example, Marks, Sabella, Burke, \& Zaccaro, (2002) empirically showed that team-interaction knowledge (i.e., knowledge acquired through experience) facilitated team coordination and team performance. Team interaction is thus argued to be a key aspect for members to build a sufficient understanding of the team's diversity (van Knippenberg, Ginkel, et al., 2013). Once a team achieves an understanding of the team's diversity through experience, team members are better able to see the value of diversity and thus make changes to their existing diversity beliefs accordingly. In contrast, when team members acquire external information about the benefits of diversity, it is hypothesized that they are less likely to perceive the potential value of the diversity in the team and thus are less likely to make meaningful changes to their diversity beliefs.

Furthermore, a case study of a student's development of multicultural awareness and sensitivity showed that even though a student was taught about the value of diversity in her study program, her experience with diversity was critical in re-examining and enhancing her already pro-diversity beliefs (Garmon, 2004). Although the generalizability of the results based on one subject is limited, the study also provides preliminary evidence of the value of experience in the development of pro-diversity beliefs. In combination, the aforementioned studies and theoretical arguments suggest that knowledge acquired through experience, compared to when acquired through an external source, results in a more effective way in changing diversity beliefs as it leads to more accurate and long-lasting changes in the beliefs.

## Changing Diversity Beliefs

Previous research, however, has mainly focused on changing diversity beliefs through acquiring knowledge from an external source, without involving the concrete experiences of the individual. Homan et al., (2007) for example, successfully impacted team members' diversity beliefs by making participants read research providing evidence about the benefits of diversity on team process and outcomes. In order to determine whether involving concrete experience of individuals has a differential impact on changing diversity beliefs compared to providing knowledge through an external source (e.g., research), we aimed to manipulate team members' diversity beliefs by asking participants to either think about a past experience in working with a diverse other or read research about the effects of diversity in teams.

According to ELT theory, acquiring information is necessary but not sufficient for learning to occur as one also has to reflect on the acquired knowledge (Kayes, 2002). Reflection may thus, be an important tool for teams to develop their mental representation of their teamwork and ultimately improve team processes and performance (van Ginkel \& van Knippenberg, 2008). In this way, we asked participants to also reflect on what they learned from their experiences or knowledge of working with diverse others in order to encourage reexamination and change of their diversity beliefs. By comparing the effects of both types of learning through a clean experimental design, we aim to empirical prove that changing diversity beliefs is more effective when drawing on the experiences of participants than informing them about the effects of diversity through research.

Hypothesis 2: Learning type will change individuals' diversity beliefs such that teams in the experience condition will exhibit greater diversity beliefs, as opposed to teams in the knowledge condition.

The aim of the present research is to convince individuals to realize the value of diversity and thus develop more pro-diversity beliefs required to reap the benefits of diversity

## Changing Diversity Beliefs

outcomes. The most effective way to change individuals' diversity beliefs is expected to be a manipulation in which participants are guided to reflect about the positive learning points of an experience they have had with diverse others (i.e., promotion-experience condition). Selfreflection can magnify the positive impact of past experiences by encouraging people to think about the valuable lessons they have learned and devised ways in which they can apply it to future opportunities and challenges (Youssef \& Luthans, 2007). As mentioned in the previous sections, experience is thought result in the formation of a more accurate understanding of a team's diversity (van Knippenberg, Ginkel, et al., 2013). Thus, experience rather than receiving external information about the value of diversity is expected to result in greater diversity belief change. Thus, reflecting on evidence that highlights the positive outcomes of diversity (i.e., promotion-knowledge condition) is also expected to result in a more positive change of diversity beliefs, although to a lesser extent than when participants reflect about their own experience.

When reflecting on the challenges and negative outcomes of past experiences or knowledge about working with diverse others, on the other hand, individuals are likely to form less favorable diversity beliefs because they do not see the value of diversity. Individuals reflecting on their own negative experience with diversity others are expected to develop the least positive diversity beliefs (i.e., prevention-experience condition). Those reflecting on evidence emphasizing the negative outcomes of diversity are also expected to form less positive diversity beliefs but to a lesser extent than those reflecting on their own experiences (i.e., prevention-knowledge condition). Overall, an interaction between learning type and diversity framing is hypothesized, in which the most pro-diversity beliefs will result from the promotion-experience condition, followed by a promotion-knowledge condition, and then the prevention-knowledge condition. The least positive diversity belief change is expected to occur in the prevention-experience condition.

Hypothesis 3: The effects of diversity framing and learning type will interact when predicting diversity beliefs such that teams' diversity beliefs will undergo the most positive change when participating in the promotion-experience condition, followed by the promotionknowledge condition, then the prevention-knowledge condition and the least positive change in the prevention-experience condition.

## Diversity Beliefs and Information Elaboration

The categorization-elaboration model (CEM) provides a useful framework for differentiating the factors that contribute to the occurrence of either positive or negative outcomes of group diversity (van Knippenberg et al., 2004). As diverse teams have the advantage over homogenous teams of having a greater variety of resources and information, the key underlying process of the positive effects of diversity on group performance, according to the model, is the extent to which the team is able to elaborate on task-relevant information (i.e., information elaboration; (Homan et al., 2007; van Knippenberg et al., 2004). In order to do so, it is imperative that the team members not only have the ability to address the given task, but also avoid forming negative sub-group categorizations that obstruct the team on engaging on information elaboration (van Knippenberg et al., 2004).

An effective way to evade the negative effects of social categorization is believing in the value of diversity. Homan, Greer, Jehn, \& Koning (2010), empirically showed that individuals who valued diversity were more likely to define diversity in terms of individual differences and less likely to interpret diversity in terms of subgroups. In other words, individuals with positive diversity beliefs are less likely to form negative social categorizations. In turn, there is evidence that groups with low levels of social categorization are more likely to engage in information elaboration compared to groups with high levels of social categorization, even when diversity faultlines are strong (Meyer, Hasler, \& Shemla, 2010). The evidence of

## Changing Diversity Beliefs

both studies thus suggests that teams who have positive diversity beliefs are less likely to form negative social categories, which in turn, positively predicts information elaboration at the team level. The moderators highlighted in CEM that can negatively impact information elaboration are thus neutralized; namely identify the threat of social categorization and the extent to which the categorization results in relatively homogeneous categories (van Knippenberg et al., 2004).

More evidence about the positive relationship between diversity beliefs and information elaboration comes from research done by Homan et al., (2007), which found that informationally diverse teams outperformed homogeneous teams when they had pro-diversity beliefs rather than pro-similarity beliefs, through information elaboration. In other words, only when individuals held pro-diversity beliefs did the team engage in information elaboration (Homan et al., 2007). In line with the results, it is expected that team-specific diversity beliefs will positively predict team information elaboration.

Hypothesis 4: Diversity beliefs will positively influence team information elaboration such that teams who have more pro-diversity beliefs will have higher scores in information elaboration, as opposed to teams with less pro-diversity beliefs.

## Mediating Role of Diversity Beliefs

There is ample evidence of the central role of diversity beliefs in determining whether group diversity is an asset or a liability. For example, the relationship between perceived diversity and team identification is positive when individuals' hold pro-diversity beliefs (Hentschel et al., 2013; van Dick et al., 2008; van Knippenberg et al., 2007). There is also evidence that team creativity and decision-making performance is improved when diverse teams believe in the value of diversity (Homan et al., 2015, 2007). Moreover, diverse teams with pro-diversity beliefs are less likely to experience relationship conflict (Hentschel et al.,
2013). Together, the studies point out the value of team members' diversity beliefs to obtain the positive effects of diversity.

Research has also pointed out that teams believing in the value of diversity are better able to convert individual differences in the team as a resource, compared to teams composed of individuals with less favorable diversity beliefs (Homan et al., 2015). Presumably, the reason being that pro-diversity beliefs may increase the likelihood that group members actively gather new information and perspectives from fellow group members and thereby, stimulate performance (Homan et al., 2007). It was also previously argued that a manipulation highlighting the positive effects of diversity (vs negative) based on previous experience (vs knowledge) will lead to more favorable diversity beliefs. It is thus expected that teams whose team members developed more pro-diversity beliefs resulting from manipulating their way of learning about diversity and their framing of diversity, will be more likely to engage in information elaboration.

Hypothesis 5: Diversity beliefs mediate the effect of diversity framing and learning type on team information elaboration.

## Method

## Sample

The target population of the current study were bachelor students enrolled at Erasmus University of Rotterdam. A total of 907 students were assigned to the workshops, of which 70 participants were excluded due to missing data or because participants began the questionnaire 10 minutes later than the start of the training. In the final sample, $51 \%$ of the participants were male, $39.9 \%$ were female, and data was missing from $8.6 \%$. Regarding the nationality of the sample $55.6 \%$ participants were Dutch, $35.8 \%$ had nationalities from other countries (e.g.,

## Changing Diversity Beliefs

America, Belgian, Colombian, etc.), and data was missing from 8.6\%. In total, the final sample consisted of 837 participants from which 203 teams were formed. Eight teams were composed on the day of the workshop when groups were less than three members. This happened because some participants failed to attend the workshop or arrived late (i.e., after the start of the training). To test the conditions, 53 teams participated in the promotion-experience, 44 for prevention-experience, 46 for prevention-knowledge, and 60 for promotion-knowledge.

## Procedure

Students participated in the team workshop as of the Human Resource course at the University. All students were assigned to one of four conditions, from which groups consisting of 3-6 members were formed previous to the start of the workshop. The assignment of participants to teams was done by the Program Manager of the Business Administration program. Each condition was tested twice. Two different presenters involved with the present study conducted the workshops. A script was previously determined so as to reduce variations stemming from the presenters' characteristics.

The workshop was divided into three parts. At the start of the workshop, students were asked to sit with their groups. Before starting with the introduction, the presenter made sure that all teams consisted of three to six members, otherwise a new group was formed for this workshop. A short introduction about the aim and the agenda of the workshop was communicated. The introduction consisted of describing the importance of learning to work in teams as well as stating that the goal of the workshop was for the students to get to know their team before the start of their course. Then participants were instructed to fill in the first part of an online questionnaire individually, as a warm-up exercise. This included the demographic measures and the experimental condition, followed by a manipulation check.

## Changing Diversity Beliefs

The second part of the workshop consisted of a decision-making task; team charter task. In the team charter task, each member had to state if he/she agreed or disagreed with ten statements about group dynamics. Later, individuals were instructed to discuss the statements with their groups so as to determine the rules of interaction within the team for the future. Groups were asked to write how they managed to solve disagreements that emerged from the discussion of the statements. Previous to the workshop, the same team charter task with 20 statements was done by Master of Business Administration (MBA) students. The statements were reduced for the purpose of the study as they were observed to induce the most disagreements within the team.

The third part of the workshop included a final questionnaire intended to capture team processes resulting from the team charter task. After everyone was finished with the online questionnaire, a full debrief on the goal of the team charter task as well as key takeaways of the workshop was given. The workshops had an approximate duration of 1 hour and 45 minutes in total.

Manipulations. The $2 \times 2$ experimental design intended to change diversity beliefs focused on manipulating participant's type of learning (knowledge vs experience) and diversity framing (promotion vs prevention).

Condition 1: promotion-experience. Participants were asked to think of a person that was different from them in some way and describe their relationship with that person in detail. No instructions were given on whether this interaction had to be positive or negative in nature. Then, participants were asked to define one learning point of that interaction.

Condition 2: prevention-experience. Participants were asked to think of a person that was different from them in some way and describe their relationship with that person in detail. No instructions were given on whether this interaction had to be positive or negative in nature.

## Changing Diversity Beliefs

Then, participants were asked to identify the difficulties they had in interacting with that person and describe how they could avoid similar challenges in the future.

Condition 3: prevention-knowledge. Participants were instructed to read a fictitious study about the benefits of diversity for the team and the individual. Afterwards, they were asked to describe one learning point from the research.

Condition 4: promotion-knowledge. Participants were instructed to read a fictitious study about the negative effects of diversity on the team and the individual. Afterwards, they were asked to name one learning point from the research.

## Measures

Manipulation check. A four-item scale was created in order to check whether each condition had the desired effects. The scale measured the extent to which the study participants' perceived learning type (knowledge vs experience) and diversity framing (positive vs negative). An example item for measuring the knowledge condition was "The previous exercise helped understand that there is scientific evidence that working in a diverse team improves performance". Responses were given on a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Perceived Diversity. In order to measure the degree of diversity in teams, developed by van Dick et al., (2008) was used. An example of an item is "The members of my team vary widely in their background". Responses were rated on a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), with a reliability of $\alpha=.87$. The average inter-rater agreement of teams was $\operatorname{ICC}(1) .68, F(203,406) 7.41, p<.001$ and $\operatorname{ICC}(2) .741$.

Diversity beliefs. Diversity beliefs were measured based on two items of the scale developed by Homan, Greer, Jehn, and Koning, (2010). Two additional self-developed items were incorporated to the scale. The adapted scale thus includes the following four items: "I have personally experienced that diversity is a good thing", "I believe that diversity in teams will help us in the task", " I enjoy working together with diverse people in a team", and "I feel enthusiastic about diversity in my team". The four items measured individual's diversity beliefs after the training ( $\alpha=.82$ ). Responses were given on a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The average inter-rater agreement of teams was ICC(1) .58, $F(203,609) 6.55, p<.001$ and $\operatorname{ICC}(2) .847$.

Information-elaboration. Measured based on a previously developed scale from Homan et al. (2007). The four items measured the extent to which group members shared and elaborated on information to complete the task. An example of an item is "The group members complemented each other by openly sharing knowledge during the group task". Responses were rated on a Likert scale ranging from 1 (strongly agree) to 5 (strongly disagree), with a reliability of $\alpha=.76$. The average inter-rater agreement of teams was $\operatorname{ICC}(1) .52, F(203,609)$ $5.38, p<.001$ and $\operatorname{ICC}(2) .814$.

## Results

## Descriptive Statistics

Table 1 shows the means, standard deviations, and correlations between diversity beliefs, information elaboration at the team level, and perceived diversity. Perceived diversity was used as a measure for the degree of diversity in teams, the average of the perceived diversity in teams is stated in the table below.

## INSERT TABLE 1 HERE

## Manipulation Checks

Separate independent sample t-test analyses were conducted to determine whether the conditions had their intended effect on participants at the team level. There was a significant difference in the scores for knowledge $(\mathrm{M}=3.26, \mathrm{SD}=1.08)$ and experience $(\mathrm{M}=2.84, \mathrm{SD}=$ .53) in the knowledge condition; $\mathrm{t}(201)=3.49, \mathrm{p}=.001$. Similarly, experience scores $(\mathrm{M}=3.58$, $\mathrm{SD}=.48$ ) were significantly higher in the experience condition compared to knowledge scores $(\mathrm{M}=3.08, \mathrm{SD}=.52, \mathrm{t}(201)=-7.16, \mathrm{p}<.001)$. These results suggest, that the manipulation checks for learning type (i.e., knowledge and experience conditions) were successful.

Similarly, there was a significant difference in the scores for the prevention $(M=3.08$, $\mathrm{SD}=.68$ ) and promotion diversity framing ( $\mathrm{M}=3.90, \mathrm{SD}=.40$ ) in the promotion diversity framing condition; $\mathrm{t}(201)=-10.70, \mathrm{p}<.001$. The difference in the scores for prevention $(\mathrm{M}=3.69$, $\mathrm{SD}=.57$ ) and promotion diversity framing ( $\mathrm{M}=2.76, \mathrm{SD}=.75$ ) in the prevention diversity framing condition were also statistically significant $\mathrm{t}(201)=9.80, \mathrm{p}<.001$. These results suggest, that the manipulation checks for diversity framing (i.e., promotion and prevention conditions) were successful.

## Diversity Framing, Leaning Type, and Diversity Beliefs

A two-way ANOVA was conducted to examine the effect of diversity framing (i.e., promotion and prevention) and learning type (i.e., experience and knowledge) on teams' diversity beliefs. In line with hypothesis 1 , simple main effects analysis showed that teams that participated in the promotion diversity framing condition had significantly more pro-diversity

## Changing Diversity Beliefs

beliefs than participants in the prevention diversity framing condition $\mathrm{F}(3051)=5.91, \mathrm{p}=$ .016. Hypothesis 2 was also supported by the analysis as teams in the experience condition had significantly more pro-diversity beliefs than those that participated in the knowledge condition $\mathrm{F}(3051)=5.51, \mathrm{p}=.020$. The interaction between diversity framing and type of learning on diversity beliefs was not statistically significant, $\mathrm{F}(3051)=1.96, \mathrm{p}=.163$, and so hypothesis 3 was not supported. As illustrated in Table 2 and Figure 2, the results show an additive effect of diversity framing and learning type in which teams in the experience condition experienced a greater positive change in their diversity beliefs than those in the knowledge condition. Similarly, a diversity training inducing a promotion diversity framing was shown to be superior to a diversity training using a prevention diversity framing.

INSERT TABLE 2 HERE
$\qquad$
$\qquad$
INSERT FIGURE 2 HERE

## Diversity Beliefs and Information Elaboration

A simple linear regression was calculated to predict information elaboration based on diversity beliefs at the team level. A significant regression equation was found $(\mathrm{F}(1$, $201)=61.62, p<.001$ ), with an $R^{2}$ of .235 indicating support for hypothesis 4 (refer to Table 1 for results). Teams' predicted weight is equal to $2.61+.37$ (diversity beliefs) points when diversity beliefs are measured on a 1-5 Likert scale. Teams' information elaboration increased .37 for each point of diversity beliefs.

## Mediation Analysis

As recommended by Hayes (2013), nonparametric bootstrapping analyses were used to test the meditational model of diversity beliefs as a mediator of the relationship between diversity framing and information elaboration at the team level. In these analyses, mediation is significant if the $95 \%$ Bias Corrected and accelerated confidence intervals for the indirect effect do not include 0 (Preacher \& Hayes, 2004; Preacher, Rucker, \& Hayes, 2007). Separate analyses were made in order to test the effect of two independent variables (i.e., diversity framing and learning type). Following the recommendation of Hayes (2013) for the estimation of a model with multiple independent variables, one independent variable was controlled while testing the mediation model of the other.

Results based on 5000 bootstrapped samples indicated that the indirect effect of diversity framing on information elaboration mediated by diversity beliefs was significant (IE lower $95 \% \mathrm{CI}=.012$, upper $95 \% \mathrm{CI}=.099$ ). Participants had more positive diversity scores in the promotion diversity framing condition compared to the prevention diversity framing condition ( $\mathrm{a}=.14$ ). Diversity beliefs in turn positively predicted information elaboration in the team $(\mathrm{b}=.40)$. The same analysis was used to test the meditational model of diversity beliefs as a mediator of the relationship between learning type and information elaboration. Results based on 5000 bootstrapped samples indicated that diversity beliefs partially mediated the relationship between learning type and information elaboration in the team. The indirect effect of learning type on information elaboration mediated by diversity beliefs was a significant (IE lower $95 \% \mathrm{CI}=.004$, upper $95 \% \mathrm{CI}=.095$ ). Teams in the experience learning type condition compared to the knowledge condition $(a=.12)$ had more pro-diversity beliefs and thus, were more likely to show information elaboration $(\mathrm{b}=.40)$. Overall, the results of both mediation analyses support hypothesis 5. Diversity beliefs mediated the relationship of diversity framing
and information elaboration, as well as the relationship of learning type and information elaboration.

## Supplementary analyses

Supplementary analyses were conducted in order to examine (1) whether diversity beliefs measuring team-specific attitudes and diversity beliefs measuring general/societal beliefs had a differential effect on predicting information elaboration, (2) if diversity beliefs also mediate the relationship between the manipulations and information elaboration after 2 months, (3) whether team-specific diversity beliefs also mediate the relationship between the manipulations and integrative behaviors as rated by others (i.e., objective measure of information elaboration).

Method. The same sample was used to conduct all supplementary analyses. Data of the same participants were collected two months after. Of the 203 teams which participated in the workshop, 198 answered the survey two months after.

## Additional measures.

General diversity beliefs. General diversity beliefs were measured based on two items of the scale developed by Homan, Greer, Jehn, and Koning, (2010). Two additional selfdeveloped items were adapted to the scale. The adapted scale thus includes the following four items: "Diversity is an asset for teams", "Diversity leads to better team outcomes", "Teams should be composed of diverse people", "Diversity is a good thing for teams". The four items measured individual's diversity beliefs after the training ( $\alpha=.85$ ). Responses were given on a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The average inter-rater agreement of teams was $\operatorname{ICC}(1) .61, F(203,609) 7.12, p<.001$ and $\operatorname{ICC}(2) .860$.

Information elaboration at time 2. Measured based on a previously developed scale from Homan et al. (2007). The four items measured the extent to which group members shared and elaborated on information to complete the task. An example of an item is "The group members complemented each other by openly sharing knowledge during the group task". Responses were rated on a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), with a reliability of $\alpha=.85$. The average inter-rater agreement of teams was $\operatorname{ICC}(1) .66, F(203$, 609) $8.47, p<.001$ and ICC(2) . 882 .

Integrative Behavior. A self-developed item was created to objectively measure of information elaboration by rating the extent to which participants perceived their team members to integrate their perspectives into their own ideas. The item used was "How much did this person include the perspective of others in their own thinking?". Responses were given on a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Descriptive statistics. Table 3 shows the means, standard deviations, and correlations at the team level between team-specific and general diversity beliefs, information elaboration at times 1 and 2 , and integrative behavior as rated by others. Again, the degree of diversity in teams was measured using the perceived diversity scale.

## INSERT TABLE 3 HERE

Comparison of diversity beliefs. A double mediation analysis was used to test the expectation that team-specific diversity beliefs would be a better predictor information elaboration compared to general diversity beliefs after participating in a short manipulation. Separate analyses were made in order to test the effect of the two independent variables (i.e., diversity framing and learning type). Following the recommendation of Hayes (2013) for the
estimation of a model with multiple independent variables, one independent variable was controlled while testing the mediation model of the other.

In line with previously reported results, both the team-specific and general diversity beliefs of teams in the promotion diversity framing condition were more positively affected than the prevention diversity framing condition $\left(a_{p}=.14, \mathrm{SE}_{\mathrm{p}}=.06, p_{p}=.014 ; a_{g}=.39, \mathrm{SE}_{\mathrm{g}}=\right.$ $\left..06, p_{g}<.000\right)$. Similarly, teams in the experience condition were more positively affected than those in the knowledge condition $\left(a_{p}=.12, \mathrm{SE}_{\mathrm{p}}=.06, p_{p}=.029 ; a_{g}=.16, \mathrm{SE}_{\mathrm{g}}=.05, p_{g}<\right.$ .001). Only team-specific diversity beliefs however, predicted subsequent information elaboration $\left(b_{p}=.42, \mathrm{SE}_{\mathrm{p}}=.07, p_{p}<.001 ; b_{g}=-.03, \mathrm{SE}_{\mathrm{g}}=.07, p_{g}=.691\right)$.

A bias-corrected bootstrap confidence interval for the indirect effect of team-specific diversity beliefs based on 5,000 bootstrap samples was above zero when either diversity framing (IE lower 95\% $\mathrm{CI}=.013$, upper $95 \% \mathrm{CI}=.109$ ) or learning type ( IE lower $95 \% \mathrm{CI}=$ .011 , upper $95 \% \mathrm{CI}=.109$ ) were independent variables. The indirect effect of general diversity beliefs, on the other hand, was not significant when either diversity framing (IE lower 95\% CI $=-.062$, upper $95 \% \mathrm{CI}=.039$ ) or learning type (IE lower $95 \% \mathrm{CI}=-.061$, upper $95 \% \mathrm{CI}=.036$ ) were independent variables. The results thus, support the expectations that team-specific and general diversity beliefs differ in their predictive validity of subsequent team information elaboration.

Information elaboration at time 2. A mediation analysis was conducted to test the expectation that team-specific diversity beliefs also mediate the relationship between a brief manipulation and information elaboration after 2 months. Separate analyses were made in order to test the effect of the two independent variables (i.e., diversity framing and learning type). Following the recommendation of Hayes (2013) for the estimation of a model with multiple

## Changing Diversity Beliefs

independent variables, one independent variable was controlled while testing the mediation model of the other.

Results based on 5000 bootstrapped samples indicated that the indirect effect of diversity framing on information elaboration at time 2 mediated by team-specific diversity beliefs was significant (IE lower 95\% $\mathrm{CI}=.004$, upper $95 \% \mathrm{CI}=.077$ ). Participants had more positive diversity scores in the promotion diversity framing condition compared to the prevention diversity framing condition $(a=.13)$. Team-specific diversity beliefs in turn positively predicted information elaboration at time 2 in the team $(b=.27)$. The same analysis was used to test the meditational model of team-specific diversity beliefs as a mediator of the relationship between learning type and information elaboration at time 2 . Results based on 5000 bootstrapped samples indicated that team-specific diversity beliefs mediated the relationship between learning type and information elaboration at time 2 in the team. The indirect effect of learning type on information elaboration at time 2 mediated by team-specific diversity was a significant (IE lower $95 \% \mathrm{CI}=.000$, upper $95 \% \mathrm{CI}=.079$ ). Teams in the experience learning type condition compared to the knowledge condition ( $\mathrm{a}=.12$ ) had more pro-diversity beliefs and thus, were more likely to show information elaboration at time $2(\mathrm{~b}=$ .27). The results thus indicate the mediation of team-specific diversity beliefs on both, the relationship between diversity framing and information elaboration at time 2 , and that between learning type and information elaboration at time 2.

Integrative behavior. A mediation analysis was conducted to test the expectation that specific diversity beliefs also mediate the relationship between a brief manipulation of individuals' diversity framing and learning type and integrative behavior as rated by others (i.e., objective measure of information elaboration). Separate analyses were made in order to test the effect of the two independent variables (i.e., diversity framing and learning type). Following the recommendation of Hayes (2013) for the estimation of a model with multiple

## Changing Diversity Beliefs

independent variables, one independent variable was controlled while testing the mediation model of the other.

Results based on 5000 bootstrapped samples indicated that the indirect effect of diversity framing on integrative behavior mediated by team-specific diversity beliefs was significant (IE lower 95\% CI=.008, upper 95\% CI=.0830). Participants had more positive diversity scores in the promotion diversity framing condition compared to the prevention diversity framing condition $(\mathrm{a}=.15)$. Team-specific diversity beliefs in turn positively predicted integrative behavior in the team $(\mathrm{b}=.28)$. The same analysis was used to test the meditational model of team-specific diversity beliefs as a mediator of the relationship between learning type and integrative behavior. Results based on 5000 bootstrapped samples indicated that team-specific diversity beliefs partially mediated the relationship between learning type and integrative behavior in the team. The indirect effect of learning type on integrative behavior mediated by team-specific diversity was a significant (IE lower 95\% CI=.003, upper 95\% $\mathrm{CI}=.071$ ). Teams in the experience learning type condition compared to the knowledge condition ( $\mathrm{a}=.12$ ) had more pro-diversity beliefs and thus, were more likely to show integrative behaviors $(\mathrm{b}=.28)$. The results thus indicate a full mediation of team-specific diversity beliefs on the relationship between diversity framing and integrative behaviors, as well as on the relationship between learning type and integrative behaviors.

## Discussion

Overall, the aim of the present research was to examine how diversity beliefs can best be changed in order to reap the benefits of team diversity and avoid its negative outcomes. To do so, the objectives of the study included 1) determining the most effective way of changing diversity beliefs by comparing the differential effects of diversity framing and the way of learning about diversity and 2) establishing the predictive validity of the proposed

## Changing Diversity Beliefs

manipulations on information elaboration through team-specific diversity beliefs. Although the interaction hypothesis was not supported, we found that both diversity framing and learning type had an additive effect in positively altering participants' diversity beliefs, which in turn predicted team information elaboration. Interestingly, only team-specific diversity beliefs, and not general diversity beliefs, mediated the relationship between the brief manipulations and information elaboration. The effects were sustained even after two months of the workshop.

Team members who participated in a manipulation inducing a promotion framing of diversity changed their diversity beliefs to a greater extent than those in a manipulation encouraging a prevention framing of diversity. Highlighting the benefits of working with diverse others thus make individuals view the value of diversity compared to a manipulation that emphasizes the challenges and negative outcomes of diversity. It is argued that individuals formed promotion focus goals when guided to focus on the positive outcomes of working with diverse others. This encouraged individuals to adopt positive diversity beliefs that increased the likelihood of attaining the positive outcomes of diversity. The predictive validity of diversity framing on information elaboration, through diversity beliefs, provide evidence for van Knippenberg et al's., (2013) assertion that individuals' regulatory focus is predictive of the relationship between diversity and performance. More specifically, pro-diversity beliefs, through adopting a promotion regulatory focus, were more effective in inducing individuals to actively pursue the benefits of diversity (i.e., information elaboration) compared to adopting a prevention regulatory focus (van Knippenberg et al., 2013).

It was predicted that a manipulation that taps into participants' personal experience experiences with diverse others would result in a greater diversity belief change than when reading about the scientific evidence about diversity. Participants in the experience condition were likely to change their beliefs about the value of diversity, compared to those in the

## Changing Diversity Beliefs

knowledge condition, because they were better able to see the value of diversity and make changes to their beliefs accordingly. The results support ELT's assertion for the relevance of experience for learning (D. Kolb, 1984) and its valuable role for motivating participants to reexamine their diversity beliefs as previously argued by van Knippenberg, Ginkel, et al., (2013). The present study also builds on the findings of Homan et al. (2007) by showing that manipulating team members' experience with diverse others induces a greater change in diversity beliefs compared to simply acquiring knowledge about the benefits of diversity.

Together, the results of the present research show that involving the experience of participants with diversity others and guiding them to focus on what they learned from the experience, is a more efficient way to change employees' diversity beliefs. Our study thus makes a theoretical contribution to the diversity literature by shedding light on the underlying mechanisms of diversity beliefs change. More specifically, we identify diversity framing and type of learning as two variables that are able to effectively change individuals' beliefs about the value of diversity. So far, the diversity literature has focused on the predictive validity of diversity beliefs instead of examining the factors that contribute to it. Hopefully, the results of this research will provide scholars with an incentive for exploring how diversity can best be changed in order to benefit from the positive effects of diversity and avoid the negative ones.

Only through diversity beliefs did the manipulations had an effect on the extent to which teams engaged in information elaboration, even after two months after the workshop. This highlights the important role of diversity beliefs in reaping the benefits of working with diverse teams. Trainings which ignore participants' diversity beliefs might thus not be successful in achieving their goals, explaining in part the inconsistency and lack effectiveness of many diversity trainings. Our second theoretical contributes lies in establishing the effects of diversity beliefs on important team processes such as information elaboration. Previous

## Changing Diversity Beliefs

research has established the positive relationship between information elaboration and diversity beliefs (Homan et al., 2007; Meyer et al., 2010; van Knippenberg et al., 2004), and while we replicate the results, we are among the first to demonstrate that the effects are longlasting. By uncovering the underlying mechanisms of diversity belief change, the proposed conceptual model also provided preliminary evidence for the effectiveness of a training that incorporates both a positive diversity framing and the experience of participants. Practitioners are advised to incorporating these aspects in trainings when wanting to encourage teams to elaborate on task-relevant information, through team-specific diversity beliefs. When teams engage in information elaboration, it is expected that they will be better able to improve their performance.

Relying exclusively on single-source measures however, is problematic because (a) common method assessments may inflate relationships and (b) outcome ratings looking at the perception of a relationship are not necessarily a consequence of diversity but are rather dictated by the diversity beliefs of the individual (van Knippenberg, Homan, et al., 2013). Moreover, self-report measures are also questionable because they have sometimes been shown to correlate poorly with measures rated by others (van Knippenberg, Homan, et al., 2013). In order to reduce the limitations of relying on a single-source and self-report measure of information elaboration, an item intended to objectively measure information elaboration was introduced to the study. As expected and consistent with our previous results, the same pattern emerged when examining others' ratings of information elaboration. In other words, diversity framing and leaning type through team-specific diversity beliefs also predicted the extent to which participants' perceived members in a team to integrate each other perspectives to their own.

## Changing Diversity Beliefs

Finally, a supplementary analysis comparing general and team-specific diversity beliefs determined the importance of making a distinction between the two measurement levels of diversity beliefs. Although both general and specific diversity beliefs were affected by the brief manipulations of the study, only team-specific diversity beliefs predicted subsequent team information elaboration. The indirect effect of general diversity beliefs on team information elaboration, on the other hand, was not significant. Results are thus in line with research from other disciplines showing that specific attitudes are a better predictor of behavior than general attitudes (Ajzen \& Cote, 2011; Ajzen \& Timko, 1986), which have great implications in the way diversity beliefs are currently measured. The present research hopes to contribute to reducing the great variability in the measurement of diversity beliefs by providing the distinctive effects that general and team-specific beliefs can have on behavior. When wanting to predict behaviors, scholars and practitioners are advised to focus on the measurement of team-specific beliefs and not general ones. Previous research in the diversity literature has not made this distinction, which might explain the inconsistency in results or lack of significance when predicting behavior.

## Limitations and Future Research

Although the present research provides reasonable and constructive evidence to the ability to manipulate team members' diversity beliefs to unlocking the benefits of diverse teams, some limitations have to be acknowledged. First, it was not explicitly tested whether individuals changed their diversity beliefs due to developing promotion or prevention focus goals. No explicit measure was included in the study to confirm this assertion. Future research should include a measure of the regulatory focus of participants to confirm if it is in fact, partly responsible for the development of diversity beliefs as argued by van Knippenberg et al. (2013).

## Changing Diversity Beliefs

Second, although the measures of general and team-specific diversity belief were based on a previously validated scale (Homan et al., 2007), the additional items incorporated to the general and team-specific diversity belief scale were not validated. The present research thus provides preliminary evidence for the usefulness and predictive validity of separating items that measure team-specific or general diversity beliefs. Similarly, the additional item of integrative behavior was not validated and was self-developed. The present study provides preliminary evidence to the reliability and validity of both measures, but future research should utilize the measure to establish its generalizability for different samples such as in the working population. More research that replicates the results and confirms the validity of the scales should be conducted in order to make concrete conclusions about the value of separate diversity belief measures.

Another valuable recommendation for future research is including a team performance measure (e.g., decision-making task) in the conceptual framework of the present study. The results obtained in this study replicating the study, show that changing participants' diversity beliefs through manipulating their diversity framing and type of learning, is beneficial for encouraging teams to engage in information elaboration. Although previous research has established the value of information elaboration as a key process for unlocking the benefits of diverse teams (Homan, van Knippenberg, Van Kleef, \& De Dreu, 2007; Resick, Murase, Randall, \& Dechurch, 2014; van Ginkel \& van Knippenberg, 2008; van Knippenberg, De Dreu, \& Homan, 2004), it is valuable to explicitly determine whether this is the case. Thus, studies wanting to replicate or build on the results of the present study should explicitly examine the effects of team information elaboration on team performance.

## Conclusion

Diversity in teams is a double edge sword, and research regarding the conditions under which diversity leads to beneficial outcomes is still developing. The findings of the present research indicate that team-specific diversity beliefs play a significant role in managing the double edge sword of team diversity. More specifically, it was observed that team members' diversity beliefs were changed through manipulating the way they learned about diversity as well as the way in which they framed diversity. In turn, developing more pro-diversity beliefs predicted team information elaboration; a key process for improved team performance. The results suggest these manipulations can be used for an effective diversity training, but further research examining this is needed in order to make concrete conclusions. Furthermore, we hope that by providing evidence for the differential effects that team-specific and general diversity beliefs have on predicting behavior, scholars will be encouraged to conduct more research on the value of these two new measures.

## References

Ajzen, I., \& Cote, N. G. (2011). Attitudes and the prediction of behavior. In Attitudes and Attitude Change. https://doi.org/10.4324/9780203838068

Ajzen, I., \& Timko, C. (1986). Correspondence Between Health Attitudes and Behavior. Basic and Applied Social Psychology. https://doi.org/10.1207/s15324834basp0704_2

Crowe, E., \& Higgins, E. T. (1997). Regulatory focus and strategic inclinations: Promotion and prevention in decision-making. Organizational Behavior and Human Decision Processes. https://doi.org/10.1006/obhd.1996.2675

Friedman, R. S., \& Förster, J. (2001). The effects of promotion and prevention cues on creativity. Journal of Personality and Social Psychology. https://doi.org/10.1037/00223514.81.6.1001

Garmon, M. A. (2004). Changing preservice teachers' attitudes/beliefs about diversity: What are the critical factors? Journal of Teacher Education. https://doi.org/10.1177/0022487104263080

Hayes, A. F. (2013). Introduction to Mediation, Moderation and Conditional Process Analysis. Journal of Chemical Information and Modeling. https://doi.org/10.1017/CBO9781107415324.004

Hentschel, T., Shemla, M., Wegge, J., \& Kearney, E. (2013). Perceived Diversity and Team Functioning: The Role of Diversity Beliefs and Affect. Small Group Research, 44(1), 33-61. https://doi.org/10.1177/1046496412470725

Higgins, E. T. (1998). Promotion and Prevention: Regulatory Focus as A Motivational Principle. Advances in Experimental Social Psychology. https://doi.org/10.1016/S0065-

2601(08)60381-0

Homan, A. C., Buengeler, C., Eckhoff, R. A., van Ginkel, W. P., \& Voelpel, S. C. (2015). The interplay of diversity training and diversity beliefs on team creativity in nationality diverse teams. Journal of Applied Psychology, 100(5), 1456-1467. https://doi.org/10.1037/apl0000013

Homan, A. C., Greer, L. L., Jehn, K. A., \& Koning, L. (2010). Believing shapes seeing: The impact of diversity beliefs on the construal of group composition. Group Processes and Intergroup Relations, 13(4), 477-493. https://doi.org/10.1177/1368430209350747

Homan, A. C., van Knippenberg, D., van Kleef, G. A., \& de Dreu, C. K. W. (2007). Bridging Faultlines by Valuing Diversity: Diversity Beliefs, Information Elaboration, and Performance in Diverse Work Groups. Journal of Applied Psychology, 92(5), 11891199. https://doi.org/10.1037/0021-9010.92.5.1189

Kauff, M., \& Wagner, U. (2012). Valuable therefore not threatening: The influence of diversity beliefs on discrimination against immigrants. Social Psychological and Personality Science, 3(6), 714-721. https://doi.org/10.1177/1948550611435942

Kayes, D. . (2002). Experiential Learning and Its Critics. Academy of Management Learning and Education. https://doi.org/1 (2)

Keller, J., Mayo, R., Greifeneder, R., \& Pfattheicher, S. (2015). Regulatory focus and generalized trust: The impact of prevention-focused self-regulation on trusting others. Frontiers in Psychology. https://doi.org/10.3389/fpsyg.2015.00254

Kolb, A., \& Kolb, D. (2009). Experiential learning theory: A dynamic, holistic approach to management learning, education and development. In The SAGE Handbook of

Changing Diversity Beliefs

Management Learning, Education and Development.
https://doi.org/10.4135/9780857021038.n3

Kolb, D. (1984). Experiential learning: Experience as the source of learning and development, David A. Kolb, Prentice-Hall International, Hemel Hempstead, Herts., 1984. No. of pages: xiii +256 . Journal of Organizational Behavior. https://doi.org/10.1002/job. 4030080408

Marks, M. A., Sabella, M. J., Burke, C. S., \& Zaccaro, S. J. (2002). The impact of crosstraining on team effectiveness. The Journal of Applied Psychology. https://doi.org/10.1037/0021-9010.87.1.3

Meyer, B., Hasler, B. S., \& Shemla, M. (2010). A note of caution against treating diversity faultlines as social category salience and against treating diversity beliefs as a trait. International Workshop on Team Working at the EAWOP Small Group Meeting, (June 2015). Retrieved from
https://www.researchgate.net/publication/277889520_A_note_of_caution_against_treati ng_diversity_faultlines_as_social_category_salience_and_against_treating_diversity_be liefs_as_a_trait

Pendry, L. F., Driscoll, D. M., \& Field, S. C. T. (2007). Diversity training: Putting theory into practice. Journal of Occupational and Organizational Psychology. https://doi.org/10.1348/096317906X118397

Preacher, K. J., \& Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. Behavior Research Methods, Instruments, and Computers. https://doi.org/10.3758/BF03206553

Preacher, K. J., Rucker, D. D., \& Hayes, A. F. (2007). Addressing moderated mediation
hypotheses: Theory, methods, and prescriptions. Multivariate Behavioral Research. https://doi.org/10.1080/00273170701341316

Stanley, L. S. (1996). The development and validation of an instrument to assess attitudes toward cultural diversity and pluralism among preservice physiclal educators. Educational and Psychological Measurement. https://doi.org/10.1177/0013164496056005017
van Dick, R., van Knippenberg, D., Hägele, S., Guillaume, Y. R. F., \& Brodbeck, F. C. (2008). Group diversity and group identification: The moderating role of diversity beliefs. Human Relations, 61(10), 1463-1492.
https://doi.org/10.1177/0018726708095711
van Ginkel, W. P., \& van Knippenberg, D. (2008). Group information elaboration and group decision making: The role of shared task representations. Organizational Behavior and Human Decision Processes, 105(1), 82-97. https://doi.org/10.1016/j.obhdp.2007.08.005
van Knippenberg, D., de Dreu, C. K. W., \& Homan, A. C. (2004). Work group diversity and group performance: An integrative model and research agenda. Journal of Applied Psychology, 89(6), 1008-1022. https://doi.org/10.1037/0021-9010.89.6.1008
van Knippenberg, D., Ginkel, W. P. Van, \& Homan, A. C. (2013). Organizational Behavior and Human Decision Processes Diversity mindsets and the performance of diverse teams. Organizational Behavior and Human Decision, 121(2), 183-193. https://doi.org/10.1016/j.obhdp.2013.03.003
van Knippenberg, D., Haslam, S. A., \& Platow, M. J. (2007). Unity Through Diversity: Value-in-Diversity Beliefs, Work Group Diversity, and Group Identification. Group Dynamics, 11(3), 207-222. https://doi.org/10.1037/1089-2699.11.3.207
van Knippenberg, D., Homan, A. C., \& van Ginkel, W. P. (2013). Diversity cognition and climates. In The Oxford handbook of diversity and work.
van Knippenberg, D., \& Schippers, M. C. (2006). Work Group Diversity. Annual Review of Psychology. https://doi.org/10.1146/annurev.psych.58.110405.085546

Weigel, R. H., Vernon, D. T., \& Tognacci, L. N. (1974). Specificity of the attitude as a determinant of attitude-behavior congruence. Journal of Personality and Social Psychology. https://doi.org/10.1037/h0037540

Youssef, C. M., \& Luthans, F. (2007). Emerging Positive Organizational Behavior. Journal of Management. https://doi.org/10.1177/0149206307305562


Figure 1: Conceptual Model

Table 1

Means, standard deviations, and inter-correlations of model

|  | $M$ | $S D$ | 1 | 2 |
| :--- | :--- | :--- | :--- | :--- |
| 1.Diversity beliefs | 3.86 | .40 |  |  |
| 2.Information <br> elaboration | 4.03 | .31 | $.485^{* *}$ |  |
| 3.Perceived <br> Diversity | 3.24 | .67 | $.363^{* *}$ | $.376^{* *}$ |

Notes: Cronbach's alphas are displayed on the diagonal. $* p<.05$, ** $p$ <. 01

## Table 2

Means and standard deviations of specific diversity beliefs for each diversity training condition

| Independent variables | Conditions | $M$ | $S D$ |
| :--- | :--- | :--- | :--- | :--- |
| Diversity framing | Negative | 3.78 | .04 |
|  | Positive | 3.92 | .04 |
| Type of Learning | Knowledge | 3.78 | .04 |
|  | Experience | 3.92 | .04 |

## Changing Diversity Beliefs



Figure 2. Effects of diversity framing and learning type on specific diversity beliefs at the team level.

Table 3

Means, standard deviations, and inter-correlations

|  | $M$ | $S D$ | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1.Diversity <br> beliefs | 3.86 | .40 |  |  |  |  |  |
| 2.General <br> diversity | 3.79 | .44 | $.706^{* *}$ |  |  |  |  |
| beliefs |  |  |  |  |  |  |  |
| 3.Information <br> elaboration | 4.03 | .31 | $.485^{* *}$ | $.271^{* *}$ |  |  |  |
| 4.Information <br> elaboration at <br> time 2 | 3.85 | .44 | $.259^{* *}$ | $.164^{*}$ | $.316^{* *}$ |  |  |
| 5.Integrative <br> behavior | 4.44 | .39 | $.280^{* *}$ | .134 | $.502^{* *}$ | $.202^{* *}$ |  |
| 6.Perceived <br> Diversity | 3.24 | .67 | $.363^{* *}$ | $.173^{*}$ | $.376^{* *}$ | $.260^{*}$ | $.146^{*}$ |

Notes: Cronbach's alphas are displayed on the diagonal. $N$ between 198 and 203 due to missing data. $* p<.05, * * p<.01$

