

科學研究能否支持大學招生要考慮種族呢？

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平權法案

- 一直以來，哈佛大學和教堂山北卡羅來納大學都是根據平權法案，在招生程序中考量學生族裔背景。
- 今年六月底，美國最高法院以6票對3票裁定這做法違憲，宣告裁決之後，美國社會反應兩極。



圖為亞裔教育聯盟連同各族裔的家長，在高院前集會慶祝哈佛及北卡案裁決。(Aayushi Chouhan提供)

美國教育研究協會聲明

- 在法院宣告的同一天，美國教育研究協會馬上發出聲明回應，該聲明表示：「（最高法院的）決定是一個低點，可能會阻礙高等教育的公平機會，侵蝕校園多樣性，增加高等教育中長期存在並且有害的偏見，阻礙未來工人和領導者在日益多元文化的社會中茁壯成長.....可悲的是，法院的判決沒有承認，大量科學證據顯示出學生群體多樣性可以改善教育成果。」



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AERA Statement on Supreme Court Decision on Race in College Admissions

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The following statement is from Felice J. Levine, executive director, and Tyrone C. Howard, president, of the American Educational Research Association.

Today the U.S. Supreme Court made it harder for higher education to achieve student equity and inclusivity, but avenues remain open and higher education must seize them. The decision is a low point that could impede equitable access to higher education; erode campus diversity; reinforce, rather than reduce, longstanding and pernicious patterns of bias in higher education; and hinder the development of future workers and leaders who can thrive in an increasingly multicultural society.

The Court did not expressly overrule prior rulings that allow race as a factor in admissions to achieve the benefits of educational diversity for all students. However, it invalidated the way institutions and prior Court decisions have defined the educational benefits of diversity as insufficiently measurable

and without a necessary end point. More analysis is needed of the complex decision to determine how it translates into institutional policies and practices. While the Court's decision will leave students and the country worse off, it should not extinguish scientific and higher education efforts to pursue educational equity and excellence for all students.

Sadly the Court's decision fails to acknowledge the substantial body of scientific evidence that student body diversity improves educational outcomes. Study after study has found that alternatives to race-conscious admissions put into place by states do not have the same impact as race-conscious policies in achieving that crucial diversity. The constraints imposed by the Court are formidable; yet, the scientific community and higher education need to respond by redoubling their efforts and expanding their commitment to the hard work of creating equitable educational systems.

Meanwhile, at a time when college opportunity is limited for underrepresented students of color and members of other marginalized groups, we urge all educational institutions to take all legal paths to ensure that students from all backgrounds get equal opportunities. We furthermore urge researchers across the country to work with colleges and universities to develop and implement admissions criteria and processes that are as inclusionary as possible for students of color and address systemic inequities.

*In 2022, AERA and other major research associations submitted a Supreme Court **amicus brief** in support of Harvard University and the University of North Carolina, calling on the court to rely on the substantial body of research and reaffirm the governmental interest in diversity. Joining AERA on the brief were the American Anthropological Association, the American Association for the Advancement of Science, the American Political Science Association, the American Sociological Association, the Association for the Study of Higher Education, and the Linguistic Society of America. Visit the AERA **website** for research resources related to the case and race-conscious admission policies.*

研究結果並不是一面倒

- 雖然多元化對學習有幫助，但研究結果並不是一面倒的。
- 2012年，加州州立大學東灣分校社會心理學教授杜絲（ Negin Toss ）及其團隊發表了一篇多元化對教育影響的論文，其團隊回顧了之前四十年相關的研究，所有研究的參與者數目加起來是12,463人，她們發現，學生與相同族裔的同學一起學習時，其表現比混合族裔的小組略高，此外，前者比後者有較少負面的感覺，在互動中表現出更加友善的態度。值得一提的是，這些差異甚少，僅是一個小數位之後的數字。
- Meta-analysis

多元化令人分心？

- 普林斯頓大學社會心理學家霍洛恩（ **Deborah Holoien** ）嘗試解釋為什麼這研究結果並不符合推動多元化的期望，其中一個可能的解釋是：不同族裔的人在互動時言行都要特別小心，要避免冒犯對方，專注在這方面反而令到他們分心，結果影響了學習。
- 筆者在這方面也有類似的經歷，許多時候為了政治正確，我會避免說出任何稍為令對方不快的批評，缺乏批評當然會妨礙進步。

支持多元化的研究

- **2022**年學術期刊《勞工經濟》刊登了一篇論文，該論文的撮要指出：多元化的學習組別會提高學生畢業時的**GPA**，並且提高女性學生頭一年的學習成績。驟眼看來，這是支持多元化的鐵證，不過，其實該作者進行了多項測試，他比較了相同族裔和不同族裔學生在寫作課程的成績、第一個學年結束後的**GPA**、他們畢業時的**GPA**，還有學生的畢業率。



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Does racial diversity improve academic outcomes? A natural experiment in higher education classrooms[☆]



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ABSTRACT

This paper estimates the causal effect of racial diversity on academic outcomes in a higher education classroom setting. I exploit a natural experiment where first-year college students in a mandatory writing course are assigned to discussion conferences with varying racial compositions. Within-classroom diversity is effectively random conditional on scheduling availability. I find that **a higher degree of classroom diversity increases GPA at graduation, improves first year grades of female students**, and affects the major choice of white students. I develop a trimming procedure to bound estimates and account for selection into the sample of completers. My results highlight the potential value of racial diversity in higher education and contribute to the debate over race-based admissions policies.

支持多元化的研究

- 分析結果顯示，在統計學意義上來說，多元化與否對寫作課程的成績、第一個學年結束後的**GPA** 沒有影響，至於畢業率，多元化群組的畢業率反而比相同族裔群組的較低。
- 多元化產生顯著正面影響的是學生畢業時的**GPA**，還有女學生在第一年學期結束的**GPA**，但男學生卻沒有顯著進步。
- 這是典型的「大包圍」戰略：從多角度進攻，只要其中一面得到勝利便大書特書。

X_{icty} . The second column in each set shows regression results which add male and international status indicators, as well as admissions ratings, conference size and the number of course units over the relevant time frame, as covariates. The third column in each set augments the specifications in the second column with category indicators for major area of study. Within each set of three specifications, estimates of the coefficient on diversity do not change substantially across them.

There does not appear to be any statistically significant average treatment effect of diversity on writing course grade (columns (1) through (3)) or GPA at the end of the first year (columns (4) through (6)). This implies that diversity in writing course conferences does not have contemporaneous effects on outcomes during the first year while the students are in the writing course. As for diversity's effect on completion (columns (7) through (9)), one of the three coefficient estimates is negative and statistically significant at the 10% level, while the other two point estimates are negative but not statistically significant, suggesting either no effect or a weak effect at best. However, the next set of estimates suggests diversity might have other longer-term effects.

Regression coefficient estimates in Table 4 show the effect of diversity on GPA at graduation for the completers subsample only.²⁴ The effect of diversity on GPA at graduation is positive and statistically significant (columns (1) through (3)). The estimates suggest that a one-unit increase in the diversity index of the writing course conference (i.e. from a single-race classroom to one with equal proportions) increases graduation GPA by approximately 0.30σ (from the preferred-specification and middling estimate in column (2)). Alternatively, replacing one White student with one minority student in a “typical” conference increases graduation GPA by 0.024σ . In this student-replacement scenario, the change represents a 0.0094 grade-point increase in GPA at graduation.

While the weak estimates of diversity’s negative effect on completion suggest otherwise, some may nonetheless be concerned about sample attrition. Attrition may occur when students drop out of college or transfer to another institution. Specifically, if greater classroom diversity caused

漏洞百出

- 學生在幾年之後獲得較佳的**GPA**，這和他們幾年前參加了一個短期的多元化學習組別有沒有因果關係呢？
- 如果丐幫幫主喬峰用「亢龍有悔」打了星宿老怪丁春秋一掌，幾年之後星宿老怪暴斃，我們能否將這歸究於喬峰呢？



輕微增長沒有實質意義

- 參加過族群多元化學習小組的學生，在畢業時成績只有輕微增長，與在相同族裔學習環境下的學生相比，他們的**GPA**增加了**0.0094**。這種增長根本沒有實際意義！
- 一般來說，**GPA** 只有兩個小數位，例如**3.25**、**3.75**，而不是**3.2594**。可能有人會說，若果四捨五入的話，那麼**3.25** 便會變成了**3.26**。然而，即使**GPA** 多了**0.01**，這對畢業生將來的就業會有重大影響嗎？

Regression coefficient estimates in [Table 4](#) show the effect of diversity on GPA at graduation for the completers subsample only.²⁴ The effect of diversity on GPA at graduation is positive and statistically significant (columns (1) through (3)). The estimates suggest that a one-unit increase in the diversity index of the writing course conference (i.e. from a single-race classroom to one with equal proportions) increases graduation GPA by approximately 0.30σ (from the preferred-specification and middling estimate in column (2)). Alternatively, replacing one White student with one minority student in a “typical” conference increases graduation GPA by 0.024σ . In this student-replacement scenario, the change represents a 0.0094 grade-point increase in GPA at graduation.

While the weak estimates of diversity’s negative effect on completion suggest otherwise, some may nonetheless be concerned about sample attrition. Attrition may occur when students drop out of college or transfer to another institution. Specifically, if greater classroom diversity caused

輕微增長沒有實質意義

- 至於女學生，她們的 GPA 只是增加了 0.019 標準差（ standard deviation ）。
- 但男生並沒有因着多元學習而提高成績。
- 這只是偶然產生的結果，還是真正的性別差異呢？

Female students benefit more from diversity than male students with respect to certain outcomes. Including the male indicator interaction term in the specification reveals heterogeneous diversity effects between male and female students. For female students, the effect of diversity on GPA at the end of the first year becomes positive and statistically significant at the 5% level. The estimate suggests that replacing one White student with one minority student in a “typical” conference increases the average female student’s first year GPA by 0.019σ . The estimated effects of diversity on GPA at graduation and writing course grade for female students are also more positive and more statistically significant when compared to point estimates of average treatment effects, though for the latter outcome, it is significant only at a 10% level. The effect of diversity on completion remains statistically insignificant for female students. On the other hand, for male students, the diversity effects on writing course grade and first year GPA are not statistically significant from zero (calculated by combining the baseline female estimates with the coefficient on the interaction term), while the statistically insignificant interaction term coefficients for the completion and graduation GPA outcomes indicate no heterogeneity by sex.

4.4. Major choice

Interacting with racially-diverse classmates may influence the choice of major. To investigate this possibility, I run a multinomial logit regression with major area of study as the categorical dependent variable. To capture possibly heterogeneous effects of diversity across different student race groups, I include the diversity index as well as its interactions with each race group (White being the omitted category) as covariates in the multinomial logit specification. Other covariates include own SAT score, mean SAT score in conference, male indicator, international status, admissions rating, conference size, number of first year course units, race indicators, free indicators, as well as year, time slot, and instructor fixed effects.

Columns (1) and (2) of [Table 6](#) report estimates of the marginal effects of the $diversity_{cty}$ variable on the probability of being in each of the four major areas of study for White students and (non-White) minority students respectively. These average marginal effects are evaluated for the two groups of students separately, based on estimates from a single multinomial logit regression.

The two statistically significant estimates within columns (1) and (2) imply that **when White students are placed in higher diversity writing conferences, they are less likely to take up majors in literature, language, and arts, and more likely to take up majors in social sciences, history, and philosophy. This pattern of White students flowing from one major area to another may be the result of their being exposed to worldviews and social networks different from their own when placed in more racially diverse classrooms.**

多元化已經是現實

- 退一步說，縱使研究真的證明了多元化能夠提高學生的成績和其他學習成果，但這仍然不能用來支持在招生時將族裔放在考慮之列，和提高某些族裔在學生人口中的比例。
- 在現實中，絕大多數美國大學校園和班房都不是清一色白人，多元化已經是現實，學生在課堂中跟不同族裔互動已經是常態。若果你需要進行研究，你必須要故意將相同族裔的學生分配在一起，那些比較相同族裔和不同族裔學習組別的研究，根本不符合真實的環境。

有沒有黃金比例？

- 真正的問題並不是清一色族群與多元化的分別，而是什麼程度的多元化和不同族群的比例，比方說，若果某班房有八個白人、八個亞裔、兩個西裔人士、一個黑人、一名國際學生，是不是要將這比例改為四個白人、四個亞裔、四西裔人士、四個黑人、四名國際學生，這才是較為理想的多元化呢？有沒有任何科學證據提供一個「黃金比例」呢？

有沒有黃金比例？

- 再退一步說，縱使這黃金比例真的存在，而根據黃金比例實踐的多元化會得到更加良好的教育成果，但是，那些合資格卻被拒諸門外的學生，卻完全沒有機會享受這更加優良的教育成果！
- 中國俗語有云：「犧牲小我，完成大我。」但先決條件是那些小我是自願犧牲的，而不是其他人為他們作決定。
- 我並不反對多元化，無可置疑，和不同背景的人互動，可以打破自身狹窄的眼界，可以刺激創意。不過，多元化應該是在維護公義、公平的大前提下進行。

隱藏的議程

- 任何範疇對不同的群體都會有不相同的結果，例如2017-2019年社會工作碩士畢業生中近90%是女性。超過22%的新社會工作者是非裔美國人。女性與黑人社會工作者遠超其人口比例。
- 支持以種族作為入學標準之一的一個論據是：少數族裔更加能夠在提供服務或者諮詢幫助時更加明白自己族群受助者的感受和需要。
- 社會科學家和教育學家批評女性與少數族裔在STEM的比例與人口不相符，但從來沒有人認為社會工作、心理治療……等範疇的比例失衡有問題。

Rethinking the Dworkinian Forward-Looking Approach: is Affirmative Action Compatible with Fairness?

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Abstract

Whether Affirmative Action is a proper way to accomplish social justice in terms of fairness has been an ongoing debate in the United States. Late philosopher Ronald Dworkin was a vocal supporter of Category 4 Affirmative Action, in which preferential treatments for minorities is justified. Dworkin emphasized a forward-looking approach as a means to achieve social justice and overall fairness. In his view, it is not sufficient for black applicants to enjoy preferential treatment now just because in the past their ancestors suffered due to slavery. Rather, a successful argument for affirmative action programs must include a forward-looking justification. To be specific, this policy promises a better educational environment in terms of diversity and promotes a less racially conscious society for all citizens. Additionally, Dworkin often cited the study entitled *The Shape of the River* to substantiate his claim that special treatment for minorities could amend social injustice and produce fairer outcomes. This article attempts to evaluate this Dworkinian theory on both the principle and practical levels. It concluded that while a neutral or non-interventional policy is insufficient to achieve racial equality, interventions in terms of special treatments and soft quotas are not yet shown to be fair in practice.

Keywords: Action, Affirmative, Compatible, Fairness.

- Yu, C. H, & Cheung, K. T. (2017). [Rethinking the Dworkinian forward-looking approach: Is Affirmative Action compatible with fairness?.](#) *European Journal of Social Sciences, Education, and Research*, 11(2), 166-174. doi:10.26417/ejser.v11i2.p166-174.

Category 1. Formal equality of opportunity: In this approach, an affirmative action program aims to implement a neutral policy to ensure that opportunities are open to everyone regardless of race, gender, religion, or any demographic attribute. This is the original intent of affirmative action advocated by President Kennedy in 1961. Executive Order 10925 signed by President Kennedy states that “it is the plain and positive obligation of the United States Government to promote and ensure equal opportunity for all qualified persons, without regard to race, creed, color, or national origin, employed or seeking employment with the Federal Government and on government contracts” (Kennedy, 1961, para. 2).

Category 2. Aggressive formal equality of opportunity: Instead of neutrality and non-intervention, supporters of Category 2 would aggressively use sensitivity training, external monitoring, and outreach efforts to achieve a fair outcome in admission and employment. For example, the Office of Civil Engagement at the University of Chicago developed a plethora of programs for minority middle school and high school students to learn science, such as the Young Scientist Program and Space Explorers (University of Chicago, 2017).

Category 3. Compensating support: In this approach, special training programs, financial support, mentoring, or tutoring are provided to minorities to compensate for their disadvantages. Executive Order 11625 signed by President Nixon in 1971 is a good example. Under this law, the Federal Government is obligated to provide minorities with additional technical and management assistance to disadvantaged businesses, and to assist in demonstration projects. It is mandatory for the Secretary of Commerce to “establish a center for the development, collection, summarization, and dissemination of information that will be helpful to persons and organizations throughout the Nation in undertaking or promoting the establishment and successful operation of minority business enterprise” (Nixon, 1971, para. 5).

增加在考試成績以外的比重

Category 4. Soft quotas: In this method, “bonus points” are added to the selection indices of minorities in admission and employment while no explicit quota is set. It is important to point out that very often explicit point-adding is forbidden. In 2003, the US Supreme Court struck down the proposed admission policy of the University of Michigan, where 20 points out of 100 were added to minority applicants. Nonetheless, sometimes the soft-quota approach is allowed in an implicit way. For example, in 1997 the University of Texas, Austin adopted a new admissions policy that gives more weight to the essay for non-top 10-percent applicants. This admission criterion is based on how well the candidate could overcome adversity, and also takes into account the special circumstance that might affect the candidate’s test score and GPA. As a result, the freshman enrollment of minorities surged significantly (Sabbagh, 2011). This policy was challenged by Fisher, a white applicant who was turned down by the university in 2008 (Fisher vs. University of Texas, No. 14-981). After a long legal process, the Supreme Court decided to side with UT, Austin (Liptak, 2016).

Category 5. Hard quotas: As the name implies, this approach aims to achieve a proportional representation of the population by gender and racial composition in the student body and the work force. Today, this category is unacceptable because in *Regents of University of California vs. Bakke* (1978), the Supreme Court ruled that a university’s use of hard quotas in the admission process is unconstitutional (Justia, 2016).

In contrast, there is evidence that race-based admissions and hiring policies would harm the society as a whole. Take Malaysia as an example. Malaysia is a racially-diverse country, which is composed of Malays, Indians, Chinese people, and other minorities, including Orang Asli (Aborigines of Peninsular Malaysia), Eurasians, and the indigenous groups of Ibans, Kadazan, Dusuns, Bidayus, and Murut. Malays are the ruling majority while the Indian and Chinese people are

significantly smaller minorities in terms of number. Indians and Chinese people outperform Malays in both academic and economic achievements. To empower the Malay group, the government implements its own version of “affirmative action,” setting different admissions and hiring standards for different ethnic groups. As a result, many talented people lost the opportunity to actualize their potential. In 1965, a group of Chinese separated themselves from Malaysia to form an independent country—Singapore. Singapore adopted a racially-neutral policy in virtually all aspects of their society. Within a decade, Singapore became one of the “four tigers” in Asia. In terms of area and population, Singapore is a much smaller country than Malaysia. The size of Singapore is only 263 square miles and the population is about 4 million, whereas Malaysia covers 127,316 square miles of land and has a population of 23 million. Despite this disparity, Singapore’s sophisticated manufacturing infrastructure and technological advancements have made her a regional giant. In 2016, the GDP of Singapore was almost US\$297 billion while the per capita GNP approached US\$52,600. In contrast, the 2016 GDP of Malaysia was almost US\$275 billion and the per capita GNP was only \$US11,028 (Trading Economics, 2017). Therefore, we do not need a counterfactual argument or a thought experiment; the comparison between Malaysia and Singapore illustrates that depriving a small number of people their rights and suppressing their talents makes a worse, not a better society. Candidly, Malaysia has been hurt by her own policy. Should a policy be considered fair if the so-called overall fairness in terms of total welfare of a wider community is not achieved?

取消以種族入學為標準並不會影響整體的多元化

Bowen and Bok (1998) asserted that without the race-sensitive admission policy some blacks could not have been admitted to selective universities such as Harvard. As a result, counterfactually speaking, those universities would not have been culturally diverse and those blacks would not have led successful lives. There are two problems with this argument. First, if those black applicants were rejected by selective universities, they could have been admitted to less selective universities. Don't less competitive universities also need a diversified environment? One of the goals of equality is to help those who are disadvantaged. When less prestigious colleges are in a disadvantageous position compared to top universities, doesn't it make sense for these schools to increase their diversity to enhance the learning environment and educational opportunities? In 1996, the State of California passed Proposition 209, which prohibited public institutions from using race-based admission policies. Although the black and Hispanic enrollment was reduced at the most prestigious University of California campuses (-42% at UC Berkley; -37% at UCLA), other less competitive UC campuses increased their black and Hispanic enrollment (+22% at UC Irvine, +18% at UC Santa Cruz; +65% at UC Riverside) (Sander & Taylor, 2012). Basically, overall diversity of more UC campuses improved as a result of Proposition 209.

拉近距離？

- 這需要分開是在賽前還是賽中拉近。比方說，有兩隊球隊，其中一隊背後有大財團支持，有最先進的高科技訓練器材，有全國最好的教練，但另外一隊沒有這些資源，如果要拉近起跑點，你可以資助處於弱勢的那一個隊伍，為他們添置更好的器材，聘請更好的教練。但是，如果在比賽的時候或者比賽開始之前，我已經為前一個隊伍減分，為另外一個隊伍加分，例如入了一球當成兩球，這是不公平的。
- 我贊成幫助弱勢社群的學生，例如為他們提供免費補習，贊助他們遊學，贈送電腦.....，但是，這都應該在事前進行，而不是在考核和比賽過程中減分或者加分。
- 我自己教書很多年，經驗告訴我，為弱勢學生提供太多優惠，到頭來因愛成害，很多人以為那一切都是自己應得的，結果坐定粒六，削弱了上進心。

- 亞裔在數據科學會議和工作坊中佔大多數



- 提供 incentives 鼓勵其他族裔參與？