THE SCIENCE OF INCLUSION:
How we can leverage the brain to build smarter teams

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In an increasingly global marketplace, diversity and inclusion are being recognized more and more as imperative for business success. Diverse and inclusive teams are smarter, more creative, and make better decisions. While an increasing number of organizations are embracing the notion of diversity, the practice of inclusion is often overlooked. Being respected, valued, and welcome to contribute equates to more than just good feelings; humans have a biologically based need to belong—to feel included, supported, and valued by others socially. In fact, research shows that social exclusion can negatively impact performance, productivity, and pro-social behavior, among other consequences. The challenge is, we often make others feel excluded without realizing it. First, the language, nonverbal cues, and subtle interactions we engage in can communicate signals of exclusion. Second, initiatives that focus on minimizing exclusion can actually increase feelings of out-group. Essentially, if we're not actively including, chances are we're accidentally excluding. To address this challenge, rather than focus on how to not exclude, we provide a neuroscience-based approach focused on what to do more of in order to achieve an inclusive workplace.

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A positive trend has emerged recently, with major organizations prioritizing diversity in an unprecedented manner.

In 2015, for example, Intel's CEO publicly proclaimed the company would achieve gender parity by 2020, and within one year of the announcement, Intel implemented pay parity across genders (Zarya, 2016). Apple followed suit, announcing it would devote $50 million to the cause (Lev-Ram, 2015). Not to be outdone, Google pledged $150 million (Kelly, 2015). In part, these high-profile examples illustrate an important moral shift toward better recognizing the potential of people from diverse backgrounds. But that is only part of the story. Additionally, it turns out that there is evidence of quantifiable value of greater diversity to the bottom line. Across 15 years of data, for innovation focused firms in the S&P 1500, having women in senior leadership lead to an average of over $40 million in increased value (Dezsö & Ross, 2012). Among 500+ US companies, every unit increase in racial diversity was correlated to a 9% increase in revenues—even while controlling for establishment size (Herring, 2009). In that work, combining gender and racial diversity accounted for 16.5% of the variance in revenues. And a global study of over 2000 companies showed that those companies with women on the board had on average 4% higher return on equity and 4% higher net income growth (Curtis, Schmid, & Struber, 2012). However, data also show that we are unlikely to see the benefits of diversity without inclusion (i4cp, 2015).

Studies report that workplaces that are both diverse and inclusive benefit from a 12% increase in discretionary effort, a 20% increase in intent to stay, and ~50% improvement in team collaboration and commitment (CEB, 2012).

A D&I Paradox

Why do we feel more effective in homogeneous groups, but perform better in diverse groups?

There is a potential objection to seeking diverse teams that may be on the minds of many readers. It is captured in this idea: "Isn't there value in having a team that easily understands one another, and feels comfortable together?" Probably most people will have had an experience in which it just felt easier to be on a homogeneous team. That would seem to run counter to the above findings about the benefits of diverse and inclusive teams. How can both be true—that diverse teams are more effective, and that we have had experiences of feeling more effective on homogeneous teams?

An important part of the answer lies in our brains' wiring—we have automatic, non-conscious responses to many situations because these largely save us a lot of time and neural processing resources. The problem with these decision-making tendencies lies in the fact that they leave our thoughts, decisions, and behavior vulnerable to a large number of unconscious biases. Highly relevant to a discussion of diversity and inclusion are in-group and out-group biases—biases of "Similarity" that lead us to prefer people who we perceive as being more similar to ourselves, and on the other hand, to be suspicious of and less likely to prefer dissimilar others (Lieberman, Rock, Halvorson, & Cox, 2015).

Our tendency toward "in-group preference" leads to a D&I paradox: We expect teams of people who are composed of more similar individuals to outperform those that include people we see as different (i.e., more

diverse groups). One research study investigating this paradox created groups of "oldtimers" and compared how the oldtimers-only group performed vs. a group in which they introduced a "newcomer" who was socially different from members of the existing group (i.e., they created a more diverse group by adding an out-group member) (Phillips, Liljenquist, & Neale, 2008). Their findings showed a direct contrast between what group members perceived to have happened compared to what actually happened to performance. The newcomer (more diverse) group members thought that their group interactions were less effective, and they had less confidence in their decisions. However, this more diverse group consistently outperformed the oldtimers-only (less diverse) group on a complex task (i.e., solving a murder mystery).

The findings from this study highlight some of the main roadblocks to taking full advantage of the benefits of diversity and inclusion—our own brains and our susceptibility to unconscious bias. For an in-depth discussion of the neural basis of unconscious bias and evidence-based mitigations strategies, see the paper previously published in this journal detailing The SEEDS Model® of breaking bias (Lieberman et al., 2015).

A closer look at the research on the psychological effects of diversity helps show what we gain when we include diverse perspectives, and why inclusion is so key.

Creative problem solving. In one study, participants were asked to come up with creative solutions for improving an area as a tourist destination. Ethnically diverse groups outperformed ethnically homogenous groups in terms of how feasible and how effective their ideas were judged to be (McLeod, Lobel, & Cox, 1996).

Error detection. In mock jury research, racially mixed groups have been shown to identify more facts of the case and make fewer errors than homogeneous groups (Sommers, 2006).

Logical problem solving. Groups working together can be tested for "group intelligence" in much the same ways that individuals can be tested for intelligence—through logical and analytical challenges. For example, these can include matrix reasoning—detecting an option to complete a set—moral reasoning, planning for a typical event, and so on (Woolley, Chabris, Pentland, Hashmi, & Malone, 2010). Groups who are more inclusive—socially sensitive and balanced in terms of who gets a chance to speak—end up testing as more intelligent.

The role of inclusion in these psychological benefits. One critical factor contributing to this increased performance is an increase in perspective taking—the highest performing groups are those with the most social and

emotional intelligence (Woolley et al., 2010; Woolley & Malone, 2011). They take turns and listen to one another. That is, they include more of the voices at the table in a meaningful way. Interestingly, the individual IQ of any one member of a team did not predict performance in the team intelligence work, but social intelligence did (Woolley et al., 2010; Woolley & Malone, 2011). This latter finding is underscored by a recent New York Times article chronicling Google's research into what characterizes the best performing teams:

> The paradox, of course, is that Google's intense data collection and number crunching have led it to the same conclusions that good managers have always known. In the best teams, members listen to one another and show sensitivity to feelings and needs (Duhigg, 2016).

While it is encouraging that research shows diverse teams are better at creative problem solving, error detection, logical problem solving, and have more business success, focusing on diversity is only a first step. Without inclusion, we stand to miss out on those benefits.

"...as far as the brain is concerned, social rejection actually hurts."

What compounds both the importance and challenge of successful inclusion are the many ways we exclude without even realizing what we are doing; this inadvertent exclusion can have consequential, meaningful impacts on workplace performance.

The benefits of inclusion and costs of exclusion

The human brain is exquisitely sensitive to social information, specifically cues in our environment that trigger a sense of social reward (e.g., feeling that we are valued by our team members), and a sense of social threat (e.g., feeling that members of our group think negatively of us) (Lieberman, 2013; Rock, 2008). For example, social isolation and loneliness significantly change the structure and function of brain areas important for social perception and memory, such as the hippocampus and superior temporal sulcus (S. Cacioppo, Capitanio, & Cacioppo, 2014; Kanai et al., 2012). As we'll see, research explains what happens behaviorally, cognitively, physiologically, and neurally when we feel included and, by contrast, when we feel excluded. Often these benefits and costs

The above six benefits of inclusion point to its value for better organizational as well as individual performance.

are non-obvious, so we can profit from understanding how our brains process signals of inclusion and exclusion, and how specific (many times subtle and unintentional) actions can drive these signals.

Social exclusion is painful

Arguably, one of the most profound contributions from neuroscience to the study of inclusion comes from findings involving pain networks in the brain. Research suggests that the limiting consequences of exclusion on mental function are likely greater than we previously realized. That research leverages a widely used paradigm for eliciting social exclusion—a virtual ball tossing video game ("cyberball") (Williams, Cheung, & Choi, 2000). In its simplicity, the game highlights just how easily real effects of exclusion can occur. Participants believe they are playing the video game with other live players via a computer. On the computer screen, the participant sees a cartoon of the two other players, and initially all players take turns throwing a virtual ball back and forth to each other—a simple game of catch. Unbeknownst to the excluded participant, the game is pre-programmed and the other two players are not real humans. Without warning, the other two players exclude the participant and only throw the ball to each other, which consistently elicits strong feelings of social ostracism (Hartgerink, van Beest, Wicherts, & Williams, 2015). This strong sense of social exclusion has been shown to activate the brain in a similar way to experiencing physical pain (Eisenberger, Lieberman, & Williams, 2003), suggesting that, as far as

the brain is concerned, social rejection actually hurts (Eisenberger, 2015).

The troubling consequence is that when we are in pain—physical or emotional—it can be very hard to operate at our best cognitively. While not all researchers agree with the conclusion that social exclusion and physical pain are in some ways the same thing (S. Cacioppo et al., 2013), there does appear to be a relationship between particular brain areas involved in processing both pain and social exclusion, specifically the dorsal anterior cingulate (Lieberman & Eisenberger, 2015). This research suggests we can at least expect some of the consequences of social exclusion to be the same as those of physical pain.

After seeing that the brain is highly reactive to social inclusion and exclusion, it is easier to understand why inclusion can have so many behavioral consequences. Specifically, we highlight six areas of mental function relevant to how individuals perform at work, which are highly affected by feelings of inclusion or exclusion.

Six areas affected by inclusion and exclusion

1. *Intelligent thought and reasoning*

Research shows that whether someone feels included or excluded has a profound impact on their ability to think intelligently and perform tasks requiring logical reasoning. In a series of studies, participants were asked to take a personality test and given (false) feedback about whether or not they were likely to have rewarding relationships

throughout life, or likely to end up alone in life (belonging vs. social exclusion conditions). When told they were likely to end up alone, people were significantly impaired on measures of intelligent thought (IQ and standardized test performance) compared to people who believed they would have a sense of belonging in their futures. The excluded group had a harder time with tasks requiring effortful logic and reasoning, while the included group showed none of the same impairments. Importantly, these cognitive impairments were unique to social exclusion (i.e., "You're the type who will end up alone later in life"). The same declines in performance were not observed when told they were likely to be misfortunate in the future (i.e., "You're likely to be accident prone later in life") (Baumeister, Twenge, & Nuss, 2002).

Exclusion also creates an environment in which people from groups associated with negative stereotypes may be more likely to underperform. A body of research shows that group differences in logical thinking result from self-perception rather than the ability to perform a task (Steele & Aronson, 1995; Steele, 1997; Davies, Spencer, & Steele, 2005). For example, women unconsciously rely on the stereotypical view that they are worse at math than men instead of on their own potential, which results in poorer performance on standardized tests. In essence, stereotyped individuals unconsciously fulfill the external expectation.

One way to avoid such a self-fulfilling prophecy is by increasing inclusion. By making the out-group member (e.g., a member of a minority group) an in-group member—i.e., by creating a feeling of inclusion instead of exclusion—we are essentially counteracting the negative stereotype and increasing a sense of belonging, social value, and psychological safety. This re-categorization from part of the out-group to part of the in-group decreases the psychological distance between former out-group members, making them closer and more included in the new in-group (Gaertner et al., 1993; Gaertner & Dovidio, 2014).

2. *Self-care and self-improvement*

Feelings of inclusion and social connection lead to acting in your own best interest, while social exclusion tends to lead to self-defeating behavior. Using the same alone-later-in-life experimental setup discussed above, researchers showed that people were significantly more likely to choose bets that were safer and more optimally beneficial when they felt included. People were much more likely to engage in irrational, fooling, and self-defeating risky behavior when they felt socially excluded—i.e., choosing a long-shot lottery with more aversive outcomes. Socially included participants were more likely to choose healthy behaviors (e.g., a granola

bar for a snack), while excluded participants chose unhealthy behaviors (e.g., a candy bar). Socially included participants were more likely to begin preparing for an upcoming test (e.g., practice arithmetic problems), while excluded participants procrastinated longer (e.g., reading entertainment magazines). Again, these findings were specific to social exclusion, and not just receiving any negative news about the future (Twenge, Catanese, & Baumeister, 2002).

Exercising self-care and willpower can also prove challenging if we feel depleted and under stress (Bhanji, Kim, & Delgado, 2016). Research tells us that perceived control over our choices positively affects our perception of setbacks (Bhanji, Kim, & Delgado, 2016), the choices we make in situations of hardship, or when none of our choice options are preferred (Leotti & Delgado, 2011). Therefore, if we can limit the highly stressful experience of being in an exclusive environment and increase feelings of inclusion, we can dramatically increase the quality of decision-making and self-regulation. Limiting stress encourages optimal prefrontal cortex function, which is critical for logical reasoning and creative thinking.

3. *Pro-social behavior*

When people feel excluded (e.g., being told "No one chose you as someone they wanted to work with"), they donate less, volunteer less, are less helpful, and are less cooperative (Twenge, Baumeister, DeWall, Ciarocco, & Bartels, 2007). When excluded, we are less willing to lend a helping hand to people in our group and to allocate resources (e.g., money, time, effort) to them (Brewer & Kramer, 1985). The opposite is true in cases of social inclusion (e.g., being told "Everyone chose you as someone they'd like to work with"), which leads people to give more to charitable causes (e.g., a student fund), be more willing to participate in voluntary tasks (e.g., other laboratory experiments), help others more after a mishap (e.g., picking up a cup of pencils that was knocked over), and be more likely to act cooperatively (e.g., dividing up money with someone else). These consequences may be influenced by the fact that we also understand others better when we feel included. We are better able to identify the emotions of in-group members. Additionally, regions of the brain important for social processing and perspective taking (e.g., superior temporal sulcus) are more active when we are trying to understand the minds of in-group (vs. out-group) members (Adams et al., 2010). Thus, a person who is included is more apt to recognize when someone needs a hand, is struggling, or by contrast, is engaged, or responding well to team dynamics.

Neuroscience evidence may help explain why inclusion leads people to more pro-social behavior. The closer we

are, the more we feel rewarded for sharing. Closeness tends to come when we are more inclusive. When we share resources or cooperate with those we are close to, there is a distinct neural signature. In a study involving a simple card guessing game, for example, participants experienced a feeling of reward when splitting their earnings with a close friend, and this was progressively stronger the closer their relationship was (Fareri et al., 2012). These findings were also reflected in increased activation in the brain's reward network. Strong, trustworthy, and inclusive relationships with others deepen the satisfaction we feel when we share resources.

4. Self-regulation

When we feel socially included, we are much better at engaging in self-regulation, an ability that is profoundly impaired when we feel excluded. People who feel included are better able to overcome a present urge in the service of a different goal. For example, they are more able to drink something healthy but that tastes bad, better able to refrain from eating unhealthy foods (eating from a plate of cookies when left alone), and more likely to persist on a frustrating task (an unsolvable puzzle). People who feel excluded are worse at all of these tasks requiring self-regulation: they consume less of the healthy drink, eat more cookies, and quit a frustrating task more quickly (Baumeister, DeWall, Ciarocco, & Twenge, 2005). Compared to people who feel included, those who feel excluded are also worse at regulating their attention. When presented with different streams of auditory information to each ear (i.e., a political speech in the right ear and a series of spoken words in the left ear), socially rejected individuals are worse at being able to ignore the political speech in order to correctly identify the words. Interestingly, it's not that social rejection completely eliminates self-regulation—further findings showed that social exclusion appears to reduce a person's motivation to make the effort to regulate (Baumeister et al., 2005).

5. A sense of purpose

In contrast to feeling included, socially excluded individuals are put into a defensive state, with the cognitive consequences of an increased sense of meaninglessness, lack of emotion, avoidance of self-awareness, lethargy, and altered time perception. They are more likely to agree with the statement, "Life is meaningless," choose fewer emotional words, turn away from a mirror, and overestimate time intervals (Twenge, Catanese, & Baumeister, 2003). These indicators of a lack of purpose in one's experience of the world are not present when you are able to promote feelings of inclusion.

6. Well-being

While social connection and inclusion are beneficial

in many domains of cognitive and social functioning, social exclusion is associated with increased social anxiety, jealousy, loneliness, and depression, as well as reduced self-esteem (Leary, 1990). As exclusion can lead to loneliness, that may compound the consequences. A wealth of evidence demonstrates that people who experience more loneliness also show increased stress and threat processing, reduced physiological functioning, reduced sleep quality, impaired executive functioning, and are much more at risk for disease, disability, poor health, and even death (J. Cacioppo & Cacioppo, 2014; Hawkley & Cacioppo, 2010). On the positive side, social connectedness reduces loneliness, which thereby reduces negative mental health outcomes, such as depression (Jose & Lim, 2014).

> *"...we accidently exclude others in many more ways than most of us are aware."*

To illustrate, suppose you are leading a product development team. On that team, you have engineers, marketers, designers, and others. You need everyone's input to make the product a success. And the team members' perspectives will likely vary on a number of points: what are must-dos, what comprises a worthwhile investment, what's the best way to proceed, etc. Now imagine you have accidentally excluded members of your working team. They are less likely to be thoughtful, to self-improve, to help others, to understand others, to regulate their own behavior, to have a sense of purpose, and to be in optimal mental health. These are not small deficits. Put more simply, if your excluded team members feel that they aren't part of the in-group, would they still have the team's best interests in mind? Or would they be more likely to let you and/or the team fail?

Note that the findings on the consequences of inclusion vs. exclusion are universal to all people. They are such that it is worth applying these lessons to all employees, and not just those who are part of an underrepresented group. All employees need to feel included, because all humans are sensitive to and feel threatened by exclusion, and people tend to underperform when feeling excluded.

We exclude others more than we may realize

Especially challenging is the fact that we accidently

exclude others in many more ways than most of us are aware. Whether through language, nonverbal cues, or the manner of our interactions, we frequently—and often unconsciously—communicate to others that they are excluded.

These exclusionary behaviors have been termed "microaggressions," (Sue et al., 2007; Sue, 2010; Treadwell, 2013) to highlight how insidious they can be, by flying under the radar. Often the person giving them has no idea he or she has done so. But to the receiver, they are loud and clear messages. Everyone has some way in which they would rather not stand out in certain contexts—be it weight, age, gender, race, ability, accent, style, and so on. Even a well-meaning comment, such as "your English is very good," calls attention to a potential deficit you have in communication. It can land as a message that you are not really a member of the group, and your presence is more tolerated than desired. The person giving the comment is likely unaware it may have landed that way.

In contrast with intentional acts of bigotry, these negative interactions are often inadvertent and carried out by people who are unaware of their behavior (Sue, 2010). These types of behaviors are usually reflective of general stereotypes and prejudices against any marginalized group of people; for instance, turning to the one woman in a group of men for input only on topics such as how people may react emotionally to some initiative. The stereotype that women are more emotionally intelligent but less rational can drive a team member to make those requests of her without realizing he is acting on stereotypes. In so doing, he will send an unintended message that she is not a valued member of the group, but only a token representative of her gender.

Even when the stereotypes are positive—extreme athletic ability, for example (Waytz, Hoffman, & Trawalter, 2014)— there can be a downside. Although usually thought of as positive, seeing someone as "superhuman" has negative effects, such as the denial of his ability to feel pain (Waytz et al., 2014). That these interactions are typically unintentional and that their perpetrators are usually oblivious to their negative effects are compelling reasons why they contribute to the persistence of exclusion.

Effectively, if you are not actively working to make your team members feel part of an inclusive, supportive group, then there are a number of ways (many subtle and unintentional) that you may be creating an environment of social exclusion and its resulting negative consequences. More specifically, we do this verbally, nonverbally, and through the ways we interact. Below are examples that help illustrate.

In the verbal context, for example, how you use the word

"we" can either include the person being addressed or exclude that person (Nordquist, 2016). How would you feel if you heard these two sentences?

1. *"We are in this together."*

2. *"We will let you know."*

Using the inclusive "we" (sentence #1) signals that the other person is part of the group. Using the exclusive "we" (sentence #2) sends a direct signal of exclusion.

Other verbal expressions driving perceptions of inclusion and exclusion include the following: pronoun usage (e.g., always using male pronouns), pronoun order (e.g., always saying "he or she"), and word suffixes (e.g., policeman) (Tasmanian Department of Education, 2012). If you consciously or unconsciously use language that can be confusing or unclear, such as jargon or acronyms, or don't define what you are referring to (presupposition), you can be excluding the people to whom you are talking. A variety of research findings indicate that our brains are not only sensitive to hearing our own names, even in noisy environments (Mack, Pappas, Silverman, & Gay, 2002), but that brain networks involved in mentalizing (taking the perspective of others, understanding others' thoughts and emotions) are also activated when other people address us by our names (Kampe, Frith, & Frith, 2003; Parise, Friederici, & Striano, 2010; Perrin et al., 2005). These brain networks are associated with affiliation, attempts at mutual understanding, and empathy. Addressing someone by name sends signals of inclusion and belonging, while failing to do so can unintentionally signal exclusion.

In addition to the linguistic signals we send, we communicate a great deal about inclusion or exclusion with our nonverbal behavior. For example, making eye contact with someone is indicative of how included or excluded they are. When a person doesn't make eye contact and averts her gaze from another, it can cause the other person to feel ostracized, have lower self-esteem, and even develop a greater temptation to act aggressively toward the excluder (Wirth, Sacco, Hugenberg, & Williams, 2010). Making direct eye contact is also associated with a neural signature associated with approach behavior, while averting your gaze elicits more avoid-related brain activation (Hietanen, Leppänen, Peltola, Linna-aho, & Ruuhiala, 2008). That is, aside from the clear case where approach behavior represents a plan of attack, making eye contact is an inviting behavior that can facilitate warmth and inclusion. Avoiding eye contact, conversely, can signal disinterest and exclusion.

Other physical actions (or reactions) to others send messages of inclusion or exclusion in social interactions, even if we are unaware that we are doing them. Non-

conscious social mimicry, such as adopting the same posture or facial expressions as the person we are interacting with, is one signal of the desire for social affiliation—signaling inclusion. When people want to be included, they are more likely to imitate the nonverbal physical behavior of the in-group members. This is especially true after people feel that they have been socially excluded in some way (Lakin, Chartrand, & Arkin, 2008). Bodily posture, such as crossing arms or legs ("closed posture"), can indicate discomfort, anxiety, or uncertainty, as well as a sense of distance or disconnection between people (Meadors & Murray, 2014)—all exclusionary signals.

Research concerning the effects of impaired social mimicry skills reveals just how important nonverbal cues are for building social and emotional connections. A series of studies investigating the effects of Botox on expressing emotions (Oberman et al., 2007; Davis et al., 2010; Havas et al., 2010; Neal & Chartrand, 2011) showed that while this wrinkle-smoothing treatment significantly diminishes your ability to frown and smile by paralyzing your facial muscles, it also unintentionally handicaps a crucial social skill—empathy—that enables building fruitful connections with others by responding appropriately to their socio-emotional expressions (Neal & Chartrand, 2011).

Language and nonverbal cues are not the only media through which we subtly send exclusionary or inclusionary signals. How we interact does so, as well—for example, through turn-taking. In conversation, turn-taking is a finely coordinated dance indicating the status of who is speaking and how speaker status gets transferred to others (Sacks, Schegloff, & Jefferson, 1974). This structured dance consists of three types of cues: 1) the speaker sends signals that she is ready to yield her turn to another (e.g., a change in intonation or a concluding hand gesticulation); 2) the speaker sends signals that suppress others' attempts to take her turn (e.g., continuing to engage in hand gesticulations); and 3) the listener sends "back channel" signals to avoid taking her turn in the conversation (e.g., saying "mm-hmm," nodding of the head, making brief requests for clarification) (Duncan, 1972). Understanding this system of subtle signals and cues for turn taking is critical for effective social communication, and indeed for making conversations more inclusive. But notice how easy it is to send the wrong signals. If you've ever been speaking during a meeting, only to find your colleagues preoccupied with email, you know all too well how such behavior breaks conversational flow and creates a sense of exclusion.

Recall that one of the defining features of the smartest and best performing teams is equal contribution by all team members to discussions (Woolley, Malone, & Chabris, 2015)—specifically, how equally distributed conversational turn taking is in the group (Woolley et al., 2010). Equal turn taking is one critical component in creating a sense of psychological safety (Edmondson, 1999), which turned out to be the most important predictor of the most successful teams at Google:

> The behaviors that create psychological safety—conversational turn-taking and empathy—are part of the same unwritten rules we often turn to, as individuals, when we need to establish a bond. And those human bonds matter as much at work as anywhere else. In fact, they sometimes matter more (Duhigg, 2016).

Not surprisingly, violating the rules and signals for turn taking can send strong messages of exclusion, even if they occur unintentionally.

After reviewing the findings that illustrate the harm exclusion has on productivity and the contrasting benefits of inclusive behavior, we believe it is helpful to again stress that these findings need not just be applied to understanding diverse employees. More importantly, we in fact suggest that for optimal team productivity, all employees need to feel included (e.g., valued, respected, and safe), as all humans are sensitive to and feel threatened by exclusion, and everyone tends to underperform when feeling excluded.

"...instead of trying to avoid exclusion, we are much better off putting thoughtful effort to enhancing inclusion."

With so many reasons why it is worthwhile, from a brain perspective, to limit exclusion, it follows naturally that well-meaning people will put great effort into avoiding excluding others in their organizations. Ironically, however, this may not be the best approach. When we focus on not excluding, we may end up making the situation worse, in a few different ways. First, when we aim not to exclude, we can be more likely to call attention to differences between people. As reviewed above, language that highlights how someone is not part of the group is often construed as exclusionary (Nordquist, 2016). We end up putting the person on the spot instead

of bringing him into the fold. Second, when focusing on not excluding, we may actually create a state of threat in ourselves as we try to be hyper-vigilant of doing or saying the "wrong thing"—becoming self-conscious and wary. This can result in over-correction or awkwardness that singles the person out that we wish to include. Finally, this well-intentioned but misguided strategy may not only strengthen feelings of exclusion and "not belonging," but can also breed further resentment as people pay more attention to the ways that others in the organization exclude one another. Therefore, instead of trying to avoid exclusion, we are much better off putting thoughtful effort to enhancing inclusion.

With so many ways in which we can exclude people without even realizing it, we believe that if we're not actively including, we're accidentally excluding.

How to actively include

It can be challenging, if not impossible, to individually become aware of all the linguistic, nonverbal, and interactive signals we give off. Rather than aim to recall a long list of individual signals, we offer a set of organizing principles to simplify that task. We provide a framework below intended to guide how to think about and act on your intention to be inclusive. That framework builds on The SCARF® Model of social motivation (Rock, 2008). The SCARF® Model organizes the ways in which a person can feel threatened or rewarded socially, into five categories: S (status—where do I stand?), C (certainty—can I predict another's behavior?), A (autonomy—who has control?), R (relatedness—are we on the same team?), and F (fairness—are resources equitably distributed?). That taxonomy has been adopted by hundreds of organizations and shared with hundreds of thousands of employees, because, feedback suggests, it is very easy for people to recall and make use of. It helps people anticipate when another will feel socially threatened or rewarded, which is of particular value when aiming to build inclusion.

> *"…if we're not actively including, we're accidentally excluding."*

Positive SCARF® signals

Leveraging The SCARF® Model, we suggest it is possible to learn to send socially rewarding signals that will build inclusiveness. We focus specifically on the positives—signals that increase inclusion—rather than on trying to

decrease exclusion. Research shows that aiming to avoid negative thoughts or behaviors can have paradoxical consequences (Wegner, Schneider, Carter, & White, 1987). Trying to not do something makes it more likely you will think about and then do that very thing. When we focus on what not to do, we prime the neural activity associated with what not to do. "Don't picture an elephant" requires thinking about an elephant, picturing it, and then applying willpower. Rather, when your aim is to avoid doing something, you are far better off simply shifting focus onto what you would prefer your brain attend to (Wegner et al., 1987). Thus, rather than trying to hold in mind the exclusionary messages to avoid sending, we focus on thinking about the inclusionary messages to send.

Positive relatedness signals

We start with relatedness because, of the five SCARF® domains, it is the most directly associated with inclusion. Relatedness refers to whether or not people see one another as being on the same team—related to one another through inclusion in the same group. A strong and effective way to increase feelings of inclusion, therefore, is to send positive relatedness signals—make a person feel like she belongs to the group and is valued. Relatedness can be signaled by actively increasing one's perceptions that she is part of the in-group and by strengthening her sense of group identity, which changes the way the brain processes other members of the group (Van Bavel, Packer, & Cunningham, 2008). Creating stronger bonds between group members and increasing a person's sense of belongingness can be accomplished by strategies that focus on highlighting commonalities between people instead of differences.

Positive relatedness signals can come from actively being warm and curious toward others, being interested in others, and finding shared experiences. Setting up situations that are conducive to these kinds of social interactions and implementing systems that focus on identifying common overarching goals are some ways that organizations can promote inclusion through sending positive relatedness signals.

Developing common goals is one of the most effective strategies that consistently brings people together and increases collaboration (Pearsall & Venkataramani, 2015; M. Sherif, Harvey, White, Hood, & Sherif, 1954). However, by bringing two initially separate groups together, it is vital to establish common goals as well as common resources to avoid a fight for now limited goods (attention, resources, etc.) (M. Sherif, Harvey, White, Hood, & Sherif, 1961). Importantly then, you can build relatedness and eliminate the natural increase in anxiety and mistrust by promoting equal status, fair resource distribution, cooperation, and support between all members (Allport, 1979).

Practicing perspective-taking can be very helpful in navigating group transitions (Amodio & Frith, 2006), and is one key way to increase positive relatedness signals. Most of us have the ability to think about what others think, know, want, and fear. Thanks to one area of the brain—the medial prefrontal cortex—we posses a uniquely human skill to mentally put ourselves in the shoes of others (Ruby & Decety, 2004). This practice of perspective-taking can reduce prejudice and stereotypes while enhancing empathy (Galinsky & Moskowitz, 2000; Gilin et al., 2013)—critical for building relatedness and increasing a sense of inclusion.

Positive status and fairness signals

Status and fairness signals can be grouped conceptually, further simplifying what a practitioner needs to hold in mind. Fairness pertains to the equitable distribution of resources, time, attention, and other factors people value. Status is often communicated by unequal distribution of these valued factors (i.e., higher status individuals receive more). Moreover, people often feel as though they are being treated unfairly when their status is diminished. For example, an employee who has worked hard and held herself in high-esteem as an important member of the company will likely feel unfairly treated if, come annual review time, she receives a grade for the year that is below the grade others received who are no more important to the team than she is. The status drop she feels due to the grade creates a sense of unfairness. In these ways, status and fairness often go hand in hand.

Helping someone feel that they are respected and valued as part of the group, and that they are fairly recognized for their contributions are critical for that person to feel included. Doing so builds psychological safety, which is a defining feature of the most successful, most cohesive, and smartest teams (Duhigg, 2016; Edmondson, 1999). Positive status signals communicate that a person's social status relative to others—her social value—is not at risk; and positive fairness signals mitigate the stress, anxiety, and anger that come with feeling that your contributions are not acknowledged. These are important factors that contribute to creating a psychologically safe work environment, which we argue is a prerequisite for an inclusive work environment.

You can send positive status and fairness signals by implementing processes that ensure that everyone is asked to contribute, that opportunities are shared, and that everyone receives credit for their contributions.

Positive certainty and autonomy signals

Certainty and autonomy are often linked. Feelings of certainty and autonomy are the ways in which people know that they have some sense of what they can expect

(e.g., feeling that they have been provided with enough information), and importantly, that they have a degree of choice in and control over what happens to them. Certainty and autonomy signals also can be grouped to simplify the process of sending positive SCARF® signals. The more certainty we have, the more we can predict what is coming in a social situation and what to expect from others. That predictive ability makes it easier for you to control your own destiny—how you will prepare, what role you will take, and so on. Likewise, the more autonomy (i.e., control) you have over your own contribution, the more certainty you can have about what is to come.

> "To better include others, we can focus on just five factors that simplify thinking about the meaning of the signals we send."

Increasing certainty in and of itself signals reward in the brain (Bromberg-Martin & Hikosaka, 2009). And the perception of greater autonomy not only elicits neural reward signals (Leotti & Delgado, 2011), but also leads to health, well-being, job satisfaction, reduced stress in the workplace, and increased motivation (Diener, Ng, Harter, & Arora, 2010; Gagné & Deci, 2005; Wood & de Menezes, 2011). Sending positive certainty and autonomy signals tells a person that he is in the loop and that his contributions matter. These kinds of positive SCARF® signals come from implementing strategies that keep people informed and give people a feeling of control (e.g., keeping people in the loop, explaining your choices, etc.).

Conclusions

The financial and psychological benefits of diverse teams and diverse leadership are well documented. However, the real power in diversity lies dormant without creating an environment where people feel integrated, feel that they belong, and feel open and safe enough to express their ideas—where inclusion is a reality.

Without realizing it, we exclude others in many ways through our verbal language, body language, and interactions with them. Subtle cues communicate whether others are welcome in the group or seen as outsiders. And those who are sensitive to being different in some way

may also interpret ambiguous cues as exclusionary.

As highlighted above, unless you actively include, we believe it's reasonable to say, you accidentally exclude.

Fortunately, scientific research helps us identify and understand the actions that send strong messages of inclusion. There are many individual ways we speak, behave, and interact that communicate inclusion or exclusion—probably far too many to keep track of during a social interaction. In this article we have provided a framework to simplify how a person aiming to include can think about the signals they send and then act differently. To better include others, we can focus on just five factors that simplify thinking about the meaning of the signals we send. We can consider whether we are sending SCARF® signals—messages that affect a person's status, certainty, autonomy, relatedness, or fairness. By sending positive SCARF® signals—signals that communicate an increase in one or more of the five SCARF® domains—individuals can take advantage of the neuroscience of social threat and reward to benefit from the smarter, more cohesive, more productive, and happier diverse and inclusive teams that they will help build.

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