

# NeuroLeadership**JOURNAL**



## **SELECT BETTER:**

How managers can reduce bias in hiring

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Despite millions of dollars spent on diversity initiatives, the workforce still suffers from a diversity gap that has not yet been effectively addressed. Bias during hiring decisions remains one of the core challenges in solving this problem. We believe a central issue in addressing bias in hiring is that there is not just one opportunity for bias to influence hiring decisions. Rather, there are three unique stages—resume review, interviewing, and choosing a candidate—that make up a hiring decision, and each is susceptible to bias in distinct ways. Research on the neural bases of cognitive bias suggests, moreover, that each stage requires distinct bias mitigation strategies. We outline which specific biases are important to address at each stage, and the ideal steps to take to mitigate these. Furthermore, when addressing bias at each of these stages in a hiring decision, we propose that organizations need to take bias out of the hiring process, rather than focusing exclusively on taking bias out of people.



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## How managers can reduce bias in hiring

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The value of workforce diversity goes far beyond compliance to being integral to business success. Increased gender and racial diversity directly correlates with profitability in the forms of increased sales revenue, greater market shares, and a broader pool of customers (Herring, 2009; Pratt, 2015).<sup>1</sup> To capitalize on the benefits of diversity, companies have spent considerable effort and money on improving diversity training and hiring practices. For example, Intel invested \$300 million in diversity efforts in 2015 (Wingfield, 2015), and Google invested \$150 million specifically on hiring women and minorities (Kelly, 2015).

Despite the growing focus to decrease bias in hiring decisions and the positive movement at numerous organizations like Google and Intel, little has improved in much of the corporate world (McGirt, 2016). Even with millions spent on awareness training and diversity initiatives, we still have a major diversity gap in our workforce that has not yet been effectively resolved. While there are some bright spots—currently 57% of the professional workforce in the US is occupied by women in select sectors (Ember, 2016; McGirt, 2016; (Saab, 2014), 12% by Black and 17%

1 As with any correlation, the relationship between diversity and business success is not a perfect one to one map, of course—it can take time for the benefits of diversity to emerge and alternative resources or training may be helpful for employees with non-traditional backgrounds (Eagly 2016; Ely & Thomas 2001). Moreover, as we and others have highlighted, the benefits of diversity truly emerge when the organization also focuses on inclusion (Cox et al., 2016). But with proper resourcing and focus on inclusion, diversity can be a powerful catalyst for business growth.

by Hispanic people<sup>2</sup> (USCB, 2015)—the numbers are less encouraging when we take a closer look. For instance, women hold only 14% of positions at the executive level, 18% of positions as equity partners in law firms and 11% of positions as creative directors in advertising (Ember, 2016). Moreover, only 7-9% of executive level positions and about 5% of science positions are held by Black and Hispanic people (Bui & Miller, 2016; McGirt, 2016). These statistics point to a clear lack of diversity in leadership and management positions.

Why does such a large diversity gap persist? When we see bias in hiring decisions, it is easy to assume a hiring manager was intentionally prejudiced while making their hiring decision. But this line of thought often misdiagnoses the problem and thus does not help us solve it. The fact is that a human brain relies on biases for decision-making and the biases that tend to derail hiring decisions are often unconscious. These biases may occur automatically and are often not in the form of overt prejudice (e.g. a conscious belief that one race is superior to another). Rather, the bias is covert; it is inherent in the way the hiring manager makes decisions, because that is how human brains work. Bias is the method through which our brains use a small amount of information to make swift decisions. (See Box 1 for a deeper dive into the neuroscience underlying how such biases affect decisions.)

2 These percentages are representative of the U.S. demographics as of 2015 (Black 13%, Hispanic 18%) (USCB, 2015).

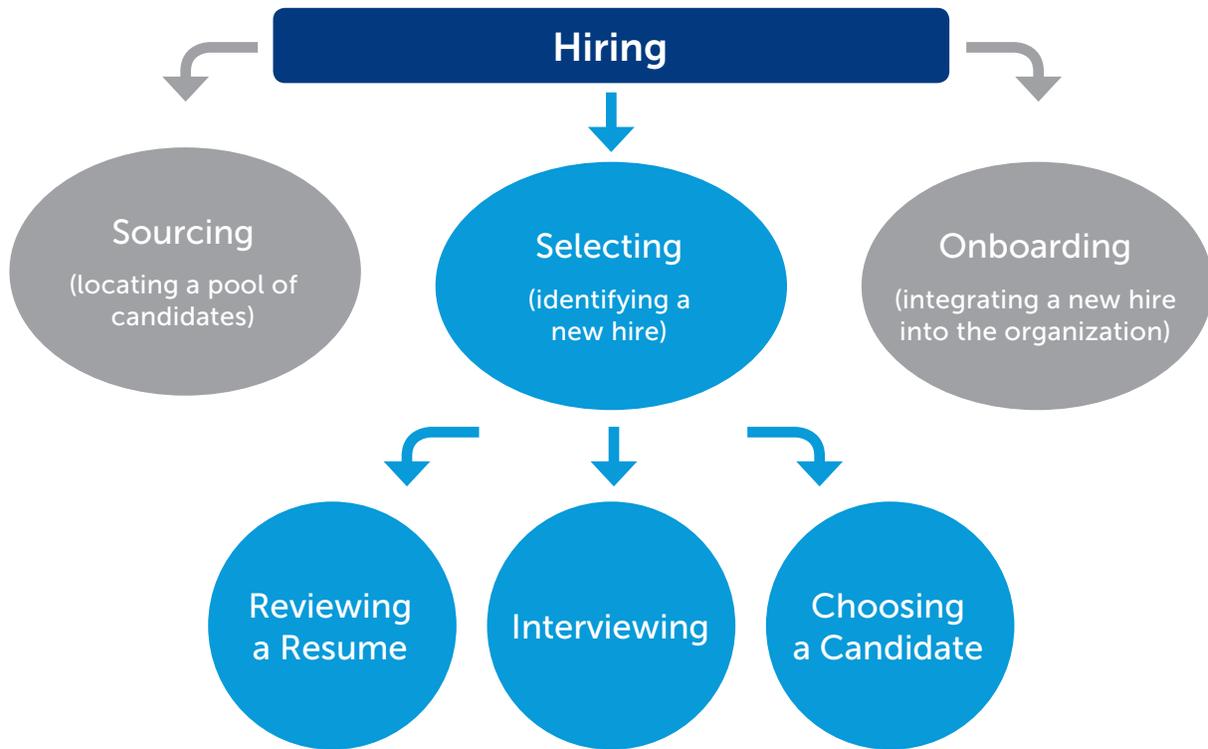


Figure 1. An illustration of where, within the three stages of hiring, we can focus to have the most meaningful impact on reducing bias in individual hiring decisions. Key decision-making regarding any individual hire occurs within the selecting stage. Selecting has three sub-stages: Resume review, interviewing, and choosing a candidate. Each sub-stage requires distinct types of bias mitigation.

A major difficulty in hiring for diversity is that bias still influences decision-making outside of our conscious control, despite the best of intentions (Banaji & Greenwald, 2013). Though our impulse may be to try to make people less biased, neuroscience suggests that it is nearly impossible to take every bias out of a person who is unaware of when and how bias is affecting them (Lieberman, Rock, Halvorson, & Cox, 2015). Instead, we must take bias out of the decision-making process.

We can simplify that challenge by illustrating where it is most crucial to focus our attention. Broadly speaking, successful hiring depends on *sourcing* (locating and recruiting a pool of candidates), *selecting* (identifying a new hire), and *onboarding* (integrating a new hire to the organization) (see Figure 1). While each of these stages is pivotal to successful hiring, the decision-making regarding whether to hire any one individual occurs at the selection stage. Those decisions are highly prone to bias. Therefore, organizations can have a strong impact on reducing bias in hiring decisions by focusing on the selecting stage.

The selecting stage is not just one process, however. Rather, there are three distinct sub-stages that a hiring manager must be able to navigate within it: Resume review, interviewing, and choosing. Each of these sub-stages

requires distinct types of decisions about a candidate, and as a result, distinct biases exhibit disproportionate influence at each sub-stage. Consequently, distinct approaches are necessary to mitigate bias at each one.

### Stage 1. Resume Review

Hiring managers often find themselves overwhelmed with the sheer volume of resumes they need to read. It is not unusual for hiring managers to review a resume with the broad goal of “getting a sense” of a person, rather than examining it with specific objectives in mind. Pressured for time to take care of other high-priority business, they often move quickly through the pile of resumes, separating those that are completely unqualified from those that spark their interest. By one estimate, recruiters spend an average of 6 seconds reviewing each resume (Sanburn, 2012)! While sifting quickly through resumes, they are likely unaware of many of the preconceived notions and biases that unconsciously influence their choices. They may even have taken bias awareness training and are therefore confident that they are objective. The trouble is that we can never fully “bias-proof” our brains. However, we can create processes for any hiring manager to follow that will limit the effects of bias. To do so, we must first know which types of bias are likely in each stage.

## Box 1. How bias works in the brain—The good, the bad, and the ugly

How is it possible that with so many well-intentioned and kind people, we end up making biased hiring decisions? The simple reason is biology: humans are biased (Banaji, Greenwald, & Martin, 2016). While we all believe that we can be objective, from a brain-science perspective, true objectivity is a myth. We are often unaware of how the lens of our deep beliefs, expectations, fears, and memories colors our view on reality and bypasses sound reasoning. Moreover, biases are often implicit, unconscious, and/or automatic. Largely outside our awareness, our brains take mental shortcuts by spending fewer resources on decision-making (Lieberman, Rock, Halvorson, & Cox, 2015; Kahneman, 2013). Just like what happens as you get to know your way around town and learn all the shortcuts, biases help us make decisions in the quickest and most efficient way possible without having to think too hard. Once you have a quicker route, you tend to take it.

**The good:** Unconscious bias is not a bad thing. In fact, it is a feature of how brains make it possible to get through a day full of complex decisions without being over-taxed. For example, an expert sales-person has a sense of whether a potential client is close to moving forward, and decides what course of action to take. That sense is due to a series of biases—associations built up over years of experience. Unconscious biases make it so that we don't have to think deeply for every decision we make.

**The bad:** There is a downside to the fact that brains operate in this way. A bias towards social groups—the attitudes or stereotypes that affect our thoughts, feelings, and actions (Bertrand & Mullainathan, 2004)—often operates “under the skin” to influence how we see and treat others—below our conscious awareness and outside of our conscious control (Dovidio & Gaertner, 2000). Every so often, there are decisions we get wrong more often than right. Hiring for diversity is one of those places where most organizations are not satisfied with the outcome of the decisions they have historically made. Without realizing it, unconscious biases—e.g. associating men with competence—can color a hiring manager's opinion of a candidate.

**The ugly:** Even the most well-intentioned individuals harbor subtle biases (Fleming, Thomas, & Dolan, 2010). Biases such as these can affect the hiring manager regardless of the hiring manager's beliefs or good intentions. That is, even if the hiring manager believes that women and men are equally competent, they might still have a hard time knowing how much a bias has affected their decisions unless they diligently measure aggregate decisions over time.

Neurological processes that occur when someone is experiencing unconscious bias happen within milliseconds (Ito & Bartholow, 2009; Ito, Wiwlladsen-Jensen, Kaye, & Park, 2011) and people find it difficult to suppress them for long periods of time (Richeson & Shelton, 2003). For example, several neuroimaging studies have found that the amygdala of White individuals responds differently to White and Black individuals almost automatically (Cunningham et al., 2004)—and this brain response has been linked directly to measures of unconscious bias (Cunningham et al., 2004; Phelps et al., 2000). Among other things, amygdala activity is often associated with a need to be alert to potential threats, suggesting the brains of White participants may have had an automatic reaction of threat. Indeed, White college students in the United States who express egalitarian values often show bias against minorities (Devine, 1989; Devine, Forscher, Austin, & Cox, 2012).

The brain is also designed to reward itself for relying on automatic biases in many circumstances. Deciding to choose an option we know well elicits increased activation in the brain's reward circuits (Delgado & Dickerson, 2012; Fareri & Delgado, 2014; Leotti & Delgado, 2011). This is because, by default, humans and other animals, are creatures of habit and safety (Yu, Mobbs, Seymour, & Calder, 2010). We like routine and predictability—it usually makes us feel good. However, if faced with choices outside of our comfort zone, we tend to get stressed and anxious. So, it is not enough to educate people about their biases in the hope that they can stop bias from affecting their decisions (Lieberman et al., 2015). Moreover, strategies to change implicit bias in individuals rarely persist more than a day or two (Lai et al., 2016). Instead, we must structure situations to alter the effects of our biased brain. This can be done by changing the procedures by which we make decisions. In other words, attempts at taking bias out of the person do not work as well as steps to take bias out of processes.

The scientific community has identified over 150 biases that our brains produce and rely on without our awareness. Mitigating this many biases, however, can prove unwieldy from a practical perspective. The SEEDS Model® of bias (Lieberman, Rock, Halvorson, & Cox, 2015) helps illustrate the kinds of bias inherent to each type of decision. The SEEDS Model® proposes a simplified classification that organizes those 150 biases into five domains, simplifying the steps involved in identifying what must be done to mitigate each bias. Those five domains are Similarity, Expedience, Experience, Distance, and Safety (See (Lieberman, Rock, Halvorson, & Cox, 2015 for a more detailed explanation). More specifically:

- **Similarity biases** pertain to the biases associated with favoring others who are similar to ourselves;
- **Expedience biases** are those that allow us to jump to conclusions without needing to see all the evidence;
- **Experience biases** include the ways we think our own perspectives most accurately reflect reality;
- **Distance biases** pertain to our inherent tendency to see what is near in space and/or time as more valuable;
- **Safety biases** reflect our strong imbalance to overweigh what is bad compared to what is good.

Due to the volume of resumes and limited time, Expedience biases are perhaps the major challenge among these five types of bias at the resume review stage.

**Expedience Bias.** Expedience biases are essentially mental shortcuts that help us make quick and efficient decisions, based on easily accessible information. Such biases are exceptionally likely to play into our decision-making when we are under tight time deadlines or juggling many tasks at once. Expedience biases make objectivity very difficult by influencing whether and how we weigh evidence outside of our awareness. Moreover, it is critical to address bias at the resume review stage, both because it is very prone to bias and because the bias that occurs at this stage will likely have lasting effects. Not only will decisions at this stage determine the pool of applicants invited for interviews, but this is when people form first impressions, assumptions, and expectations about a candidate that will feed forward into each later stage. There are two main processes that we recommend incorporating to mitigate Expedience biases in resume review: Identify the “must-haves,” and use blind resumes.

### Identify the “must-haves”

Research shows that decision-makers rely on stereotypes to determine whether a candidate possesses the right abilities for the position (Heilman, 1983). Studies also show that members of different groups are evaluated based on different criteria if there are no procedures in place to counteract that effect. In diagnosing task competence, for instance, people independently set different standards for women and men (Biernat, 2003; Biernat & Fuegen, 2001). Therefore, knowing the key dimensions along which a candidate should be evaluated is critical to setting the stage for an objective review of resumes.

We suggest that the most effective way to reduce bias is to identify the behaviors that are most relevant to the job *before* the resume review process. It is also critical to maintain these criteria throughout the hiring process, and apply them equally to each candidate. A couple of guidelines may help:

- a. **Be explicit.** Prior to reviewing any resumes for a position, it is critical to have a concrete list of behaviors, skills, knowledge or other qualities that applicants need to demonstrate to be seriously considered, *regardless of their race, age, and gender.*
- b. For each quality identified, you may want to **ask yourself**, “Could someone succeed in the role without this quality?” This type of counterfactual thinking is helpful in rooting out Expedience biases.

For example, suppose you are looking for a project manager for a marketing team to replace the star player you had in that role who has just left. Without setting clear criteria in advance, you may unintentionally shift your standards to looking for someone who reminds you of the person who just left. That mental shortcut can lead you to overlook a diverse array of highly talented candidates who may be very different from the previous person in that role. With an explicit list of must-haves for a successful project manager on your marketing team, you can reduce bias and identify the candidates with the most talent regardless of how much they personally remind you of your previous star.

Table 1 helps show the general shift in thinking involved. On the “From” side, we list a few common criteria managers tend to use, but should avoid. On the “To” side, we offer alternatives that would help mitigate bias.

While it is helpful to identify explicitly what criteria you must have, it is also helpful to consider the opposite—what criteria should not be considered. Some factors on a resume activate Expedience biases that cause us to give

FROM (bias)	TO (objectivity)
✓ Resume that stands out	^ Evidence of skills and adaptability
✓ Resume that feels “right”	^ Evidence of quality deliverables
✓ School names and pedigree	^ Evidence of progress and growth

Table 1. Demonstration of how to reduce Expedience bias by shifting from bias-driven evaluation to evidence-based assessment.

too much weight to either positive or negative pieces of information. These effects are called the halo and horn effects, respectively.

**Halo effects:** An overall positive impression of a candidate that may be unwarranted (e.g., candidates with high GPAs or those who graduated from Ivy League schools instead of state colleges may be considered more capable than their peers in all domains, thus unconsciously coloring a hiring manager’s opinion about everything else the candidate has accomplished). What is important to have in mind here is that certain groups of students (e.g. first-generation students) are less likely to attend prestigious private colleges for reasons unrelated to competency, intelligence, or potential. Ignoring this large talent pool will lead to worse outcomes for the hiring process and likely reduce diversity.

**Horn effects:** A negative impression based on a negative mark (related or unrelated to job performance) taints the reviewer’s perception of the applicant on other, unrelated dimensions (e.g. a relatively long and unexplained gap in employment may be due to a medical or family reason instead of an inability to find gainful employment, yet unconsciously creates a negative lens through which they view every other piece of information on the resume).

These Expedience biases can cast a long shadow on a hiring manager’s perception of a candidate. Moreover, they can have an undue negative effect on candidates from under-represented groups, thereby limiting diversity. For example, women are more likely to experience employment gaps (e.g. due to maternity leave), and first-generation Americans and candidates from economically disadvantaged backgrounds are less likely to have attended expensive private universities. Thus, prior to resume review, a hiring manager may wish to exclude

certain criteria—like continual employment and private university pedigree—as elements of the must-haves. Alternatively, the manager may create a policy to gather more information as to the circumstances surrounding those factors on an individual basis. At the process level, hiring managers should aim to identify ahead of resume review what they will and will not use as criteria for job candidacy.

#### Use blind resumes (when possible)

Despite the best of intentions, it is still possible to be biased to some degree by any information on a resume without knowing that it is affecting you. Therefore, taking an additional step can help decrease the likelihood of being influenced by bias. By looking at resumes blind to factors that suggest race, ethnicity, gender, and other group membership, those factors will not be present to bias the mind of the hiring manager.

A person’s name, race, age, and gender are all known to activate bias. For example, one study found that simply altering the names of candidates (using Jamal and Lakisha for Black names and Emily and Greg for White names) who had the exact same resumes led to disparities in selecting practices: White candidates received 50% more callbacks for interviews than Black candidates (Bertrand & Mullainathan, 2004). Therefore, to make the resume review process more objective, we may attempt to mask or remove names and other factors that suggest demographic group membership.

The concept of blind selection has been tested repeatedly in the entertainment industry. You may have heard about the impact several major symphony orchestras observed from switching to blind auditions (Goldin & Rouse, 1997). To overcome possible biases in recruitment and reduce gender disparities, several orchestras resorted to auditions in which the identity of the applicants was concealed from the hiring committee. After implementing this blind selecting process, the number of female musicians in the top five symphony orchestras in the United States rose from 5% in the 1970’s to over 25% (Goldin & Rouse, 1997). This strategy has also been adopted by the popular music

show *The Voice*, where judges select singers with their backs turned so as to only allow in the relevant criteria: the quality of their voice (Porter, 2015).

Technology is accelerating our ability to make use of blind resume review. Organizations such as *Unitive*, a start-to-finish hiring resource, are using machine learning to identify characteristics on resumes likely to lead to bias, and then helping to mask that information. Others are creating new ways of submitting and viewing blind resumes. For example, *Blendoor* offers a mobile application for job seekers that hides the name, gender, and photos of an applicant from potential recruiters. It operates like a dating app—swipe right for yes, left for no.

This idea was taken further and applied by the recruiting startup *GapJumpers* (Porter, 2015). While reviewing a blind resume is helpful, not seeing one altogether may be even more beneficial in some cases. Instead, candidates demonstrate their talent and skill in work-related tasks. By doing so, the hiring manager can more reliably assess whether the candidate can in fact perform key tasks required for the job, rather than merely say they can.

Finally, it is important to note that blind resume reviews will likely greatly reduce bias, but will not eliminate it. This is because focusing on “objective” criteria and scoring a resume on skills, experience, and education may still favor certain majority candidates, as they often have had more opportunities to develop required skills and gain adequate experiences than minority candidates. This can be true regardless of who would be the better candidate for the job in the long run. This disparity can translate in any blind review as a disadvantage for some otherwise desirable diverse candidates, and may result in a decreased pool of diverse candidates entering the interview phase. Therefore, knowing your must-haves for any position is critical even with blind resume review.

## Stage 2. Interview

The interview stage might be the most vulnerable to bias because it relies on human interaction, which is dynamic, unpredictable, and constantly evolving. Imagine you are about to begin an interview. You meet the candidate, you see their face, how they sit, how they dress, how they speak and laugh. Just as you react to the candidate, the candidate reacts to you in a way that can be very smooth and seamless or cumbersome and uncomfortable. There is no doubt that culture fit is important. But relying solely on intuition to assess it can lead even the best interviewers astray, since intuition has blind spots we cannot detect.

A common goal of an interview is to investigate whether rapport can be established. As a reader, you may rightfully ask yourself, “Who *doesn’t* want rapport with their hires?” The reality is that everyone wants this. A hiring manager

may therefore think that it’s best to simply go in and have a conversation with a candidate to establish rapport or “test the waters.” After all, many managers take pride in trusting their gut when it comes to people. There is no doubt that intuition is appropriate for some things, such as knowing when to push someone versus when to go easy on them, but it can introduce bias during interviews.

*Biases effectively shrink the available talent pool and leave organizations blind to many of the best possible applicants.*

While it feels very natural to run an interview focused on rapport, this method of interviewing may be one of the reasons we continue to observe so much bias in selecting. Why? Because all human brains make assumptions, form misguided impressions, and are extremely prone to several automatic thought patterns while interacting with others.

Research shows that bias exerts the strongest effects on behavior in the context of unstructured interactions (Avery, Richeson, Hebl, & Ambady, 2009). For example, unconscious bias can lead individuals to engage in nonverbal behaviors that signal disinterest, discomfort, or threat through tone of voice, lack of eye contact, and body posture. When interviewers do not stick to a script, they are more likely to ask “off the cuff” questions of candidates influenced by their race and gender. These questions may often be “stereotype consistent.” For instance, an interviewer may ask women (but not men) questions about work-family balance or having a two-income household. An interviewer might ask a Black (but not a White or Asian) candidate about participation in sports, drawing unconsciously on stereotypes about superior athleticism. These questions may signal to the candidates that the stereotypes about groups to which they belong are common in the company and that the company is therefore an unwelcoming environment.

During an interview, the interaction is often amplified by stress, which then serves as a catalyst to threat responses and increased bias. In a state of stress, our sympathetic nervous system is activated, which includes an increase in cortisol, blood pressure, sweating, and heart rate

(Porcelli, Lewis, & Delgado, 2012; Schneiderman, Ironson, & Siegel, 2005). In such a state we have less ability for conscious executive control (Porges, 2007). Therefore, we employ cognitive shortcuts—unconscious biases—to save cognitive effort. We operate in a more biased way than we would otherwise, which means we think things through less objectively.

Both the candidate and the interviewer will most likely experience a sense of threat that will manifest in different ways. For the candidate, the enhanced stress and anxiety is typically associated with poor performance, despite wanting to perform well in the interview.

Moreover, the effect is compounded for non-traditional candidates. Extensive research suggests that minority candidates often feel additional stress or threat during interviews and other similar situations (Page-Gould, Mendoza-Denton, & Mendes, 2014; Schmader, Johns, & Forbes, 2008). This is especially true among those who are worried about confirming negative stereotypes about their group, such as women or Black men interviewing for an engineering position, especially where there are stereotypes that women and minorities are not as competent as White men. This subjective experience, known as *stereotype threat*, can elicit a stress response and increase cognitive load, which can impair performance during an interview (Schmader, Johns, & Forbes, 2008). This can result in the candidate not showing up in the best light nor accurately representing their true capabilities.

For the manager, selecting a new team member triggers a threat for different reasons: A newcomer poses a heightened level of uncertainty about what to expect from their work, their capability to interact with others, and their overall cultural fit in the company. Would the new person be challenging or submissive, or would they assimilate well? Would they need extensive hand-holding, or would they prove to be a success?

We are likely to experience two types of bias in particular in the interview stage: Similarity biases and Expedience biases. These types of biases may have a negative impact on judgment during interviews.

**Similarity Bias.** We tend to prefer people who seem like us or with whom we share a common group membership (Harvey et al., 1961). This is a basic human universal—observed in every culture on earth—and is wired deeply into the human brain (Brown, 1991; Cikara & Van Bavel, 2014). The result? Automatic in-group favoritism (Van Bavel & Cunningham, 2009). We treat people viewed as similar to ourselves more favorably and with more leniency. Similarity biases arise from our innate motivation to feel good about ourselves and the groups to which we belong. However, they create unspoken divisions of “us”

and “them”, or *in-group/out-group* dynamics, that then color our perception of people depending on whether they are part of “us” or “them”.

Similarity bias can have a strong impact on our opinions. When interviewing a candidate, we are triggered by a set of inherent parallels between a manager and the applicant, like race, gender, and nationality, but also by acquired resemblances, like having attended the same university, worked at the same company, or played the same sport. In fact, research suggests that our brains automatically categorize others as in-group or out-group based on very subtle cues to group membership, and thus process information about them very differently (Ito & Bartholow, 2009; Van Bavel, Packer, & Cunningham, 2008). When we process information differently because of Similarity bias, we can end up seeing a very different candidate. For those we identify as similar to ourselves, we are more likely to listen carefully to what they say, to see the positive in them, and to empathize with their situation (Knutson, Mah, Manly, & Grafman, 2007). Fortunately, Similarity bias can be mitigated with adjustments the hiring manager can make prior to an interview. Here are some examples derived from research:

1. **Find common ground** (similarities) with each candidate. We can trigger our brains to re-categorize individuals who may initially have been categorized as out-group simply by recognizing our common ground (Van Bavel, Packer, & Cunningham, 2011). Doing this can lead us to automatically treat those people with whom we see common ground as we would an in-group member. For example, in each candidate you may look for a similar experience or identity that you yourself possess and value. This way you will perceive each candidate in a positive light, which enables you to be willing to establish rapport.
2. **Look for differences** when you read the resume or meet a candidate who is otherwise a lot like you. This can help to equalize the ways that our unconscious biases affect all candidates. It reduces overly strong positive bias toward the in-group and allow us to see the whole candidate.

**Expedience bias.** Expedience biases are perhaps as prevalent in interviews as they are in resume review, but they show up in different ways that demand different mitigation strategies. Interviewers often resist being tied to a pre-determined list of questions, in the false belief that being “free” to ask what they wish will allow them to collect more valuable information. Unfortunately,

“winging it” leaves the interviewer vulnerable to a couple of biases that fall under the umbrella of Expedience bias: Confirmation bias and recency bias.

*Confirmation bias* is the tendency to both seek out information that confirms and fail to look for information that disconfirms our pre-existing beliefs. Getting input from colleagues about their impression of the candidate *before* conducting the interview is a simple way in which confirmation bias can undermine your decision-making, leading you to (unconsciously) interpret a candidate’s answers in ways that confirm your colleagues’ opinions. Confirmation bias saves a lot of time and effort, but is only useful when our expectations happen to be on target. One way that confirmation bias can occur during an interview is if the interviewer exhibits a tendency to ask questions that would yield evidence that confirms the impression they already have, rather than ask questions that might contradict that impression.

*Neuroscience suggests that it is nearly impossible to take bias out of people—instead, we must take bias out of the decision-making process.*

*Recency bias* refers to our tendency to have better recall for, and be more influenced by, information we learned last. Without doing something to mitigate the consequences of the recency effect, the information learned most recently will interfere with the effectiveness of interviewing. Recency effects lead to stronger opinions (both positive and negative) and more vivid memories of the candidates we interviewed most recently.<sup>3</sup> Impressions of candidates seen in the middle of the interview process can become more vague and oversimplified, making those candidates less likely to be chosen. Also, during team discussions of candidates, these vague impressions may be influenced more by the opinions of colleagues (e.g., we are more easily convinced that someone we thought was good actually was not) because we cannot

<sup>3</sup> There is a corollary to the recency effect called the primacy effect (Tan & Ward, 2000). The effect is that the very first candidates may be remembered better than those in the middle, as well.

remember why we liked them in the first place.

Here are a few examples of processes that may be helpful in mitigating Expedience bias during an interview process:

1. Try to avoid soliciting the opinions of your colleagues *before* interviewing a candidate—create a “no spoiler” policy.
2. Know the questions you will ask every candidate in advance, and stick to them (ideally the same questions, in the same order, with the same timing).
3. Develop a way of objectively ranking or assessing people’s answers in a formalized manner to capture data for aggregate evaluation.
4. Capture your assessment of a candidate immediately afterward, as waiting even a short time makes it more likely that you may forget important details.

It may also be helpful to clearly share with interviewees the parameters within which you will operate during the interview stage. That can also signal to them that they will have equal opportunity at the job, regardless of the groups to which they belong (e.g., gender, race, religion) and should diminish the stress and uncertainty for candidates and hiring managers alike.

### Stage 3. Choose a candidate

At this final stage, it may be tempting to think you are out of the woods, having reduced bias in both the resume review and interview stages. Most people, having devoted so much effort and time to reach this stage, just want to be done. Of those who made it to the short list, perhaps there is one person you laughed with a lot and would enjoy having around, and he or she just happens to be very similar to everyone else on the team. Having taken the right steps to mitigate bias at the previous two stages, is it legitimate, now, to go with what feels right? Evidence suggests bias is still likely. For instance, women may be shortlisted more often for a job, but it is men who often get the job in the end (Biernat, 2003; Biernat & Fiegen, 2001). Rushing to make the choice and extend the offer is not optimal because people can fall into a trap of several biases that are unique to this final stage, particularly within the categories of Experience, Distance, and Safety bias.

**Experience bias.** We often have a mistaken belief that we see things as they are, and that we see all there is to see. Unfortunately, because we do not have conscious access to the parts of the brain that control perception, we often fail to realize how imperfect and limited our own perspective can be until proven otherwise. Admittedly,

even providing proof is not always sufficient. For example, when selecting, managers frequently assume they have all the information they need to evaluate a candidate from their own experience. Sadly, candidates can all too often be something other than they seem, and research suggests that almost 60% of hiring managers discover false or misleading information in candidate resumes (White, 2013), which ranges from embellished skills and experiences (57% of candidates) to employment dates (42%) to fabricated academic degrees (33%) (CareerBuilder, 2014). While some of the inconsistencies can be verified with a quick background check, others may be impossible to pinpoint right away, or even before they start their employment.

To overcome misperceptions and errors, you may want to gather data from multiple sources available to you outside of your immediate colleagues. The research and likelihood of Experience bias help illustrate why commonly recommended steps such as the following are worth the time and effort:

1. **Follow up** with references to make sure you have all the information necessary to evaluate someone accurately.
2. When you contact references, **ask detailed questions** and check specific facts rather than soliciting an “overall impression.” Collect input about the candidate from as many people as you can to get a more complete picture.

Gathering multiple perspectives is a must when it comes to Experience bias. However, it must be done systematically. For example, one common method of attempting to gather multiple experiences is to make final hiring decisions by teams or committees. But unless one correctly, group decision-making of this kind can actually fail to yield multiple perspectives. Politics, the loudest voices in the room, confirmation bias, and *groupthink* can all work against discovering the diverse perspectives in the room. Processes should be put in place to protect against these pitfalls. For example, the common practice of assigning a devil’s advocate is one effective way of identifying alternative perspectives. Dissenters can be chosen strategically, e.g. assigning a person who supported a candidate to argue against them, or chosen randomly. It forces the team to consider candidates in a multidimensional manner (C. Nemeth, Brown, & Rogers, 2001; C. J. Nemeth & Goncalo, 2009).

**Distance bias.** The second type of bias that is critical to the choosing phase of selecting is Distance bias. This type of bias pertains to the ways that distance in either time or space influences our decision-making, without being aware we are being influenced. For example, you

may think you want a candidate who can hit the ground running on day one. However, this hope often leads us to overvalue those who are ready now compared to those who need more time to develop but would ultimately be the more valuable employee. In addition, managers can unconsciously penalize candidates who were interviewed at a distance (i.e., remotely), rather than in-person.

Geographic and cultural diversity often come from working with colleagues who are located in other parts of the globe (distance in space). Moreover, for roles in which access to development opportunities are helpful, diverse candidates may be less likely to be ready on day one (distance in time). Distance biases thus can harm diversity in various, sometimes unexpected ways.

The reason we fall prey to Distance bias is that our brains overvalue things and events that are near and undervalue those that are far, a phenomenon scientifically called *delay discounting* (Odom, 2011). For instance, research shows what options we tend to choose when presented with various amounts of money *now* versus *in the future*. If you were offered \$100 or \$300, you would most likely take \$300. However, when people choose between \$100 now or \$300 in a year, the choice becomes less clear. When far away in time, the value of the larger reward decreases dramatically to the level of a devalued and uncertain reward (Milkman, Akinola, & Chugh, 2012; Odum, 2011). This bias applies to non-monetary rewards as well (Milkman, Akinola & Chung 2012). In a study where nicotine smokers were deprived of their vice, they highly valued a cigarette available any time in the next 6 hours but allocate almost zero value to a cigarette available in 6 months (Bickel, Odum, & Madden, 1999), indicating that cigarettes are not perceived as a fulfilling long-term reward.

The brain processes distance in space and time in surprisingly similar ways (Milkman et al., 2012; Natu, Raboy, & O’Toole, 2011). We represent what is near more fully and in more personally-relevant ways. Thus, to mitigate Distance biases, it is helpful to change how you mentally represent a candidate who is remote, was interviewed remotely, or who will not be ready immediately, to more accurately see if they are in fact the best choice.

A few simple steps can help reduce the effects of Distance bias on your choice. Here are some examples that can be incorporated into a process:

1. **Ask yourself**, “If all candidates I am choosing between were ready tomorrow, which one would I hire?” The answer may lead you to have a great hire in three months instead of an okay one tomorrow.

2. Conduct remote interviews using video conferencing technology instead of a phone, and when possible have someone interview the person on site. Video will **help the brain represent the candidate more closely** to how it would have had the interview been face-to-face.
3. **Figure out** if location matters as much for the hire as you might have first assumed. You may be surprised with your answer.

At first glance, these tasks may seem time-consuming or unnecessary, but after reviewing the relevant research, it becomes clear that simple steps such as these can enable a more objective evaluation of the candidates.

**Safety bias.** The third type of bias key to the choosing-a-candidate phase of selecting is Safety bias. This type of bias refers to the inherent human tendency to overweigh the negative. On average, most people tend to assign greater weight or value to potential losses than to potential gains. Indeed, the human brain perceives looming losses as twice as important as gains (Kahneman & Tversky, 1982; Telpaz & Yechiam, 2014; Tom, Fox, Trepel, & Poldrack, 2007; Yechiam & Telpaz, 2011). It is, of course, natural for managers to want to minimize the risk of a bad hire. Yet while minimizing the potential risk is a laudable goal, Safety bias can influence our perception of what is in fact risky. Unconsciously, people will often seek to avoid, ignore, or draw negative conclusions from anything that makes a candidate seem “non-traditional” because our brain is biased to interpret the unfamiliar as risky. Unfortunately, this bias often directly leads to a lack of diversity in selecting. To mitigate this bias, one may want to use a simple perspective-change exercise. For example:

1. Imagine that you made a choice to offer the job to candidate X. Do you regret it? Changing the standpoint from pre- to post-decision creates emotional distance from a charged decision, thereby alleviating the threat response and allowing people to look at the impending decision more objectively (Lieberman, Rock, Halvorson, & Cox, 2015).
2. Think of a decision as advice you would give to a colleague who must hire a new team member. Which candidate would you recommend if such a choice did not affect you? This way, the anxiety associated with the uncertainty is not yours. Essentially, looking from a third-party’s perspective allows your emotions to be less prevalent, empowering reason and logic to take the driver’s seat throughout the process.

Organizations can also create policies that make it less risky to hire a candidate who is not ready on day one, but has high potential. As organizations create onboarding practices and resources to support such hires, hiring managers are likely to experience less risk, and therefore less Safety bias, when making decisions about who is ultimately the best person for the job.

### Summary: Putting a science-based framework into practice

Organizations that are serious about diversity and inclusion know that to develop the diverse workforce that will carry them into future market dominance, they must work to remove bias from selection. Biases effectively shrink the available talent pool and leave organizations blind to many of the best possible applicants.

While hiring involves the stages of sourcing, selecting, and onboarding, selecting is where the bulk of the decision-making occurs for a new hire. It is thus a stage in hiring that is highly susceptible to bias. However, to successfully mitigate bias in selection, it is crucial to recognize that bias in selection is not just one thing. Rather, there are three distinct phases of selecting—resume review, interviewing, and choosing a candidate—that demand different types of decisions and therefore involve different types of bias. To mitigate bias in hiring, we must take three distinct approaches to the three phases of selection.

*To mitigate bias in hiring, we must take three distinct approaches to the three phases of selection.*

Resume review is highly susceptible to Expedience biases as hiring managers try to rush through a mountain of paperwork. To combat this Expedience bias, it is essential that hiring managers know their must-haves before looking at any resumes, and when possible, conduct a blind resume review.

Interviewing is affected by Similarity biases, and by Expedience biases such as confirmation bias and recency effects. Interviewers should find similar levels of common ground with all candidates to truly evaluate them equally. They can follow structured interviews that allow the interviewer to view each candidate through a similar lens,

STAGES OF SELECTING	BIASES	MITIGATION
Reviewing a Resume	 <b>Expedience Bias</b> "If it feels right, it must be true"	<ul style="list-style-type: none"> <li>Identify the "must-haves"</li> <li>Use blind resumes (when possible)</li> </ul>
Interviewing	 <b>Expedience Bias</b> "If it feels right, it must be true"	<ul style="list-style-type: none"> <li>Conduct structured interviews</li> <li>Record your thoughts immediately</li> </ul>
	 <b>Similiarty Bias</b> "People like me are better than others"	<ul style="list-style-type: none"> <li>Find commonalities with everyone</li> </ul>
Choosing a Candidate	 <b>Experience Bias</b> "My perceptions are accurate"	<ul style="list-style-type: none"> <li>Get multiple perspectives</li> </ul>
	 <b>Safety Bias</b> "Bad is stronger than good"	<ul style="list-style-type: none"> <li>Decide as if you are making a choice that does not affect you directly</li> </ul>
	 <b>Distance Bias</b> "Close is better than far"	<ul style="list-style-type: none"> <li>Eliminate distance (e.g. video call instead of a phone call interview)</li> </ul>

Table 2. Summary of which SEEDS biases are most active at each stage of selecting, and what steps we can take to mitigate them.

and should record their thoughts immediately after each interview.

Finally, choosing a candidate is susceptible to Experience, Distance, and Safety biases. Hiring managers should get multiple perspectives to mitigate Experience bias. To combat Distance bias, they can consider not just who is ready and easy to work with now, but which candidate will, down the road, be the best person for the job. Hiring managers should consider their decisions from a more dispassionate place, such as by imagining giving advice to someone else, in order to limit the effects of Safety bias.

Following the principles summarized here and discussed in more detail in the body of the paper, we believe it is possible for organizations, working with their hiring managers, to develop processes that mitigate the distinct biases that occur at each stage of selection.

What will not work is to expect hiring managers to become less biased. Brains are biased, for better or worse. At the heart of the challenge is the fact that biases affect us unconsciously—or show up implicitly—and we can't change that. Therefore, attempting to take bias out of the person alone is a recipe for failure. Instead, research suggests it is necessary to shift focus towards removing bias from crucial processes that hiring managers will engage in.

We encourage organizations to consult legal counsel while designing these processes as well, as they may have a view into what legally can and cannot be included in hiring processes.

A secondary benefit we have not yet mentioned can also come from having clear and effective processes aimed at reducing bias in selection. As word travels that an organization has invested in effective methods to improve and support diversity, the pool of diverse candidates who seek out positions within the organization may increase. While a company makes its way through the pool of candidates, the candidates also evaluate their interactions and experiences with the potential employer. This means that underrepresented group members will be assessing how well they perceive that the hiring practices set them up for success.

In our work with organizations, we have found that The SEEDS Model® provides a common language that managers can adopt to identify bias, discuss it, and find solutions in a non-threatening manner. By understanding the brain-basis of bias and its mitigation, it becomes a challenge to solve rather than a problem with specific individuals. Having this common language and understanding can allow managers to discuss procedural blind spots and bottlenecks without triggering defensiveness in their colleagues.

While we have illustrated the principles and some examples, there are many ways to build processes based on these principles to meet the individual needs of organizations. This represents a significant opportunity for organizations who follow the science to outcompete organizations who fail to update their hiring policies.

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