Uncertainty in Diverse Teams

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Abstract

This chapter advances an uncertainty perspective to better understand and address the challenges of enhancing performance and inclusion in diverse teams. Decades of research on diversity in teams has spawned very useful insights, but is also riddled with inconclusive findings. Because diversity research tends to rely on and recycle the same theories, this article proposes that a better understanding of diversity can be fostered by applying a different perspective. In considering diversity as enhancing uncertainty and corresponding anxiety, this article proposes that diversity causes members to manage uncertainty by relying on cognitive shortcuts to make inferences about each other, which is likely to yield inaccurate attributions of intentions and competence and can harm performance. Moreover, in trying to create certainty, diverse and majority team members are likely to behave in conflicting and antagonizing ways, which harms inclusion. As such, the uncertainty perspective provides a novel understanding of the perceptions, behaviors, and corresponding dynamics that shape the performance of diverse teams and members’ experienced levels of inclusion. In suggesting that perceptions and experiences of uncertainty and anxiety underlie processes and outcomes in diverse teams, the uncertainty perspective also offers a number of suggestions to manage diversity-infused uncertainty and enhance team performance as well as inclusion.

Keywords: Diversity, Teams, Uncertainty, Performance, Inclusion
Uncertainty in Diverse Teams

Over 80 percent of employees in organizations currently is part of one or more teams, which are small groups of interdependent individuals who work towards a common goal (Hollenbeck, Beersma, & Schouten, 2012). In being part of a team, employees are given a more socially connected and meaningful context that satisfies their need to belong (Brewer, 1991). Furthermore, teams are considered to be better able to cope with the increasing complexities and uncertainties in organizations and the world around us than individuals (Hackman & Oldham, 1976). Globalization and technological innovation have given rise to constantly changing and uncertain environments that require organizations to be adaptive. In particular diverse teams are expected to be able to address such challenges and uncertainties, given that the heterogeneity in information, perspectives, and expertise of its members enable diverse teams to come up with high-quality solutions (van Knippenberg, De Dreu, & Homan, 2004). As a consequence, diverse teams have increasingly become the building blocks of contemporary organizations.

However, the presence of diversity in teams also creates a number of challenges, of which two assume center-stage in the literature on diversity in teams. The first involves the question of how and when diverse teams outperform homogeneous teams. Despite their potential, diverse teams frequently do not live up to their promise. Numerous studies have been conducted to examine what inhibits diverse teams to perform well, and what is needed to leverage their potential. Research in this area has generally relied on the information/decision-making perspective to argue that information elaboration (i.e. the process of sharing, discussing, and integrating information; van Knippenberg et al., 2004) is crucial for diverse teams to outperform homogeneous teams, and on the social categorization perspective to argue that perceiving differences inhibits information elaboration, and causes performance in diverse teams to falter. In
light of these contrasting perspectives, it is perhaps not surprising that the most common conclusion of studies on the relationship between diversity and team performance is that diversity is a double-edged sword (Milliken & Martins, 1996), and that findings aimed at further understanding when diversity is beneficial or detrimental tend to be inconclusive (van Dijk, van Engen, & van Knippenberg, 2012a).

The second challenge involves the question how members of diverse teams can feel included. Although being part of a team in general addresses individuals’ need to belong, such effects can be undone when individuals perceive themselves to differ from the other team members, thereby reducing individuals’ feelings of inclusion. Researchers in this area have predominantly used optimal distinctiveness theory (Brewer, 1991) to explain how the presence of diversity increases the chances that individuals feel like they differ from other team members (Nishii, 2013; Shore et al., 2011). Although there is agreement on the importance of inclusion (Shore et al., 2018), many organizations struggle with being inclusive (Purrity et al., 2017), and there are still many questions regarding how to create diverse-yet-inclusive teams.

Whereas in both areas of research there thus has been much progress, to date the main underlying questions remain unresolved. In this article, I argue that this may – at least in part - be due to the tendency in research on diversity and inclusion to approach the main challenges by recycling and relying on the same theories and perspectives. By adopting a different perspective, new light is shed on the challenges that may offer a new way forward. I propose that the uncertainty perspective can offer such illuminating insights. The uncertainty perspective refers to a combination of theories regarding the perception, experience, reaction to, and management of uncertainty (e.g., uncertainty reduction theory, Berger & Calabrese, 1975; anxiety/uncertainty theory, Gudykunst, 1995; uncertainty management theory, Babrow et al., 1998; Brashers et al.,
1998; uncertainty-identity theory, Hogg, 2000; uncertainty regulation theory, Griffin & Grote, 2020). Taken together, these theories provide a unique understanding of uncertainty as driving individuals’ perceptions, motivations, and behavior. By applying this uncertainty perspective to the two challenges of diversity, I highlight how uncertainty is at the core of both challenges, and offer some potential solutions that may help to capitalize on the promise of diverse teams and make its members feel more included.

In the following, I first elaborate on the uncertainties that (diverse) teams and organizations are facing, after which I introduce the two main challenges of diversity in teams and the conventional theories and perspectives used to understand and address those challenges. Subsequently, I introduce the uncertainty perspective, explain how it sheds new light on diversity in teams, and use it to address the two main challenges of diversity research.

**Diversity and Uncertainty**

Diversity is “a group characteristic that reflects the degree to which there are objective or subjective differences among members” (van Dijk et al., 2012a, p. 39). Such differences include demographic characteristics such as age, gender, or ethnicity, job-related characteristics such as educational background, functional background, or tenure, and deep-level characteristics such as personality, attitudes, or values. The more that a team or organization hosts members with different backgrounds and characteristics, the more diverse it is.

On the one hand, the presence and level of diversity in a team or organization can be the coincidental result of having a more diverse society and workforce. Such an increase in diversity is likely to add in a number of ways to the complexity and uncertainty that people in teams and organizations are facing. When people are similar, it is easy to assume that they hold similar values, interests, competencies, and that they can be trusted, which all makes it is easier to relate
to and work together with them (Byrne, 1971; Fiske, Cuddy, Glick, & Xu, 2002). However, when team members are different, such assumptions are challenged. The highly interdependent nature of teamwork causes team members to have to interact with and rely on each other a lot, which makes being able to trust others’ intentions and competence fundamental to teamwork (McAllister, 1995; Webber, 2008). Uncertainty regarding others’ intentions and competence can therefore represent a major threat to teamwork effectiveness.

On the other hand, the presence and level of diversity in a team or organization is also something that is increasingly sought after. Teams and organizations that are diverse are generally considered to be more capable in dealing with the increasing complexities and uncertainties that organizations face, such as changing demographics, environmental changes, changing and diversifying wishes and demands from customers, global competition, etcetera (van Knippenberg et al., 2004). Because a diverse team is expected to have a more heterogeneous set of information, knowledge, skills, abilities, and perspectives at their disposal, they are considered to be well-equipped to address such complexities and uncertainties. As a consequence, organizations are increasingly intentional in becoming diverse by seeking diversity and composing teams that are diverse.

By increasing the level of diversity in response to increasing complexities and uncertainties, organizations thus tend to create more complexity and uncertainty with the aim to manage, control, or even reduce complexity and uncertainty (Schneider, Wickert, & Marti, 2017). Such intricate and paradoxical relationships between diversity and complexity on the one hand and uncertainty on the other hand calls for research to examine how and in what ways diversity can help teams and organizations to manage uncertainty as well as cope with increasing uncertainty, but to date such research has been lacking. Theory and research on diversity has
relied on theories that ignore the fundamental role of uncertainty in shaping perceptions, attributions, behaviors, and interactions. Whereas the following overview of diversity theory and research thus does not focus on uncertainty, the role of uncertainty is latently present in its major themes, and I will point that out in the subsequent overview of the uncertainty perspective. Table 1 indicates the main differences between the assumptions underlying the current perspective in diversity research and theory and the uncertainty perspective.

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The Two Challenges of Diverse Teams

Research on diversity in teams and organizations can generally be categorized as belonging to one out of two clusters (van Dijk, van Engen, & Paauwe, 2012b). The first cluster consists of studies that take a business case approach by focusing on the interests of organizations. As such, those studies typically focus on the question if, and under what circumstances, diversity enhances performance (van Knippenberg et al., 2004). In contrast, the second cluster of studies takes an equality approach by focusing more on the interests of individual employees, and in particular those with a diverse background. These studies typically focus on experiences of being treated unfairly, discrimination, and overall disparities between members from different social groups (Acker, 2006; Zanoni, Janssens, Benschop, & Nkomo, 2010). The focus in this area of research has gradually shifted towards inclusion, given that the experience of inclusion encompasses being treated fairly and equally, while also being valued and esteemed as a unique individual (Shore et al., 2011).

Whereas these clusters have developed largely separately, there is an increasing interest in inclusion from researchers looking at the business case for diversity. The reason for this is that studies on inclusion suggest that inclusion can also lead to more beneficial team outcomes
(Dwertmann, Nishii, & van Knippenberg, 2016; Nishii, 2013), which means that inclusion may be of interest to the business case as well. However, despite such an appearance of convergence, the difference in focus between the two clusters remain the same: business case scholars are predominantly interested in the extent to which inclusion enhances team performance, whereas equality scholars are mainly interested in how inclusion enhances equality. To those ends, both clusters build on different theories and perspectives, tend to use different methodologies, and face different challenges.

**Research on the Business Case for Diversity**

The main challenge for research on the business case for diversity has been to show how and when diverse teams and organizations outperform homogeneous teams and organizations. In representing mini-organizations where members work together towards a common goal, teams have been the primary foci of such studies (Eagly, 2016). About 30 years of predominantly quantitative research indicates that diversity influences attitudes, behaviors, and performance in and of teams (Ancona & Caldwell, 1992; Hoever, Zhou, & van Knippenberg, 2018). However, in terms of direction, these findings have been rather inconclusive. For each characteristic, there are studies showing positive, negative, or nonsignificant relationships with team performance (Bell, 2007; van Knippenberg & Schippers, 2007). To qualify the inconclusive findings, researchers subsequently focused on moderators that explain under what conditions the positive or negative consequences of diversity may prevail (Guillaume, Dawson, Otaye-Ebede, Woods, & West, 2017). However, those studies also yielded predominantly inconsistent results (for meta-analyses, see Bell et al., 2011; Joshi & Roh, 2009; van Dijk et al., 2012a).

Theoretically, most of these studies have been guided by the same two perspectives. The information/decision-making perspective accounts for diversity’s potential benefits by
conceptualizing diversity as an informational resource (van Knippenberg et al., 2004). Differences between team members are considered to represent a variety of knowledge, perspectives, and experiences. As such, diverse groups should be able to draw from a richer pool of information, leading to higher-quality decisions compared to homogeneous teams. The mere presence of the informational resources in diverse teams are however not sufficient, because using them to achieve high-quality decisions requires information to be shared, discussed, and integrated. To leverage on their performance potential, information elaboration is therefore considered crucial for diverse teams (Homan, van Knippenberg, van Kleef, & De Dreu, 2007; Meyer, Shemla, & Schermuly, 2011).

However, the social categorization perspective suggests that exactly because of the differences between its members, diverse teams are at risk of not engaging in information elaboration. The social categorization perspective represents a combination of theories that together suggest that people categorize others into people who are similar to themselves (i.e. ingroup members) versus people who are dissimilar to themselves (i.e. outgroup members), and prefer to interact with ingroup members over outgroup members (i.e. ingroup favoritism; Byrne, 1971; Tajfel & Turner, 1979; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). Even in small teams, such social categorizations of ingroup versus outgroup members can create subgroups of team members, which stifles interaction and information elaboration between subgroups (Carton & Cummings, 2012; Meyer et al., 2011). The social categorization perspective thus suggests that diversity tends to limit its own potential.

Although some initial studies supported these two perspectives (e.g., Homan et al., 2007; Meyer et al., 2011), gradually more and more studies started to challenge their assumptions. For example, two complementary studies found that diversity causes team members to expect
differences in opinions and expectations (De Kwaadsteniet, Homan, van Dijk, & van Beest, 2012), and that diversity is associated with more elaboration before a meeting because members are less focused on maintaining a good relationship, and instead focus more on the task (Loyd, Want, Phillips, & Lount Jr., 2013). In combination, these studies suggest that categorizing someone as dissimilar can actually be used as a cue in diverse teams that such a person may have a different perspective and expertise, thus suggesting that categorizing others as different than self (i.e. as an outgroup member) does not need to be negative and may even enable information elaboration.

In building on those insights, a different study challenged the notion that information elaboration drives the performance of diverse teams. Van Dijk et al. (2018) argued that during the process of information elaboration, team members may especially rely on the input from those team members who are expected to be more competent. However, given that such attributions can be inaccurate, this may entail that team members follow the wrong lead. In line with these arguments, the study showed that in gender-diverse teams, members who are perceived as more competent are more influential during information elaboration, and that information elaboration decreased performance when such influential members were, in reality, not that competent.

These results are illustrative of the inconclusive findings that dominate the field. After more than twenty years of relying on the same perspectives to theorize about the conditions under which diversity may enhance performance and make sense of the disparate findings (Srikanth, Harvey, & Peterson, 2016; Williams & O’Reilly, 1998), it may be time to look beyond these two perspectives and consider alternatives. Given the centrality of uncertainty in understanding one’s identity and position in a team, the tendency to reduce uncertainty by
comparing oneself to others, and the tendency to reduce uncertainty by making attributions of intentions and competence and relying on such intentions to decide who to follow, I argue that an uncertainty perspective is likely to provide an interesting alternative understanding of processes in diverse teams, and hence can reach a different conclusion to the question how and when diverse teams outperform homogeneous teams. However, before turning to the uncertainty perspective, I will first discuss the second challenge in the literature on diversity in teams.

Research on Equality in Organizations

Initial research on diversity in organizations focused on equality, which from the 1960s onwards has led to equal employment opportunity (EEO) and affirmative action (AA) policies and programs. Both types of policies and programs aim to make sure that people are not discriminated against based on their social group membership (e.g., gender, age, ethnicity, sexual orientation, religion, disability), with the difference being that affirmative action is more proactive (Crosby, Iyer, & Sincharoen, 2006). Numerous policies and programs have been proposed and implemented that tend to fall in either of three categories: establish organizational responsibility for diversity, diminish managerial bias, or enhance the social capital of diverse employees. However, the successes of those policies and programs in establishing more equality has been mixed at best (Kalev, Dobbin, & Kelly, 2006; Leslie, Mayer, & Kravitz, 2014).

In trying to make sense of these disparate findings, researchers started to argue that a main reason why many EEO and AA policies and programs have limited success in fostering equality could be because they do not necessarily address how included diverse employees feel. Organizations may do a good job in recruiting diverse employees, but if those employees don’t feel welcome, they are likely to quickly leave again (Purrity et al., 2017). As a consequence, an increasing number of studies started to focus on inclusion. Whereas such research in the
beginning was somewhat atheoretical, this improved when Shore et al. (2011) grounded research and theory on inclusion within the boundaries of Optimal Distinctiveness Theory (ODT; Brewer, 2011).

ODT suggests that two main motivations of humans are the need for belonging (e.g., validation, similarity) and the need for uniqueness (e.g., authenticity, individuation). These needs and corresponding motivations represent opposite forces that individuals seek to balance. When both needs are equally met, the point of optimal distinctiveness is reached, at which ODT suggests that individuals will identify the strongest with the group that they are part of, and will be most motivated to contribute to the group’s goals (Brewer, 1991). In applying this theoretical perspective to inclusion, Shore et al. (2011, p. 1265) defined inclusion as “the degree to which an individual perceives that he or she is an esteemed member of the work group through experiencing treatment that satisfies his or her needs for belongingness and uniqueness”. This conceptualization of inclusion integrated various studies on diverse employees’ experiences in teams and organizations, and spurred numerous studies on the antecedents and consequences of inclusion (e.g., Nishii, 2013; Jansen, Meeussen, Jetten, & Ellemers, 2020; Randel et al., 2018). The element of belongingness tends to be studied by focusing on fairness and the absence of discrimination and biases, whereas the element of uniqueness tends to be studied by a focus on the involvement, valuing, and integration of diverse identities and perspectives (Dwertmann et al., 2016).

As such, the use of ODT as a unifying theoretical perspective has led to a convergence in the focus of research on equality towards inclusion. However, in doing so, it has also shifted the main question towards how teams and organizations can be inclusive, and despite all the progress, that question is still largely unanswered. Specifically, the current state of the science
indicates that top management commitment is crucial and that “inclusive leadership”, an “inclusive climate”, and “inclusive practices and processes” foster inclusion (for a review, see Shore et al., 2018), but what such leadership, climate, and practices and processes specifically entail is still subject to debate. Moreover, the more pertinent question what causes people to feel in- or excluded, and how to actually “do” inclusion, are still largely left unanswered. Whereas ODT offers a compelling perspective regarding what the requirements are of feeling included (i.e. both addressing the need to belong and be unique), it provides less of an explanation regarding why and under what circumstances people experience these needs. To gain a better understanding of how feelings of inclusion can be fostered in teams, it may therefore be valuable to consider a complementary perspective that provides some more insight into why individuals experience these needs in the first place.

In suggesting that people’s motivation to address their needs are driven by uncertainties, the uncertainty perspective provides such a potentially complementary perspective. If uncertainties indeed drive people’s need to belong and be unique, then it suggests that inclusion in diverse teams can be fostered by identifying and addressing members’ uncertainties. In the following, I introduce the uncertainty perspective, and then elaborate on how it can advance our understanding of the challenges of enhancing performance and fostering inclusion in diverse teams.

**The Uncertainty Perspective**

The uncertainty perspective refers to a set of theories that explain why and how individuals experience and react to uncertainty, which is generally understood as “a cognitive state where people feel that the physical and social world is an unpredictable place over which they have little control” (Hogg & Belavadi, 2017, p. 2). As such, it focuses on the perception and
experience of uncertainty, rather than the actual existence and underlying probabilities of uncertainty. The theories underlying the uncertainty perspective are complementary in the sense that they tend to focus on different elements (e.g., experience of versus reaction to uncertainty), but in part they also overlap, and occasionally even provide contrasting explanations for similar phenomena. However, they have in common that they assume that uncertainty has a very large impact on people’s perceptions, motivations, and behavior. When one has difficulties with anticipating events and the word around us, it has a paralyzing effect. In contrast, certainty provides confidence in what to expect and how to navigate in one’s physical and social environment. As a consequence, managing and/or reducing uncertainty is considered to be a fundamental human motive, and one that individuals engage in in a variety of ways (Festinger, 1954; Hogg, 2000).

Uncertainty reduction theory (URT; Berger & Calabrese, 1975) focuses on the uncertainties that are experienced in interactions, and proposes that people strive to tailor behavior based on predictions of how others will behave. Not knowing how others behave thus creates uncertainties, which according to URT is something that people aim to reduce. URT suggests that reducing uncertainty is done by gathering information, which can be enacted passively (e.g., observing the target), actively (e.g., inquiring about the target by colleagues from that person), or interactively (e.g., working together with the target). Furthermore, according to URT, people are especially likely to reduce uncertainty and gather more information when a target is of future relevance. For example, when one works together in a team (Berger, 1979).

Anxiety/uncertainty management (AUM) theory (Gudykunst, 1993) developed out of URT in trying to apply it to cross-cultural interactions. Its basic premise is that anxiety tends to follow from uncertainty, and that uncertainty and anxiety need to be managed to feel comfortable in an
intercultural context. Anxiety in this context refers to the tensions and feelings of being uneasy when interacting with others. In focusing on the effectiveness of interactions, AUM theory suggests that interactions are most effective under medium levels of uncertainty and anxiety. If uncertainty is high, people cannot predict others’ behavior, but if uncertainty is low, people have much confidence in their predictions and feel like there is little left to learn, despite the fact that their predictions may be inaccurate. If anxiety is high, people may be too involved with the self and therefore incapable of processing information about the other. However, if anxiety is low, a person may lose interest in interacting with someone else (Gudykunst, 1998).

AUM theory acknowledges that individual disposition and contextual elements can influence one’s levels of uncertainty and anxiety, and suggests that it is important that people learn to manage their uncertainty and anxiety levels. Specific attention in AUM theory in that regard goes to the role that mindfulness can play in managing uncertainty and anxiety. When people experience high levels of uncertainty and anxiety, they are likely to reduce it by relying on heuristics and biases, e.g., drawing from stereotypes to make category-based inferences about who a person is (Tversky & Kahneman, 1974). In becoming aware of one’s own feelings without passing judgment, mindfulness can help to resist the tendency to label people and events, and instead be open to more idiosyncratic explanations (Gudykunst, 1998).

*Uncertainty management theory* (UMT; Babrow et al., 1998; Brashers et al., 1998) refers to a number of approaches that people use to cope with uncertainty, and has mainly been studied in the context of illnesses. In contrast to URT’s claim that people aim to reduce their uncertainties, it considers a number of different conditions under which people experience uncertainty, and based on that offers predictions regarding how people deal with or manage uncertainty. For example, Brashers, Hines, & Kasch (2000) distinguish between uncertainty in
terms of danger, opportunity, and as a constant. They argued and found that uncertainty in terms of danger was associated with actively and passively seeking information to reduce uncertainty, whereas uncertainty in terms of opportunity was associated with avoiding information or seeking information to increase uncertainty (e.g., learning about an experimental treatment in the face of death). As such, UMT suggests that depending on the context and mindset, people may actually value and appreciate uncertainty, and that their preference for uncertainty determines their information search and processing behavior to manage uncertainty.

Uncertainty-identity theory (UIT; Hogg, 2000) posits that it is in particular uncertainty regarding the self and one’s place in the world that makes people react to uncertainty. If uncertainty is not experienced as aversive, then people are likely to tolerate or even seek uncertainty. However, if people experience uncertainty regarding the self, UIT asserts that they are likely to seek group membership and identify with a group, because groups provide a social context with similar others that enables a person to compare and validate one’s own perceptions and attitudes (cf. Festinger, 1954; Wittenbaum & Bowman, 2004). Another reason why people in the face of uncertainty regarding the self seek group membership is that groups provide norms indicating how to behave. In particular extreme, outspoken groups may serve such a purpose, because those tend to provide very strong norms (Hogg & Belavadi, 2017).

Finally, uncertainty regulation theory (URegT; Griffin & Grote, 2020) proposes that individuals seek to regulate the amount of uncertainty that they feel comfortable with in a given environment. URegT suggests that if the level of uncertainty becomes higher than an individual’s tolerance level, the individual is expected to engage in closing behavior (i.e. exploitation) to decrease their level of experienced uncertainty. In contrast, when the level of uncertainty is lower than the individual’s tolerance level, the individual is likely to display opening behaviors (i.e.
exploration) that further increases the level of experienced uncertainty. In shaping the level of uncertainty in the exogeneous environment as well as one’s endogenous experience via opening and closing behaviors, individuals regulate the amount of uncertainty they experience by creating a dynamic equilibrium that results in a level of uncertainty that they feel comfortable with. URegT suggests that when this dynamic equilibrium aligns with the requirements of the exogenous environment, individuals are likely to be effective. Whereas this theory mainly focuses on the individual level, Griffin & Grote (2020) suggest that the same is likely to be true of other actors, such that teams and organizations may also engage in uncertainty reducing or increasing behavior, depending on how comfortable they are with the current level of uncertainty, and that an actor’s uncertainty regulating behavior drives effectiveness and performance.

Compared to URT and AUM, URegT thus suggests that actors are not only motivated to reduce uncertainty, and in comparison to UMT and UIT, URegT is most outspoken about the idea that actors may intentionally seek uncertainty. Whereas UMT suggests that uncertainty seeking behavior is most likely to occur in the face of threat or loss and UIT only provides a more general claim that uncertainty can be experienced as exciting or a challenge as long as one has sufficient resources to cope with the uncertainty, URegT asserts that actors may seek uncertainty in basically all environments and circumstances, depending on how comfortable they feel with uncertainty.

Despite these differences, these theories in combination provide a perspective on the experience of uncertainty as a main driver of human perception, feelings, attitudes, and behaviors that can help to make sense of a wide range of phenomena. It reveals that uncertainty can be experienced and managed in different ways. Uncertainty is frequently experienced as something
aversive, and then actors then try to reduce it. Main ways in which actors try to reduce and manage uncertainty is by gathering closing information, avoiding opening information, relying on cognitive shortcuts and heuristics, and identifying with and behaving based on membership of a group. In some circumstances, actors may proactively seek uncertainty. In those situations, an increase in uncertainty is considered desirable. Seeking uncertainty involves explorative behaviors aimed at gathering opening information, but may also involve avoiding closing information.

The set of insights from this uncertainty perspective are likely to help understanding the dynamics involved in the various uncertainties that diverse teams face, and given the inconsistent and disparate findings in research on diversity in teams, I argue that it is high time that the uncertainty perspective is applied to shed new light on the experiences and dynamics in diverse teams. In the following, I will therefore outline what I believe research on diversity in teams can learn from the uncertainty perspective.

**General Insights on Diversity in Teams From an Uncertainty Perspective**

In their original formulation of URT, Berger & Calabrese (1975) proposed that similarity reduces uncertainty. If someone is similar to the self, then one can use one’s own attitudes and beliefs to anticipate and predict how another will act and react, and based on that anticipation set out a course of action. In a diverse team, the differences between team members create uncertainty regarding how others will behave, which makes prediction and control more difficult. Furthermore, following research suggesting that people prefer to be around similar others (Byrne, 1971; Festinger, 1954), Berger & Calabrese (1975) argued that this liking for similar others is due to the reduction of uncertainty. As such, URT suggests that diversity enhances uncertainty in teams, and that members will therefore like it less to be part of a diverse team.
AUM theory adds to this by suggesting that due to elevated levels of anxiety and uncertainty in diverse teams, members are more likely to rely on stereotypes and prejudices. Such cognitive shortcuts provide an understanding of who other team members are, and thereby reduce uncertainty and corresponding anxiety. However, such a heuristic-based understanding of others may be inaccurate and lead to discrepancies between a target’s intentions and a perceiver’s interpretation of those intentions in interactions (Gudykunst, 1994; 1995). In line with this idea, only recently diversity researchers started to argue that an important reason why diverse teams fail to reach their potential is because they rely on inaccurate stereotypes (van Dijk, Meyer, van Engen, & Loyd, 2017; van Dijk & van Engen, 2019). AUM theory provides a deeper understanding of the argument that stereotypes inhibit understanding each other in diverse teams by indicating that in providing the illusion of certainty, people are unlikely to challenge their own stereotype-based attributions and assumptions. In contrast to the popular conception of stereotypes as only playing a role in the beginning when people meet, AUM theory thus suggests that stereotypes can have a pervasive effect on perceptions, attitudes, and behaviors in diverse teams throughout the team’s life course. It further proposes mindfulness as a remedy, such that it may help to look beyond stereotype-based inferences.

UMT suggests that people may not always respond negatively to the increase in uncertainty experienced in diverse teams. In case they are able to see it as an opportunity, they may actually welcome and proactively seek it. This understanding of reactions to diversity based on how it is framed and experienced is very similar to studies focusing on diversity beliefs and diversity mindsets. Diversity beliefs refer to the extent to which members believe that diversity positively or negatively affects team functioning (van Knippenberg, Haslam, & Platow, 2007), whereas diversity mindsets refer to members’ awareness of diversity in their team, how that
diversity may shape team processes and performance, and procedural implications to manage and cope with diversity to attain the team’s goals (van Knippenberg, van Ginkel, & Homan, 2013). Positive diversity beliefs and diversity mindsets are considered to enhance the performance of diverse teams. UMT explains that this may indeed be true, given that such positive beliefs and mindsets reduce anxiety and may help members to proactively seek instead of distrust and avoid diverse members and their input.

UIT provides more insight regarding why people tend to form subgroups in diverse teams. New, diverse members are likely to be uncertain and anxious about their place in the team and whether they will be accepted. They are therefore likely to drift towards members who are similar to them and they can identify with. In contrast, existing (majority) members are likely to be uncertain and anxious about whether a new, diverse member will fit in and adhere to the group norms. As such, they are likely to hold on to and emphasize the group’s identity and norms (Hogg & Terry, 2000). In combination, these dynamics are likely to result in polarizing subgroups, unless the identity and corresponding norms of the team revolve around diversity and inclusion, because then the potential increase in uncertainty is not seen as a threat, but valued as an opportunity. UIT thus suggests that the identity and norms of (diverse) teams are crucial for diverse members to feel welcome, and for diverse teams to thrive (cf. Linnehan, Konrad, Reitman, Greenhalgh, & London, 2003).

Finally, URegT explains that teams may proactively seek diversity and corresponding levels of uncertainty to cope with and address external uncertainty, such that an increase in diversity may enhance team performance. Whether a team will be open to becoming more diverse and increasing uncertainty depends on the team’s uncertainty tolerance level. To enhance performance, teams should align the level of uncertainty tolerance with the level of uncertainty
in the external environment (Griffin & Grote, 2020). In light of the novelty of URegT and these insights, there is no research yet on how teams can create such an alignment, but it is likely to involve continuous monitoring of and reflection on the team’s uncertainty tolerance levels and the level of uncertainty in the external environment, and attempts to adjust uncertainty tolerance levels. Mindfulness may be helpful for the part involving monitoring and reflection, whereas diversity beliefs and diversity mindsets may help to adjust uncertainty tolerance levels.

In combination, the theories underlying the uncertainty perceptive provide a number of interesting insights regarding the behaviors and dynamics that can be expected in diverse teams, and how to manage those. A number of these insights and predictions contribute to some (recent) ideas in diversity research by suggesting that uncertainty is the root cause of some of the perceptions, attributions, and behaviors in diverse teams. In particular when diversity is perceived and experienced as aversive, it creates anxiety that may result in a host of negative dynamics and outcomes. However, if the uncertainty that is associated with diversity is considered an opportunity, diversity may relate to a number of positive consequences. In the following, I will more specifically explore how this uncertainty perspective relates to the two main challenges of diverse teams, i.e. their functioning and experiences of inclusion.

The Role of Uncertainty in the Functioning of Diverse Teams

The uncertainty perspective suggests that diversity in a team creates uncertainty that most - if not all – members will seek to reduce. This can be done by gathering information about each other, but because anxiety is associated with avoidance, it is more likely that members use and rely on stereotypes to anticipate how others will behave. Research on stereotyping suggests that there are two main attributions that people make by using stereotypes (Fiske et al., 2002). The first concerns attributions of a target’s intention or warmth. If a target is considered to have good
intentions, then perceivers will be inclined to trust and cooperate with the target. However, if the target is considered to have questionable intentions, then perceivers are negatively inclined to trust and cooperate with the target (Cuddy, Fiske, & Glick, 2007). Because targets dissimilar from self are in general less likely to be trusted (Byrne, 1971), these arguments suggest that social integration in diverse teams is less likely to take place, which is in line with the preference for ingroup members as suggested by the social categorization perspective.

However, the other attribution that people make by relying on stereotypes involve competence (Fiske et al., 2002), which tends to be less colored by a preference for one’s own group. Instead, people may attribute a higher competence to a member in a team who is dissimilar from self in case that person’s attributes and characteristics are stereotypically more aligned with those needed for the task (i.e. outgroup favoritism; Berger, Cohen, & Zelditch, 1972; Eagly & Karay, 2002). Reducing uncertainty by relying on such competence stereotypes can be very helpful for members of diverse teams, because they inform and guide a member on who to go to for advice, and whose input to follow in the face of conflicting suggestions and alternatives (van Dijk et al., 2017). Consider a situation in which a person works together with a designer and a surgeon and is confronted with a question of a medical nature. The stereotype informs the person that the surgeon is more likely to provide an accurate answer to the question, so to manage uncertainty, the person is more likely to only ask the surgeon for input and refrain from asking the designer for advice.

Such a process of relying on competence stereotypes can greatly enhance efficiency and performance in diverse teams without needing to rely on information elaboration (van Dijk et al., 2017; 2018). Quite often, there may neither be the time nor the need to engage in such an elaborate process. The uncertainty perspective thus suggests that by only approaching the person
who is most knowledgeable about a topic, it may not be needed to gather input from all team members, and to discuss and integrate that input. Using cognitive shortcuts to reduce uncertainty in this way can enhance efficiency and, as a consequence, performance. Given that such cognitive shortcuts cannot be used in homogeneous teams, the uncertainty perspective complements the information/decision-making perspective with a different, additional argument regarding the potential benefits of diversity in teams.

However, the caveat here is that stereotypes may result in inaccurate attributions. In case the designer has recently experienced a similar health problem, the designer may actually be able to provide better input than the surgeon, which means that the input will be suboptimal in case the designer’s input is not asked for. Moreover, because the health problem may be unrelated to the surgeon’s area of expertise, the surgeon’s input may be outdated or flat out inaccurate, which causes the person to follow the wrong lead. The uncertainty perspective thus also complements the social categorization perspective by providing an additional argument regarding the potentially detrimental consequences of diversity in teams.

Given that the uncertainty perspective suggests that people are unlikely to become aware of the inaccuracies of their own perceptions and beliefs (cf. Jost, Banaji, & Nosek, 2004), an important question is how such inaccuracies can be overcome, and how members of diverse teams can be motivated not to rely on stereotypes. A number of suggestions offered by the uncertainty perspective have been outlined above. For example, positive diversity beliefs and mindsets can help members to increase their uncertainty tolerance levels and look beyond stereotype-based attributions. Specifically, emphasizing the opportunities in diversity can help members to overcome their anxiety and tendency to reduce uncertainty in diverse teams, and establishing norms on these matters can further stimulate members in the right directions. In
addition, gathering closing as well as opening information is likely to be an effective strategy to align the level of experienced uncertainty with the level of external uncertainty and enhance team performance (Griffin & Grote, 2020; cf. van Knippenberg et al., 2004).

Most of such productive uncertainty regulating and managing behaviors are unlikely to happen automatically, but they can be facilitated, and potentially even learned. At the conception of a team or the entry of a new member, team leaders can, for example, facilitate information gathering through team building and getting to know each other sessions. Subsequently, team members can gather information by scheduling intermediate and final evaluations and reflections. Such sessions can be seen as practices in team mindfulness (Yu & Zellmer-Bruhn, 2018), where members do not only engage in becoming aware of their own thoughts and feelings without passing judgment, but also share those thoughts and feelings, and become knowledgeable of other members’ thoughts and feelings. In doing so, team members can update their perceptions and attributions of each other, and over time come to a more accurate understanding of each other’s intentions and competence.

**The Role of Uncertainty in Fostering Inclusion in Diverse Teams**

The uncertainty perspective suggests that new members are primarily looking for a place to belong, whereas existing group members are predominantly concerned with preserving the group identity. In particular when the newcomer is diverse, the mere appearance of difference is likely to result in a negative spiral where the new member as well as the existing group members don’t feel like the new member belongs there. Such feelings are likely to translate into antagonistic and excluding behaviors that further strengthen and confirm those feelings (van Dijk et al., 2017).

This insight holds two important implications for fostering inclusion in diverse teams. First, the uncertainty perspective suggests that experiences of uncertainty and anxiety underlie
feelings of not belonging and corresponding excluding behaviors. This entails that various practices and programs aimed at fostering inclusion are unlikely to be helpful if they do not address the underlying feelings of uncertainty and anxiety. By uncovering the root cause of exclusion, the uncertainty perspective indicates what initiatives aimed at fostering inclusion should target. Moreover, it suggests that diverse and other team members need different interventions. For diverse team members, the main attention should focus on becoming aware of and managing feelings of uncertainty and anxiety regarding whether or not they belong. As mentioned earlier, mindfulness can help them in this to make sure that their thoughts and behaviors won’t be guided by feelings of uncertainty and anxiety. In contrast, for the other team members it will likely be more helpful to engage in a reflection about their group identity. In making team members reflect on what the core values of their group identity are, they may also want to include some values that they strive for, or be open to suggestions that would be important for the organization (e.g., inclusion). In case the values that they embrace are indicative of exclusion, then the organization can either use that information to consider who to place there, or – even better – engage in a series of conversations to discuss the values of the team and try to uncover the potentially underlying uncertainties and anxieties regarding the more exclusive values.

Second, that uncertainty causes individuals to seek a group that they can identify with, and that experiences of inclusion and exclusion tend to be fueled by behaviors from the team, in combination suggests that team members are likely to have a strong bearing on how included or excluded individual team members feel. Whereas much of the literature on fostering equality and inclusion focuses on organizational policies and practices and the more general role of leadership, the uncertainty perspective highlights the crucial role of leaders and team members
behaviors, given that their behaviors are most likely to give individuals the feeling of belonging – or not.

To that end, it would be worthwhile to focus more on the role that everyday occurrences and behaviors in diverse teams play on perceptions and feelings of exclusion (van Dijk, Kooij, Karanika-Murray, De Vos, & Meyer, 2020). Scientific research on this topic is still in its infancy, but a recent McKinsey (2020) report suggests that women, ethnic or racial minorities, and LGBTQ+ persons more often than others experience that they hear derogatory comments or jokes about people like themselves and are excluded from social events. Such experiences are likely to reduce feelings of inclusion. Research on microaggressions, which are brief, everyday exchanges that send denigrating messages (Sue, Capodilupo, & Holder, 2008; Sue, Lin, & Rivera, 2009) may provide a good starting point, not only to explore how such microaggressions from team members are related to feelings of inclusion or exclusion, but also to uncover the reasons why people display microaggressions. The uncertainty perspective suggests that uncertainty and anxiety about whether in particular diverse team members threaten the identity of the team causes team members to display microaggressions and related exclusive behaviors. If future research finds out that to be true, then it provides a specific starting point for interventions aimed at reducing such excluding behaviors and fostering inclusion.

Conclusion

There are two main questions regarding diverse teams. The first focuses on how diversity can enhance performance, and the second focuses on how diverse team members can feel included. Whereas research on these two questions has advanced a number of important insights, the field is also riddled with inconclusive – and occasionally even contradictory – findings. In this article, I have argued that a new perspective may help to address these two main questions of
diverse teams, and outlined how the perspective of uncertainty contributes to a deeper understanding of the root causes and potential solutions on both matters. Specifically, the uncertainty perspective suggests that diversity increases uncertainty, which is likely to raise anxiety, and causes team members to focus on reducing uncertainty. This tendency jeopardizes the functioning of diverse teams, as well as the extent to which teams are inclusive towards diverse members. Based on the uncertainty perspective, I have proposed a number of interventions that can help diverse teams to improve their performance as well as their inclusiveness. Given that this understanding of the challenges of diverse teams from an uncertainty perspective is novel, it provides ample opportunities for research as well as practice to build upon.

References


Brewer, M. B. (1991). The social self: On being the same and different at the same time.


Accessible online at:


Puritty, C., Strickland, L. R., Alia, E., Blonder, B., Klein, E., Kohl, M. T., ... & Gerber, L. R. (2017). Without inclusion, diversity initiatives may not be enough. *Science, 357*(6356), 1101-1102. Doi: 10.1126/science.aai9054


TABLE 1
Comparison of the Current Perspective on Diversity in Teams Versus the Uncertainty Perspective

<table>
<thead>
<tr>
<th>Fundamental assumptions</th>
<th>Current perspective</th>
<th>Uncertainty perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main motivation of team members</td>
<td>Get along with each other and perform well</td>
<td>Manage uncertainty and perform well</td>
</tr>
<tr>
<td>Positive consequences of diversity</td>
<td>Enables making better decisions</td>
<td>Enables addressing external uncertainty</td>
</tr>
<tr>
<td>Behaviors associated with the positive consequences of diversity</td>
<td>Information elaboration</td>
<td>Align level of uncertainty tolerance with level of uncertainty in the external environment, recognize and rely on expertise</td>
</tr>
<tr>
<td>Negative consequences of diversity</td>
<td>Reduces cohesion and feelings of inclusion</td>
<td>Increases uncertainty and reduces feelings of inclusion, may result in inaccurate attributions of expertise</td>
</tr>
<tr>
<td>Behaviors associated with negative consequences of diversity</td>
<td>Subgroup formation, displaying ingroup favoritism</td>
<td>Relying on cognitive shortcuts, which may involve outgroup favoritism</td>
</tr>
<tr>
<td>Managing diversity</td>
<td>Positive diversity beliefs and mindsets</td>
<td>Mindfulness, teambuilding, positive diversity beliefs and mindsets</td>
</tr>
<tr>
<td>Experienced inclusion determined by</td>
<td>Feelings of belonging and uniqueness</td>
<td>Uncertainty and anxiety regarding belonging</td>
</tr>
<tr>
<td>Managing inclusion</td>
<td>Interventions similar for all team members</td>
<td>Different interventions for diverse members versus other team members due to different uncertainties</td>
</tr>
</tbody>
</table>
Inclusion accomplished by Organizational policies and practices, leadership A leader’s and team members’ behaviors