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How Diversity in Contexts and Experiences Shape Perception and Learning Across the Lifespan

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The field of psychology has a long history of studying how diversity influences various outcomes such as identity development, social behaviors, perceptions, and decision making. However, considering the ways that diversity science research has expanded in recent years, the goal of this special issue is to provide space to highlight work that centers on identifying and testing new pathways from which we learn about diversity broadly defined. Specifically, this set of articles across the November and December 2024 issues stresses the need for us as a field to consider one's context, one's social identities or group memberships, and other various individual difference factors that all shape how we experience different forms of diversity across the lifespan (infancy through early adulthood). We also discuss areas of research not reflected through the submissions and push the field to fill those gaps in future work.

Keywords: diversity, learning processes, identity, social perceptions, behavior

The field of psychology has a long history of studying how contexts and experiences affect what we learn about various aspects of life, such as how we conceptualize our own identities (e.g., Amiot et al., 2007; Hogg et al., 1995; Phinney, 1989), how we learn language (e.g., Kuhl et al., 2003; Ochs, 1993), and how we learn to process our social worlds (e.g., Dunham & Degner, 2010; Molden & Dweck, 2006; Scott & Arcaro, 2023). These research areas have identified distinct pathways we may use across the lifespan to learn about diversity, both regarding ourselves and others. Considering the ways that diversity science research specifically has expanded in recent years (Buchanan et al., 2021; Plaut, 2010; Roberts et al., 2020; Watson-Singleton et al., 2023), the goal of this special issue (published across November and December 2024 issues) is to provide space to highlight work that centers on identifying and testing new pathways from which we learn about diversity across the lifespan. Importantly, since the word "diversity" can be defined in multiple ways (e.g., based on race/ethnicity, age groups, circumstances, or environment; Danbold & Unzueta, 2020; Devine & Ash, 2022), we allowed all authors to define what "diversity" meant to them as it related to their own research. Across the submissions received, we had an overrepresentation of work related to race and ethnicity, which is not surprising considering the fact that many people often equate the word diversity most easily with racial diversity. And yet, the present set of articles overall stresses the need for us as a field to consider one's context, one's social identities or group memberships, and other individual difference factors that all shape how we experience different forms of diversity across the lifespan, from infancy through early adulthood. Thus, based on the articles included in this special issue, it is time for psychological science to be honest in who their research represents and under what contexts or conditions a given set of results may or may not replicate.

The majority of submissions we received focused on how we come to perceive different forms of diversity, with an emphasis on face categorization methodology. Specifically, several articles highlighted how a person's own identity can shift based on whether a given target is seen as one's ingroup or outgroup or positively or negatively. For example, in this special issue, Schwartzman and Rule (2024) showed that straight and lesbian, gay, and bisexual perceivers rate targets as more attractive when they think that a particular target's sexual identity status matches their own, highlighting an ingroup motivational difference in perception. Kawakami et al. (2024) provided evidence pushing researchers to consider both the identities of the target and the perceiver, with data showing that Black perceivers may use facial cues differently when assessing trustworthiness for White and Black targets compared to White perceivers. Relatedly, Traast et al. (2024) used a reward reinforcement learning task to test interracial perceptions and suggest two mechanisms where race affects instrumental learning—initial expectations (i.e., priors) and later updates to that expectation based on the reward.

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2628 GAITHER AND WU

An additional commonly studied pathway that impacts how we may see others that was submitted used aspects of intergroup contact theory (e.g., Dovidio et al., 2003; Pettigrew, 2021) by directly assessing different forms of contact through one's environment. With an infant sample, Arnold et al. (2023) in this issue were able to isolate the fact that it is not necessarily the diversity of an infant's neighborhood that shifts how they process own-race and other-race faces, but rather the diversity of their actual social networks that impact social perceptions. Similarly, Okocha et al. (2024) showed for the first time that young children with more close social relationships in their social networks (but importantly not larger networks broadly) have higher vocabularies. Relatedly, Atwood et al. (2024) in this issue showed similar findings for cisgender and transgender/nonbinary identified individuals where one's immediate context, in addition to one's previously lived experiences, both can impact how gender and sex are perceived.

We also received a few articles that focused on testing aspects of diversity that address real-world problems and/or are based in realworld contexts. For example, Stein et al. (2023) found that exposure to body-positive online content impacted women's concepts of ideal body types in terms of rating larger body shapes as more ideal, as well as a broader range of body shapes. With regard to how individuals perceive actual real-world integration policies for people with a migrant background, Maratia et al. (2023) found that adolescents had a more favorable attitude toward the policies than their parents, and teachers had more favorable attitudes than adolescents and their parents, demonstrating clear differences in diversity policy endorsements. Regarding school settings, Ragland and Sommers (2024) showed that faculty racial diversity is an important cue for diversity, equity, and inclusion culture especially for Black science, technology, education, and mathematics students. Within workplace contexts, O'Brien et al. (2023) found that across several racial/ethnic groups, people were more likely to make judgments of discrimination when Black Americans were rejected from a White-collar position, and less so with Latino Americans or Asian Americans highlighting differences in minority treatment outcomes, with the least discrimination claims for White Americans. Geerling and Chen (2024) highlighted how various cues (sometimes conflicting cues) regarding diverse representation in an organization can shift how we consider diversity more broadly. Goya-Tocchetto et al. (2024) also tested how learning about a job candidate's advantaged versus disadvantaged backgrounds can shift how both liberal and conservative individuals value policies that promote socioeconomic diversity. Finally, regarding health care contexts, Martin and Johnson (2023) showed that White Americans learning about instances of racial injustice fosters perspective taking in the context of racial equity in health care, namely, Black-White health disparities.

Another theme from our submissions focused on testing established theories or findings in new groups or settings. Vitriol and Banaji (2024) established specific conditions such as evaluating the validity of the implicit association test before receiving one's scores as a pathway to increase one's acceptance of their bias and willingness to learn. Regarding language group differences, Hochman et al. (in press) tested the role that language plays in how we process space and number in British English speakers and Iranian Farsi speakers, and Ryken et al. (2024) highlighted that real-world experiences with language exposure and racial diversity (for White and Black participants) can shift how adults learn associations between linguistic variation and speaker

characteristics. Regarding context, Cao et al. (2024) conducted two large-scale replications of 12 tasks that previously showed cross-cultural differences between Western and East Asian contexts centering on how learned cultural differences may shift various types of responses, with only five tasks showing strong cultural differences. Reyes-Jaquez and Koenig (2024) provided evidence with children in the Dominican Republic stating that children who grow up in a more morally heterogeneous context learn to be more critical toward unethical practices.

Finally, examining how and when biases emerge or change across the lifespan was also a popular area of submitted research. For example, Tompkins et al. (2023) demonstrated across three age ranges (3–5 years, 9–12 years, and adults) how empathic biases shift across development when considering one's ingroup or outgroup, and Shahbazi et al. (2024) adapted two paradigms used in Western samples to test the development of essentialist beliefs (e.g., gender, race, nationality, religion, socioeconomic status, ethnicity) in Iran for children and adults. Moreover, Bashyam et al. (2023) highlighted new considerations for how language biases are learned early on in development, especially when in multilingual contexts such as in India, and Immel and Liberman (2024) also showed that the diversity of a child's language environment also influences their tendencies to generalize food preferences when learning about others. And finally, Singh et al. (2024) reviewed the literature surrounding early language learning as it relates to later flexibility and suggested that being bilingual and learning two languages is associated with broader explorations and learning through one's environment.

Although this special issue provides a unique opportunity for us to assess new ways we are learning about diversity in addition to further considering how contact with diversity may also shape those same perceptions, there are a number of areas of research that remain absent in this special issue that we would like to encourage researchers to pursue. First, our call was specifically to reflect lifespan learning approaches, and yet we did not receive a single submission with middle-aged or older adult participants. Jolles et al. (2023) measured potential age biases against older job candidates and found that a diversity statement targeting the hiring of older adults did increase their selection, but this study concerned perceptions of, rather than by, older populations. This is critical in our view since generational differences influence how we define our identities (e.g., Chopik et al., 2013; Keith, 2014), in addition to the types of societal influences that have varied over time. For example, The Civil Rights Movement and the Black Lives Matter Movement are related in their goals broadly, but occurred in very different generations and time points historically which would shape definitions of identity and diversity differently. Additionally, although we had submissions with racial/ethnic minorities and sexual and gender minorities, we still saw a bias toward White-centered research practices and bias toward Western samples. This is in line with the Western/White, Educated, Industrial, Rich, and Democratic problem that has been identified as a publication bias within psychological science (Henrich et al., 2010; Thalmayer et al., 2021). Thus, despite seeking a more diverse set of submissions, this special issue reflects only a specific view or experience regarding how *some* learn about diversity. We would like to highlight this consideration for all researchers—our work can only reflect the populations we assess using the methods we have developed, regardless of how well validated those methods may or may not be.

In sum, as we continue to study how learning occurs throughout the lifespan, there are three main important considerations: (a) The identities of participants matter, and we should note how one's multiple identities may influence findings; (b) the contexts in which participants have lived/learned should be acknowledged; and (c) including discussions of other potential factors that may influence our research outcomes that were not originally considered will maintain honesty in our research. As we continue to build on each other's findings, transparency in our research decisions are key—consider which scales or methods do or do not generalize and provide evidence for why that may be the case; be open-minded if someone tests an established question in a new population that may go against our previous findings since that is still an advancement in science and does not mean our findings are no longer valid; acknowledge how all of our diverse experiences across the lifespan influence every aspect of our lives.

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2630 GAITHER AND WU

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