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Diversity and Inclusion

Diversity and inclusion go hand in hand, and yet they are not the same. Diversity refers to differences within a group of people in terms of different cultural backgrounds, ethnicities, gender, age, education, working style, working experience, and way of thinking. While inclusion is the act of making a person part and entitled to all rights and conditions of a social unit.

Many governmental and educational institutions, non-profit organizations, and private companies have efforts to increase diversity in the workplace. This is evident in their diversity statements and greater commitment to hire people from diverse backgrounds. However, achieving inclusion in a workplace is much more complicated because this requires change in perceptions and negative attitudes in both majority and minority groups.

Institutions might be able to hire scientists from diverse groups in order to comply with their diversity statement; yet minority members are often not heard or do not feel they have the same “voice” as non-minority members. This then leads to poor retention of minority members and unsuccessful performance of scientific teams. Why does this matter? Why is diversity valuable? And why should we be more inclusive in science and other disciplines? In the following paragraphs, I share my perspective on importance of diversity and some ideas on how to be more inclusive.

Importance of diversity

- 1) It is morally correct

Advocating for diversity and inclusion is the right thing to do. This is highlighted by the U.S. Civil Rights Act of 1964, the Title VII of the Civil Rights Act of 1991, the Age Discrimination in Employment Act of 1967, the Pregnancy Discrimination Act of 1978, and the American with Disabilities Act of 1990.

- 2) Diverse societal problems need diverse scientists

Our society is currently facing a vast array of environmental, social, and economic problems. Because these problems are diverse, we need a diverse group of scientists to help provide solutions to diverse communities around the world. In order to better understand the problems of a group of people (i.e. women, African Americans, Hispanics, LGBTQ, etc.) or the problems of a

region/country, it is important to bring scientists from these groups/places and with different ways of thinking because they can provide different perspectives needed to develop successful and sustainable solutions.

3) Greater innovation and creative potential

Diverse groups of scientists develop more innovative products and services to provide solutions to problems that affect diverse communities. It is then not a surprise that diverse scientific teams tend to generate greater research output, as well as more citations; thus, giving diverse teams a greater competitive advantage (Powell, 2018; Adams, 2013).

4) Learn culture of mutual respect

The experience of working with diverse groups can train individuals to better interact with people of different cultures, create intercultural understanding and change their perception about them. This might help people develop a better understanding of what are some of the cultural differences that will possibly need to be considered when working as a team in order to respect each other.

How can we be more inclusive?

1) Practice empathy

Being able to place yourself in the position of another person is helpful not only for diverse groups but for teamwork in general. However, empathy is especially important when working with diverse groups because people with empathy can place themselves in the position of the diverse others in order to understand the experiences/perspectives and feelings of people with different backgrounds, values, and beliefs. This ability is vital to be able to connect with diverse groups and create an inclusive environment with improved communication.

An example of empathy is not assuming that certain facts are universal knowledge. When non-minorities take certain knowledge for granted, they make the minority feel left out. To avoid this, it's important to reduce the use of examples that are only applicable to the non-minority. This can be done by giving an introductory explanation to the subject in discussion by asking, encouraging questions and participation to level knowledge and understanding within the group.

2) Be an ally

Diverse groups will have a mix of minorities (women, African Americans, Hispanics, LGBTQ, etc.) and non-minorities. While minorities can help and support each other, non-minorities have an innate advantage that they can use to empower minorities and influence change. If you are a non-minority, you can help the voice of minorities to be heard to ensure equal access to opportunities.

3) Be a mentor

Diverse groups are faced with extra challenges when they are starting their undergraduate or graduate studies, or when they are applying or starting new jobs in a professional environment. People with different backgrounds might have greater language/communication barriers, as well as less confidence and unfair treatment. A mentor can have a huge impact in the professional career of people from diverse groups by giving them advice, guidance, and encouragement, especially during important moments of their career. I'm very thankful that as a minority (Hispanic woman), I've had great mentors that have supported me throughout my graduate career and now as an early career scientist. However, I've met many students that were not as lucky as I was.

4) Develop workshops, trainings or coursework

As we strive to create more diverse groups in our scientific community, it would be extremely beneficial to create workshops, trainings or coursework that highlight the importance of diversity and inclusion. This could be done via undergraduate one-credit courses where students learn about the importance of diversity and inclusion and how to be more inclusive. Trainings/workshops on this topic are also necessary for students, early career, and senior scientists.

5) Celebrate together

The simple act of having a non-work related gathering to celebrate special occasions (e.g. birthdays) and cultural festivities (e.g. Nowruz, Diwali, Christmas, etc.) can promote inclusion, strengthen relationships, and reduce cultural biases.

The future

Creating a diverse and inclusive environment in our scientific community can be challenging, but the positive ethical, social, and economic impacts of this effort are worth it. As a scientific community, we have already taken the first steps towards more diversity and inclusion. The first step has been to become more comfortable talking about these subjects, and second, the implementation of strategies to improve diversity and inclusion. However, as we move forward, we must continue to change perceptions and cultivate the diversity of backgrounds within graduate education and scientific teams in order to help us be better individuals and make more meaningful contributions to science and communities worldwide.

References

- Powell, K. 2018. The power of diversity. *Nature*. 558: 19-22.
Adams, J. 2013. The fourth age of research. *Nature*. 497: 557-560.