COMMENTARY

Additional (and not leaky) pipelines: Online faculty positions to diversify I-O psychology

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We agree with the assertions of Kraiger et al. (2022) and appreciate their focus on the experiences of graduate students. Although we maintain that the most important outcome related to graduate education is its effectiveness for students, our goal is to expand this discussion to include a focus on instructors, with a particular focus on issues related to instructor diversity and accessibility. Specifically, we wish to first highlight how online graduate education may contribute to and/or detract from most educational institutions' stated diversity and accessibility goals, with a particular focus on the experiences of instructors with marginalized identities. Using autism as an illustrative example (supplemented by an expanded list of other marginalized identities and characteristics; see Table 1), we then discuss the deficiencies of the current implementation of the Americans with Disabilities Act (ADA) for higher education and discuss the benefits (and potential pitfalls) in online education for instructors. Finally, we conclude by highlighting the need for reflection regarding the rationale for opposition to online education.

Missing data are not random

The negative perceptions of online graduate education that Kraiger et al. (2022) highlight are indeed disconcerting. However, we note that the data collected among graduate school educators necessarily came from individuals who were taught and had been teaching (prior to the COVID-19 pandemic) primarily in person. Thus, it is reasonable to assume that those perspectives are skewed in favor of what is familiar and the perspectives of those who find benefit in online education would be unrepresented in the available data. More inclusive data are needed to truly understand the perceptions of online graduate education.

Importance of online education for diversifying faculty

We argue that online education can also address several issues related to faculty diversity and inclusion, which most universities have prioritized in concerted ways recently. There is a dire underrepresentation of marginalized populations among higher education faculty (Smith et al., 2021), and online options would likely make teaching a more viable profession for those who may otherwise not feel welcome, valued, or appreciated in the field. Indeed, perceptions that online education is not a valued endeavor have likely contributed to many marginalized individuals feeling like they have to pursue other, nonacademic career options (e.g., remote consulting work). Furthermore, instructors with marginalized identities who obtained online degrees are

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We have no known conflict of interest to disclose.

Table 1. Marginalized Groups Who May Benefit From Online Teaching Positions

Marginalized identity	Benefits of online instruction	Possibility of ADA accommodations	Relationship to COVID-19
Older person	Lower risk COVID-19	No	Higher risk of death due to COVID-19
Younger person	Ability to use technology, some younger peoplemay be skilled with technology	No	No
Person with mental illness(es)			
Obsessive compulsive disorder (OCD) Social anxiety (Complex) posttraumatic stress disorder ([C]PTSD)	Ability to control one's environment, avoidtriggers. Ability to conceal one's stigmatizedidentity.	Yes	Increases in mental illnesses due to COVID-19. Mental illnesses like OCD, social anxiety, or (C)PTSD may be associated with increased symptoms when interacting in person due to higher risk of COVID-19.
Neurodivergent person			
Attention deficit hyperactivity disorder (ADHD) Autism spectrum disorder (ASD)	Ability to control sensory distractions in one'senvironment, ability to plan and schedule socialinteraction.Ability to conceal one's stigmatized identity.	Yes	No
People with dependent care responsibilities			
Parents, parents who chest feed Primary caretaker for sick and/or elderly family member	Time with children at home, avoid child carecosts. Ability to turn off camera.	No	Children and elder dependents may be at a higher risk of complications due to COVID-19 (i.e., immune compromised, vaccine eligibility).
Medical conditions with challenges in person			
Menstruation Menopause Recently carried a child or pregnant Irritable bowel syndrome (IBS)	Ability to access a restroom or cater to medicalneeds as needed.	Yes	COVID-19 is related to increases in self-reported psychological distress and gastrointestinal symptoms among people diagnosed with IBS and comorbid anxiety/ depression.
Disabilities			
Blind/visual impairment Deaf/hearing impairment	Avoid public transportation and thus a higherrisk of contracting COVID-19.Ability to turn off camera.Ability to conceal one's stigmatized identity.	Yes	Many of these individuals are not able to drive themselves to work. Taking public transit can put these individuals at a higher risk of contracting COVID-19. Depending on severity, they may not be able to see whether they are at a safe distance from other passengers.
Populations with safety concerns			
Racial/ethnic minorities Transgender people Women	Enhanced physical safety online compared within person.Ability to turn off camera.Ability to conceal one's stigmatized identity.	No	Asian Americans and Pacific Islanders (AAPI) experienced an increase in hate crimes due to COVID-19.

(Continued)

Table 1. (*Continued*)

Marginalized identity	Benefits of online instruction	Possibility of ADA accommodations	Relationship to COVID-19
Immune compromised			
Human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS) Cancer Diabetes Genetic disorder Organ transplant recipients	Enhanced physical safety online compared within person.Ability to manage symptoms of disease and/orside effects of treatments.	Yes	More likely to get severely ill from COVID-19 and are more likely to transmit the virus to household contacts.

critically important for diversifying the field of industrial-organizational (I-O) psychology—they are likely to be more understanding of marginalized online students' needs due to their lived experiences (Hekman, 1997). Thus, we now turn to some specific examples of the potential benefits of online graduate education in I-O psychology. We then highlight these benefits in the context of autism for illustrative purposes (but see Table 1 for an expanded list of examples).

General benefits of online instruction for faculty diversity and accessibility

There are several general benefits of online instruction for increasing faculty diversity and accessibility of faculty positions for a variety of marginalized populations. Here we use specific examples of marginalized groups as illustrative examples. However, we provide a more comprehensive list of populations that would likely benefit from online teaching positions in Table 1.

First, the greater flexibility associated with online teaching may aid in recruiting and retaining many faculty members who may otherwise not be able to teach in person. For instance, parents and others with dependent care responsibilities will likely benefit from the availability of online teaching positions. Traditional students would be 27 years old at the time that they would graduate to apply for faculty positions. This can present challenges, particularly for those interested in carrying children given fertility rates begin to decrease in people's late 20s (Lampic et al., 2006). Women and racial minority individuals also tend to have more family-related responsibilities than do their White male counterparts, making flexibility particularly important for instructors who hold these identities. Further compounding the issue, those who are immunocompromised (e.g., older adults, pregnant people, those with HIV or other diseases) are at a higher risk of death due to COVID-19 (Centers for Disease Control and Prevention, 2021), thus lecturing in a room full of many students in close quarters can present an additional barrier for those who are themselves immunocompromised or care for others (i.e., family members) who are immunocompromised. Online teaching may also be more accessible for those who are prone to social anxieties related to interpersonal interactions, large crowds, and associated contagion risks (e.g., obsessive compulsive disorder, posttraumatic stress disorder).

Second, the online environment may aid faculty with marginalized identities in handling issues of classroom management, particularly that include discrimination. Racial minority and gender minority faculty are more likely to be targets of challenging and disruptive student behavior than their White male counterparts. Rather than being forced to confront a perpetrator of discrimination in front of one's class, the instructor can simply remove or mute a student and address the issue how and when they would prefer (e.g., confront the student one on one in office hours later, report the student, involve the department chair). While online, there may be less focus on the instructor's marginalized identity from students. For instance, while attending lectures online via

videoconference, the lecture slides are much larger than the instructor's face and instructors can opt to turn their cameras off while lecturing if they choose. Instructors who have visible stigmatizing characteristics (e.g., wheelchair use) may be able to hide these characteristics from students in online environments. Additionally, from the perspective of a student, there are other students facing them directly, as opposed to everyone looking toward the instructor in a large lecture hall. This may reduce instructors' experiences of stereotype threat (see Casad & Bryant, 2016) and result in higher quality instruction.

Third, psychology departments often have high proportions of students with disabilities (National Science Foundation, 2019) who may go on to become faculty members and would benefit from the availability of an online teaching option. Contrary to popular perceptions that online education is deficient compared with instruction in person (in line with the data presented in the focal article), those who obtain online degrees may actually be the most qualified for online teaching positions because of their experience with this modality. Furthermore, as alluded to previously, there are multiple direct (i.e., retention, productivity, attendance, diversity) and indirect (i.e., improved interactions, increased morale, increased safety) benefits to providing accommodations (Society for Human Resources Management, 2019). Nevertheless, we assert that although the Americans with Disabilities Act entails many benefits for marginalized populations, it is insufficient in providing accommodations for all those who may need them (see Table 1 for further information), meaning that creating inclusive environments that do not necessitate formal accommodations is critically important.

Finally, completely online instruction can be distributed across multiple disciplines or institutions. In the event that online instruction proves beneficial in recruiting and retaining diverse faculty, a wider range of students could benefit from their representation, mentorship, and expertise across institutions. Thus, students at multiple institutions could benefit from diverse perspectives more easily in online instruction environments because they are not limited by the availability of faculty who reside locally. This can be especially important for students who live in relatively homogenous regions in which marginalized faculty may not want to live themselves. Increasing diversity in the leadership (i.e., faculty, mentors) leads to more diversity throughout the ranks (McCarty, 2009). Indeed, there are many benefits of increasing diversity for organizations including increased diverse recruitment, retention, and general innovation (Robin & Thomas, 2020). The portability of online courses also benefits marginalized instructors because they can more easily accrue experiences and affiliations (and financial compensation) from a variety of institutions that would otherwise be inaccessible.

An illustrative example of online instruction as inclusive: autism

We use autism[1] as a specific example because the autistic population is underrepresented in I-O research, stereotypes about autistic people[2] are in direct opposition with academic ideals, and the gap between autism and academia is likely to engender challenges outside of those discussed previously. Autistic people are stereotyped as both incompetent and unproductive or (in rare media representations) as antisocial but with cognitive super powers (Draaisma, 2009). These stereotypes are inherently misaligned with expectations of intelligence, sociability, and efficiency inherent in

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[1]Neurodivergence is an umbrella term that refers to nonpathological variation in the human brain (Armstrong, 2010; Singer, 1998), emphasizing that differences in mental processing are not necessarily problems with the individual who diverges from neurotypicality. For example, people with autism, dyslexia, dyscalculia, and attention deficit hyperactivity disorder are typically included within the neurodivergent umbrella.

[2]In clinical psychology, autism is classified as a disorder—autism spectrum disorder (American Psychiatric Association, 2013)—and can be defined as "neurodevelopmental impairments in communication and social interaction and unusual ways of perceiving and processing information" (World Health Organization, 2013, p. 7). However, we avoid the use of the term "disorder" when referring to autism because we believe that being autistic is not a problem, this terminology is stigmatizing, and that environments that are not inclusive of autistic people can instead be thought of as "disordered."

academia (see Berg & Seeber, 2018), and this lack of fit has been shown to be detrimental to career success in other populations (Lyness & Heilman, 2006).

By providing more opportunities for instructors to teach online, universities may provide more teaching opportunities for autistic instructors. There may be a higher number of autistic people studying psychology than one may expect due to a particular interest among this population in better understanding people and interpersonal interactions (see Grove et al., 2018). However, social demands of faculty positions may present challenges for autistic people. Although many autistic people can enjoy and thrive in scripted and repetitive social interactions (e.g., leading tours, lecturing; Johnson & Joshi, 2016), unscripted interactions outside of teaching—like departmental politics, conferences, or networking—can be challenging to navigate due to ambiguous implicit social norms and expectations. Due to the stigma associated with mental disabilities, particularly in academia (Dolmage, 2017), autistic instructors are likely to attempt to conceal their stereotypical autistic characteristics (Attwood, 2006). This concealment is theorized to underlie the high comorbidity between autism and mental health diagnoses (i.e., depression, anxiety, eating disorders; Cage et al., 2017; Simonoff et al., 2008). Online teaching positions may be less taxing and more accessible for autistic instructors because there are fewer informal and unscripted social interactions or instructors may be able to better control their social environment.

Critically consider ableism in academia

Many of the participant quotes that Kraiger et al. (2022) highlighted promoting in-person graduate instruction are inherently ableist in nature. For instance, proponents of in-person graduate education (as quoted in the focal article) focused on instructors' abilities to detect, monitor, and respond to visual cues that students display in the classroom. This of course assumes that (a) students are displaying visual cues, (b) those visual cues can be interpreted by instructors in ways that accurately reflect internal cognitive processing, and (c) instructors can and should respond to these cues appropriately in real time. Each of these assumptions can further be countered with personal experiences to the contrary among those who teach in person regularly. Furthermore, this calls into question exactly what high performance as an instructor entails. It has been well documented in the educational literature that end-of-term instructor and course evaluations are heavily influenced by idiosyncratic instructor characteristics such as gender, height, vocal tone, rate of speech, and body language (devoid of any actual lecture content; e.g., Miles & House, 2015). The utility of course evaluations is beyond the scope of this response, but the point, as highlighted in the focal article, is that online graduate education does seem to increase student knowledge in intended ways and this is achieved in environments that do not require in-person social interactions. Thus, an emphasis on instructor interpersonal skill could be misplaced and directly disadvantage those with neurodivergent[3] characteristics who can otherwise provide rich online learning environments.

Another argument in favor of in-person instruction is the ability for students to interact with one another. The unfolding reality is that many I-O psychologists engage in completely remote work that does not include working with coworkers or supervisors in person at all. The recent forced move to remote work for the majority of the workforce has shown that many jobs that were previously assumed to require in-person interaction can, in fact, be done remotely successfully. Online instruction may actually better prepare future I-O psychologists for remote work than in-person instruction would because part of online training entails learning and being comfortable using remote technology and communication styles. Furthermore, prioritizing social interaction skills as part of graduate education again calls into question what constitutes high performance and what can be expected from an educational experience. Indeed, because autism

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[3]We use "autistic person" instead of the typically preferred first-person language for marginalized populations (e.g., "person with autism") in line with the dominant preferences of the autistic community.

is a genetic and developmental characteristic (Chaste & Leboyer, 2012), these individuals may not develop their social interaction or cue-monitoring skills from in-person interactions. Students with autism or other neurodivergent characteristics can experience challenges with such social expectations, and most instructors should be motivated to be accommodating of such students if they were aware.

Potential pitfalls of online instruction for faculty diversity and accessibility

Although we believe that there are several benefits to online instruction for faculty diversity and accessibility, there are some noteworthy potential pitfalls. First, faculty with marginalized identities may experience ostracism from their colleagues, limiting opportunities for collaboration and networking, which may be exacerbated in online environments. Indeed, female faculty experience greater workplace exclusion than men, and faculty of color experience more exclusion than White faculty (Zimmerman et al., 2016). Online environments may enhance the ostracism that marginalized faculty experience, considering that employees plan or schedule more casual interactions with their coworkers online compared with in person (i.e., running into someone in the hallway). Specifically, with more spontaneous interactions removed, homogeneous grouping may occur intentionally or unintentionally more frequently. Additionally, perpetrators of ostracism may be more likely to go undetected online.

Second, instructors with stigmatized identities may find having students view their private living spaces invasive. Home environments may be safe spaces away from discriminatory working environments, and thus their presence in marginalized faculty's homes may present challenges (i.e., discomfort, lack of privacy, inadvertent disclosure of stigmatized identity). For instance, a faculty member who is gay or lesbian and wishes to conceal their sexual orientation at work may inadvertently reveal their sexual orientation to their students or colleagues if their partner were to walk by in view of their camera. However, these challenges can be alleviated by using blurred backgrounds, physical barriers that block the view of one's desk from the living area and vice versa, or by using working spaces outside of the home (e.g., WeWork, a separate home office, working in coffee shops, portable offices).

Third, adjunct faculty may have limited access to resources for online instruction compared with those with permanent teaching contracts (i.e., multiple monitors to see students' faces and be able to view lecture notes, audio/visual equipment, high-quality Internet access). Marginalized populations who already endure financial challenges may experience more difficulty obtaining permanent teaching positions than adjunct positions (Nettles et al., 2000; O'Meara & Nyunt, 2018). However, universities can remediate this issue by providing equipment or Internet access for instructors as needed.

Finally, although we have indicated several advantages of online faculty positions for diversity and accessibility, it is crucial that this option is made available but marginalized faculty are not relegated to only-online teaching. Faculty should not be segregated to online versus in-person based on their marginalized identities without their consent. Departments should instead have open conversations with applicants regarding their preferences and accommodate those who are interested in teaching online.

Conclusion

We are excited by the prospect of increased online teaching opportunities and therefore increased accessibility of faculty positions for several marginalized populations. The presence of marginalized populations in faculty positions is about more than merely their representation but includes the benefits of their unique perspectives, their mentorship of marginalized students, and therefore their ability to diversify the field of I-O psychology. We assert that the field of I-O psychology

should adapt to be more inclusive of those who may not, or may never have, interpersonal skills in alignment with the dominant majority, or for those for whom it is taxing to pretend to assimilate. The perspective that online education leads to unsocial people with skills promotes academic gatekeeping and serves as a way to justify discrimination. As an alternative, academic organizations should focus on communicating clear norms for social behavior as a part of onboarding, providing frequent feedback, and offering support for marginalized employees.

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