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The graduating international undergraduate class of 2020—Counterintuitive graduation rate and time to degree during onset of the coronavirus pandemic

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Abstract

What were the graduation rate and time to degree for international undergraduates who would have been expected to graduate during the coronavirus pandemic's onset in spring 2020? The present study addressed this question by testing for intergroup differences in graduation outcomes between an American public university's international undergraduate class of 2020 and its pre-pandemic comparison counterpart of 2019. Controlling for early (pre-pandemic) graduations, the study yielded counterintuitive results; although the literature on the pandemic's educational disruptions, mental health symptoms, xenophobia, and stressors would predict that the class of 2020's graduation rate should have been lower and average time to degree longer than the class of 2019's, the two classes' values were almost identical. These results, together with previous ones on term grade point averages, are indicative of this class of 2020's academic success, resilience, and/or benefit from institutional support. They are discussed in the context of racism and caste.

Keywords: caste, COVID-19, graduation outcomes, international undergraduates, racism

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Introduction

International students who attended American postsecondary institutions during spring 2020 (SP20) had to cope with multiple negative conditions in their learning environment coinciding with onset of the novel coronavirus pandemic (COVID-19). The negative conditions included disruptions of these students' instructional/learning continuity, graduation plans, interpersonal interactions, and various education-related practices (Dickerson, 2020; Gallagher et al., 2020; Krahmer et al., 2020; Lederer et al., 2021; Osaze, 2021). Additionally, these students experienced mental health symptoms (e.g., anxiety, depression, fear of infection, loneliness), social isolation, travel bans, financial hardships, food insecurity, loss of employment, immigration/visa issues, and/or multiple uncertainties during the pandemic's SP20 onset (Alaklabi et al., 2021; Aucejo et al., 2020; Bardill Moscaritolo et al., 2022; Chirikov & Soria, 2020; English et al., 2022; Firang, 2020; Hou & Wang, 2021; Liu, 2021; Martirosyan et al., 2022; Zhang & Sustarsic, 2022). The responses of American postsecondary

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institutions (including the one in the present report) to the pandemic consisted of canceling in-person classes and examinations for SP20 and summer 2020, administering final examinations and conducting all classes virtually, and/or campus closures that required students to isolate in or vacate their campus residences (Burke, 2020; Redden, 2020; Smalley, 2020). These learning environment conditions were consistent with the acknowledged characteristics of stressors—arousing, aversive, and unpredictable or uncontrollable conditions (Kim & Diamond, 2002).

The pandemic's educational disruptions of postsecondary learning environments (e.g., Bardill Moscaritolo et al., 2022; Hou & Wang, 2021; Liu, 2021) potentially could have been accompanied by negative graduation outcomes for international students at American higher education institutions (Aucejo et al., 2020; LaFee, n.d.). These students could have been particularly vulnerable to the pandemic's educational disruptions accompanied by mental health symptoms (Aucejo et al., 2020; Bardill Moscaritolo et al., 2022; Zhang & Sustarsic, 2022), rising xenophobia/racism (Hou & Wang, 2021; Koo et al., 2021), and preexisting stressors (Fass-Holmes, 2022). They might reasonably be expected to have experienced delays or difficulties in completing degree requirements on time, if at all. For example, 13% of 1,500 students surveyed at one of America's largest public universities delayed their graduation "due to COVID-19" (Aucejo et al. 2020, p. 1).

The present study's purpose, then, was to explore graduation outcomes—rate and time to degree—of international undergraduates who would have been expected to graduate during the SP20 term coinciding with the COVID-19 pandemic's onset. Specifically, it explored intergroup differences on these outcomes between the international undergraduate (pandemic) class of 2020 and the comparison (pre-pandemic) class of 2019 at an American West Coast university where the academic year consisted of *three terms* (not two semesters). This university's international student population was one of America's 10 largest, almost two-thirds of which was from China (Institute of International Education [IIE], 2021). Research on international undergraduates' graduation outcomes during the pandemic's onset had not appeared in the literature by the time of the present report's review. The findings reported here would be the first ones focusing specifically on this research issue, following up on two prior reports about academic performance (grade point averages) in SP20 (Fass-Holmes, 2021, 2022). They inform postsecondary administrators and researchers about the positive educational outcomes and successes that international undergraduates could have experienced during the disruptions, mental health symptoms, rising xenophobia, and stressors accompanying the pandemic's onset.

Relevant events during the university's 2019–2020 academic year (AY) to keep in consideration were the following (Fass-Holmes, 2022): the university first informed its students about the coronavirus on January 22, 2020; winter term's final examinations were administered online beginning March 14, three days after the pandemic's declaration; on March 20, the governor of the university's state issued a stay at home order, and the campus closed except for critical functions; winter term ended on March 21; SP20 began on March 25, *coinciding in its entirety with the pandemic's educational disruptions* (Liu, 2021); March 29 was the deadline for all students who could safely vacate the campus to do so (the number and percentage who did vacate is unknown); and SP20 ended on June 12.

Literature Review

The following literature review provides context for the racist/casteist idea that international students (especially Chinese ones) should demonstrate poor graduation outcomes, regardless of their learning environment conditions, because of their presumed linguistic (English) inferiority (Zhang-Wu, 2018, 2021). The reason for providing this context is that the present report debunks this idea.

Racism vs. Caste

Caste in American History

The COVID-19 pandemic has been accompanied by rising xenophobia in the United States (Allen & Ye, 2021; Koo et al., 2021). Many American politicians and their followers have used the pandemic as an opportunity to advocate for and/or implement immigration restrictions (Loweree et al., 2020), and to stigmatize (Viladrich, 2021) people from other countries, especially China (Hou & Wang, 2021; J. J. Lee, 2020). Anti-China rhetoric has included statements that China cheats and steals (Ooi & D'Arcangelis, 2017), Chinese immigrants are responsible for bringing COVID-19's virus to the United States (Koo et al., 2021; Salcedo, 2021), and Chinese international students are a threat to America's national security (J. J. Lee, 2020). These statements have negatively affected their target groups' well-being (Firang, 2020; Lian & Wallace, 2020), destabilized the two countries' relations (Allen & Ye, 2021), and jeopardized American postsecondary institutions (Fischer, 2021; Yu, 2021) where China has become the top source country of their international students (IIE, 2020).

In the years following America's election of its first Black president, the term "racist" has elicited declarations like "I don't have a racist bone in my body" (Petrella & Gomer, 2019) and "I am the least racist person" (Fisher, 2016). Racism, according to Kendi's (2019) definition, is a social power construct; it conceptualizes racist policies leading to and normalizing racial inequalities that are defended by invoking racist ideas. Racist policies are defined as plans or strategies that produce or perpetuate inequity between racial groups. Racial inequity is a condition that results in two or more racial groups having unequal status, support, and/or treatment. Racist ideas are thoughts or concepts in which one racial group is deemed to be inferior or superior to another racial group. Racial groups are collections of people who are distinguished from others on the basis of features such as skin color, hair texture, eyelid creases, lip thickness, and/or nasal width.

The above definitions support Kendi's (2019) advocacy for addressing racism by changing policies rather than by changing individuals; racist policies that serve self-interests result in racial inequities that are defended, justified, and rationalized with racist ideas. In contrast, the historical approach has been to address racism by changing individuals' ignorance and emotions (e.g., anger, fear, and/or hate) that lead to racist ideas and policies producing racial inequities (Banks & Valentino, 2012; Kendi, 2019; Spanierman & Cabrera, 2014).

The term "caste" has a meaning that differs from and overlaps with "race." Caste and race can be present together in the same society whereby the former is a transparent hierarchy of dominance versus subordinance, while the latter is the physical characteristics (skin color, hair texture, etc.) that have arbitrary significance about an individual's position in the hierarchy (Wilkerson, 2020). America's caste system has operated during the country's entire existence (Berreman, 1960; Wilkerson, 2020), having exhibited the following distinguishing features: inherent inferiority and superiority; endogamy (control of marriage and mating); a basis in religion; a hierarchy of occupations; heritability and permanence; purity vs. pollution; dehumanization and stigma; and enforcement of the hierarchy (Wilkerson, 2020).

Caste's impacts on American society as a whole are exemplified by the country's history with Chinese people. Beginning in the mid-19th century, immigrant Chinese contract laborers (who reportedly were illiterate, unmarried male peasants) journeyed to America's western states for dangerous jobs in railroad construction and mining (Brockell, 2021; Holland, 2007; Strochlic, 2020). Once the railroads were completed, however, western states began perceiving Chinese

laborers as a threat to White counterparts' employment opportunities (Holland, 2007). This perceived threat was exemplified by Leland Stanford's California gubernatorial inauguration address:

To my mind it is clear, that the settlement among us of an inferior race is to be discouraged, by every legitimate means. Asia, with her numberless millions, sends to our shores the dregs of her population....There can be no doubt but that the presence of numbers among us of a degraded and distinct people must exercise a deleterious influence upon the superior race, and, to a certain extent, repel desirable immigration. It will afford me great pleasure to

concur with the Legislature in any constitutional action, having for its object the repression of the immigration of the Asiatic races. (Stanford, 1862)

The motivation for removing Chinese laborers from western states was based upon self-interest (i.e., job opportunities) which led to legislation and acts of violence that reasonably could be interpreted as a dominant caste's enforcement of its society's hierarchy of perceived human value in which Whites were the superior race and Chinese were an inferior one (Wilkerson, 2020).

America has a history of legislative and violent acts that targeted Chinese immigrants and enforced the dominant caste's hierarchy of superiority vs. inferiority. This history is briefly summarized in the following chronologically ordered list of such acts (Brockell, 2021; Holland, 2007; E. Lee, 2007; J. J. Lee, 2020; Miller, 2018).

- "yellow peril" tropes—dehumanizing/stigmatizing characterization of Chinese immigrants
- Anti-Coolie Act of 1862—imposed a monthly tax on Chinese immigrants doing business in California
- Naturalization Act of 1870—barred Chinese from naturalization because they could not be assimilated into American society
- Chinese massacre of 1871
- Page Act of 1875—prevented Chinese women from entering America
- anti-Chinese riots of 1870s and 1880s
- Chinese Exclusion Act of 1882—specifically barred Chinese contract laborers from immigrating to America
- Scott Act of 1888—barred all Chinese people from entering America
- Gresham-Yang Treaty of 1894—totally prohibited Chinese immigration to America
- Asiatic Exclusion League—67 labor unions joined in 1905 to promote laws restricting Asian immigration
- Pacific Coast race riots of 1907—anti-Chinese immigrant sentiments turned violent
- Immigration Act of 1917—created the Asiatic Barred Zone
- Emergency Quota Act of 1921 and Immigration Act of 1924—restricted immigration based upon country of origin

These legislative and violent acts against Chinese immigrants coincided with ones targeting other groups who also were relegated to subordinate castes due to the dominant caste's perceptions of them as inferior races, including (but not limited to) African and Native Americans (Wilkerson, 2020).

Caste in International Education

Racism's impact on international students attending US postsecondary institutions have been covered substantially in the media and research literature (Kanthor, 2021; Zhang-Wu, 2018). Caste's potential impacts on these students, however, have attracted comparatively little attention and they generally could be unrecognized by educators and researchers.

The American dominant caste's enforcement of its society's hierarchy of human value has continued into the 21st century and extended to American postsecondary institutions' international students from countries outside Europe. Chinese students, in particular, have been perceived as threatening and therefore subjected to enforcement actions. In light of the burgeoning number of these students attending American postsecondary institutions (from 5 in fall 1964 to 98,235 in fall 2008 coinciding with the great recession, and 317,299 in fall 2020 coinciding with the pandemic [IIE, 2020]), actions that enforce the hierarchy would impact a substantial proportion of America's international student population.

Current events and research findings indicate that international students attending American postsecondary institutions in many cases are subjected to the impacts and consequences of caste in addition to those of racism. Self-interest-based motivations have resulted in enforcement of the caste hierarchy by actions which dehumanize, stigmatize, and/or restrict international students (especially ones from China) attending American universities. These actions are briefly

summarized in (but are not limited to) the following list (Fass-Holmes, 2016, 2022; Feng, 2019; Hussein & Schiffelbein, 2020; J. J. Lee, 2020; Matross Helms & Spreitzer, 2021; Padilla et al., 1991; Viladrich, 2021; Zhang-Wu, 2018).

- promote a deficit view—these students collectively and necessarily have English weakness (linguistic inferiority), choose majors that hide their weakness, and cheat
- rationalize evidence of academic success—grade inflation, leniency, and/or dilution of grade point averages by students' choice of pass-fail option account for these students' successes
- assert that international students deprive domestic counterparts of admissions slots
- exclude visas for students with ties to the Chinese Community Party or military
- blame/stigmatize Chinese students for bringing the pandemic's virus to America

To the extent that international students' experiences in America are influenced by caste, the present report's positive findings could be dismissed out of hand by educators and researchers who knowingly or unwittingly are defending the hierarchy.

It turns out that the greatest threat to a caste system is...lower-caste success.... Achievement by those in the lowest caste goes against the script handed down to us all. It undermines the core assumptions upon which a caste system is constructed and to which the identities of people on all rungs of the hierarchy are linked. Achievement by marginalized people who step outside the roles expected of them puts things out of order and triggers primeval and often violent backlash. (Wilkerson, 2020, p. 218)

Research Method

Participants

The entire population of international (F-1 or J-1 visa [US Department of State, n.d.]) undergraduates in the class of 2020 (i.e., ones who would be expected to graduate in SP20; pandemic group), plus counterparts in the class of 2019 (i.e., ones who would be expected to graduate in SP19; pre-pandemic comparison group), at an American West Coast public university (where the AY has *three terms rather than two semesters*) comprised the present study's participant pool. This university afforded the following educationally significant and distinct advantages: 1) it historically has provided a broad range of student support services and programs plus additional ones specifically intended for international undergraduates and enhanced during the pandemic's onset (e.g., weekly virtual chat sessions with university staff, language conversation tables, "alone together" emotional support sessions, mixers, and Chinese students' online town hall [Tokify pinboard, 2020]); 2) support services and programs, combined with the university's strong reputation for academic excellence, have attracted one of America's 10 largest international student populations (IIE, 2021); 3) the university's AY consisted of three terms (rather than two semesters) in which the pandemic's onset coincided with the entire SP20 term; and 4) previous research results on this university's undergraduate population (Fass-Holmes, 2016, 2021, 2022; Fass-Holmes & Vaughn, 2014, 2015) were available for potential comparison.

Data Collection

Demographic data plus graduation records for the university's entire population of international undergraduates in the classes of 2020 and 2019 were extracted from its student information system using structured query language programs (Fass-Holmes & Vaughn, 2014, 2015). The resulting records (1,664 for the class of 2020; 1,661 for the comparison class of 2019) contained unique ID, degree awarded and award term/year, applicant type (first-time students [NFRS] vs. transfers [TRAN]), field of study, home country, and visa type. These data were organized in a spreadsheet file with quality controls that precluded double-counting students with multiple records. Records belonging to the class of 2020 in which the degree

award term preceded SP20 (i.e., students unexposed to the pandemic's disruptions) were excluded from the analyses described below; class of 2019 comparison counterparts with degree award term preceding SP19 similarly were excluded. The included records (1,172 for the pandemic class of 2020; 1,243 for the comparison class of 2019) were considered "eligible" for graduation (i.e., ones who could have graduated in their expected term/year). Confidentiality was protected by performing the analyses on a physically locked-down computer, encrypting the records, and using procedures approved by the university's Institutional Review Board.

Descriptive statistical analyses consisted of calculating counts, graduation rates for graduation outcomes (graduated on time; graduated late), percentages (did not graduate), time to degree (number of academic terms), and standard deviations (where applicable). These metrics were disaggregated by applicant type and country. In the calculations of percentages, the denominator was a total value appropriate for the data category in question; for example, the denominator for calculating the percentage of the class of 2020's NFRS who did not graduate was the total number of NFRS eligible to graduate in SP20 (i.e., excluded those who graduated prior to the pandemic's onset). These statistics describing international students' graduation outcomes coinciding with the pandemic's onset would be the first of their kind in the education research literature. Inferential statistical analyses of potential intergroup differences between the classes of 2020 and 2019 on graduation rates and times to degree included Z-tests for the significance of difference between two independent proportions (i.e., graduation rates/percentages; http://vassarstats.net/propdiff ind.html), Mann-Whitney U(https://www.statskingdom.com/170median mann whitney.html), and standardized effect size. These tests of international students' graduation outcomes coinciding with the pandemic's onset also would be the first of their kind and were performed to determine the magnitude and statistical significance of intergroup differences between the pandemic and pre-pandemic groups (statistical determination of cause and effect was beyond this exploratory study's scope).

Results

Demographics

Data Analyses

The university's international undergraduate class of 2020 comprised 1,664 students, 1,128 having entered as NFRS in FA16 and 536 as TRAN in FA18. After excluding the ones who graduated before the pandemic's onset, 813 NFRS and 359 TRAN remained for this study's analyses. These NFRS' top five home countries were China, India, South Korea, Taiwan, and Hong Kong. The corresponding countries for the TRAN counterparts were China, South Korea, Hong Kong, Indonesia, and Taiwan. The percentages of these students from their top five home countries are shown in Table 1.

The international undergraduate comparison class of 2019 comprised 1,661 students, 1,213 having entered as NFRS in FA15 and 448 as TRAN in FA17. After excluding the ones who graduated prior to SP19, 891 NFRS and 352 TRAN remained for comparison purposes in this study's analyses. These NFRS' top five home countries were China, India, South Korea, Taiwan, and Hong Kong. The corresponding countries for the TRAN counterparts were China, South Korea, Hong Kong, Taiwan, and Indonesia. The percentages of these students from their top five home countries are shown in Table 1.

Graduation Rates

Figure 1 shows the counts and percentages of international undergraduates in the classes of 2020 and 2019 who graduated early (before SP), on time (SP), late (after SP), or did not graduate. Almost 30% of the class of 2020 (28% of the NFRS, 33% of the TRAN) graduated early (prior to the pandemic's onset) and consequently were excluded from the study's analyses below. More than a third of the class of 2020 (~40% of the NFRS, 28% of the TRAN) graduated on time,

Table 1 *International Undergraduates' Top Five Home Countries, Disaggregated by Graduating Class and Applicant Type (Percentages)*

Graduating Class	Applicant Type	China	Hong Kong	India	Indonesia	South Korea	Taiwan
2020	NFRS (<i>N</i> =813)	67.2%	1.4%	8.2%	n/a	6.0%	3.8%
	TRAN (<i>N</i> =359)	60.4%	5.6%	n/a	5.6%	10.9%	5.3%
2019	NFRS (<i>N</i> =891)	70.0%	1.3%	5.8%	n/a	5.8%	3.1%
	TRAN (<i>N</i> =352)	55.1%	7.4%	n/a	4.3%	12.5%	4.8%

Note. Abbreviations: *N*=number; n/a=not applicable; NFRS=international undergraduates who entered the university as first-time students; TRAN=international undergraduates who entered the university as transfer students

Figure 1Numbers and Percentages of International Undergraduates in the Classes of 2020 (Pandemic) and 2019 (Prepandemic), Disaggregated by Graduation Outcome (Did Not Graduate; Graduated Early, On Time, or Late) and Applicant Type

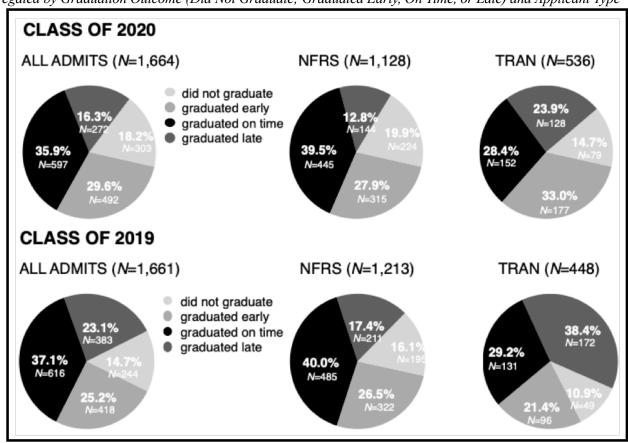
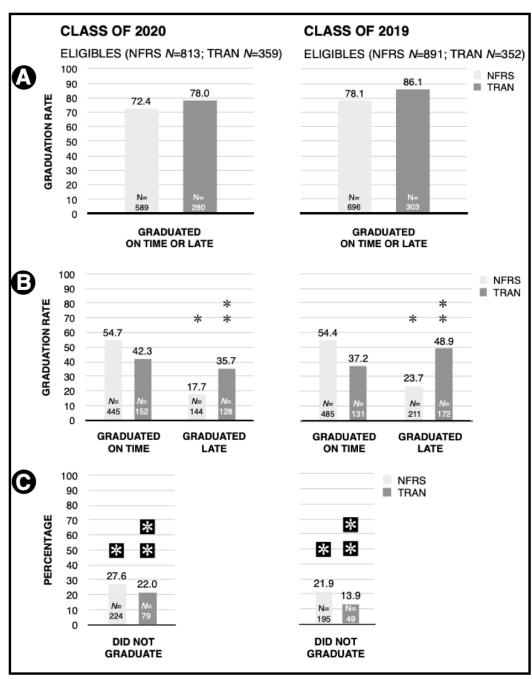


Figure 2
Graduation Outcomes of International Undergraduates in the Classes of 2020 (Pandemic) and 2019 (Prepandemic Comparison). A. Disaggregated by Applicant Type. B. Disaggregated by Applicant Type and Outcome—On Time vs. Late. C. Disaggregated by Applicant Type and Outcome—Did Not Graduate



Note. One asterisk indicates a statistically significant difference (alpha level 0.05) between the class of 2020 NFRS (bar graphs on the figure's left half) and 2019 counterparts (ones on the right); two asterisks indicate a difference between 2020 TRAN and 2019 counterparts. Values above the bars represent graduation rates in A and B and percentages in C; values at the bottom represent counts. Error bars are standard deviations. Abbreviations are the same as in Figure 1.

about 16% (~13% of the NFRS, 24% of the TRAN) graduated late, and less than 20% (~20% of the NFRS, 15% of the TRAN) did not graduate at all (transferred to another institution; took leave of absence; etc.).

For comparison, the class of 2019's corresponding values were as follows (see Figure 1). Approximately 25% (26.5% of the NFRS, 21.4% of the TRAN) graduated early and were excluded from the analyses. More than a third (40% of the NFRS, ~30% of the TRAN) graduated on time, almost a quarter (~17% of the NFRS, ~38% of the TRAN) graduated late, and less than 15% (~16% of the NFRS, 11% of the TRAN) did not graduate at all.

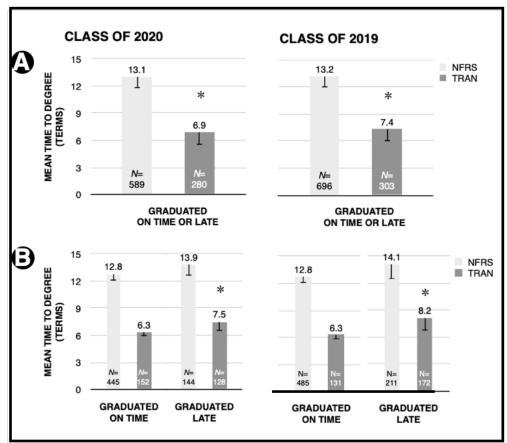
Graduation rates for the classes of 2020 and 2019 (excluding members of each class who graduated before their respective spring terms), disaggregated by applicant type only, are shown in Figure 2A. Class of 2020 NFRS and TRAN had lower graduation rates than their class of 2019 counterparts—approximately 6 and 8 percentage points, respectively. To determine the degree to which each graduation outcome (on time vs. late) contributed to these differences, the data are disaggregated additionally by graduation outcome in Figure 2B. Contrary to what might have been expected, class of 2020 NFRS and TRAN did not differ significantly from class of 2019 counterparts with regard to on-time four-year graduation rate.

The 2020 NFRS graduation rate (54.7%) was almost identical to the 2019 comparison counterparts' value (54.4%); the magnitude of this difference was not statistically significant (Z test two-tailed p>0.05). The 2020 TRAN on-time graduation rate (42.3%) was about 5 percentage points higher than the 2019 comparison counterparts' value (37.2%), although the magnitude of this difference also was not statistically significant (Z test two-tailed p>0.05). However, the class of 2020's NFRS and TRAN did differ significantly from the class of 2019's comparison counterparts with regard to late graduation rate. The 2020 NFRS value (17.7%) was almost 6 percentage points lower than 2019 counterparts' (23.7%); the magnitude of this difference was statistically significant (Z=-3.03; two-tailed p=0.002). The 2020 TRAN late graduation rate (35.7%) was about 13 percentage points lower than the 2019 comparison counterparts' (48.9%); the magnitude of this difference also was highly statistically significant (Z=-3.566; two-tailed p=0.0004). The class of 2020 NFRS and TRAN differed significantly from the class of 2019 comparison counterparts with regard to not graduating (Figure 2C). The 2020 NFRS value (27.6%) was almost 6 percentage points higher than 2019 comparison counterparts' (21.9%); the magnitude of this difference was statistically significant (Z=2.713; two-tailed p=0.0067). The 2020 TRAN value (22.0%) was about 8 percentage points higher than the 2019 comparison counterparts' (13.9%); the magnitude of this difference also was statistically significant (Z=2.805; two-tailed D=0.005).

Times to Degree

Mean times to degree for the classes of 2020 and 2019 (excluding members of each class who graduated before their respective spring terms), disaggregated by applicant type only, are shown in Figure 3. Counterintuitively, the class of 2020 NFRS and class of 2019 comparison counterparts who graduated on time took the exact same number of academic terms (12.8, rounded to one decimal place; 4.27 academic years) to graduate; this comparison was not statistically significant (Mann-Whitney U two-tailed p>0.05). The 2020 TRAN and 2019 comparison counterparts who graduated on time also took the exact same number of academic terms (6.3, rounded to one decimal place; 2.1 academic years); this comparison was not statistically significant (Mann-Whitney U two-tailed p>0.05). Additionally, the 2020 NFRS who graduated late took almost the same number of academic terms (13.9; 4.6 academic years) to graduate as 2019 comparison counterparts (14.1; 4.7 academic years); the magnitude of this difference was not statistically significant (Mann-Whitney U two-tailed p>0.05). The 2020 TRAN who graduated late took fewer academic terms (7.5; 2.5 academic years) to graduate than 2019 comparison counterparts (8.2; 2.7 academic years); the magnitude of this difference was highly statistically significant (Mann-Whitney U=8104, Z=-3.9425; two-tailed D=0.00008), and the effect size was small (0.23).

Figure 3
Mean Time to Degree (Number of Terms) for International Undergraduates in the Classes of 2020 (Pandemic) and 2019 (Prepandemic). A. Disaggregated by Applicant Type. B. Disaggregated by Applicant Type and Graduation Outcome—On Time vs. Late



Note. Asterisks indicate a statistically significant difference (alpha level 0.05) between the class of 2020 TRAN (bar graphs on the figure's left half) and 2019 counterparts (ones on the right). Values above the bars represent mean times to degree, values at the bottom represent counts. Error bars are standard deviations. Abbreviations are the same as in Figures 1 and 2.

Discussion

No one is completely immune from racist ideas or caste assumptions; anyone can be anti-racist one minute and racist the next (Kendi, 2019), or egalitarian in one situation and hierarchical in another (Wilkerson, 2020). Many racist ideas and casteist assumptions are sweeping generalizations; for example, educators and/or researchers could generalize that international students collectively have a "lack of daily communication skills" (Jin & Schneider, 2019, p. 91) and/or that they "…cannot do writing almost at all" (Hussein & Schiffelbein, 2020, p. 67). Alternatively, educators and/or researchers could generalize in describing these students as "cash cows" (Cantwell, 2015), "… having language barriers, linguistically incompetent, or deficient in English" (Zhang-Wu, 2021, p. 11), or being "particularly vulnerable" to cheating (Bertram Gallant et al., 2015, p. 226). These negative/deficit generalizations about international students have been supplemented by recent reports of negative mental health symptoms (e.g., anxiety, depression, fear of infection, loneliness) that non-randomly selected survey and interview participants experienced during the pandemic's onset (Aucejo et al., 2020; Bardill Moscaritolo

et al., 2022; Zhang & Sustarsic, 2022); educators and/or researchers might generalize these symptoms to *all* international students.

The extant literature's negative/deficit generalizations about international students would logically lead to the prediction that the educational disruptions (Bardill Moscaritolo et al., 2022; Hou & Wang, 2021; Liu, 2021), mental health symptoms (Aucejo et al., 2020; Bardill Moscaritolo et al., 2022; Zhang & Sustarsic, 2022), rising xenophobia (Hou & Wang, 2021; J. J. Lee, 2020), and/or other stressors (e.g., Fass-Holmes, 2022) accompanying the COVID-19 pandemic's onset additionally should have negatively impacted these students' graduation outcomes in SP20. Consequently, the present study was conducted to test whether the university's international undergraduate pandemic class of 2020 would have had poorer graduation outcomes than the pre-pandemic comparison class of 2019 (this study was conducted to test for intergroup differences, not to determine cause and effect).

The present counterintuitive results showed that the university's class of 2020 did *not* have poorer four-year graduation rates and times to degree in SP20 than the comparison class of 2019 had in SP19. Instead, the two classes' outcomes were similar or favored the class of 2020. The observed four-year graduation rates of 72–86%, and time-to-degree values approximating the conventional 4 years for NFRS and 2 years for TRAN markedly contrast with the report that "...only 41% of American college students graduate from college in four years. Further, the majority of colleges and universities in the United States now possess four-year graduation rates below 60%..." (Trivette, 2022).

These results are the first in the research literature to indicate international undergraduates' equivalent or better (rather than worse) graduation outcomes during onset of the COVID-19 pandemic. They provide additional evidence of international student success (e.g., Fass-Holmes, 2016, 2021, 2022) and contrast with numerous recent reports emphasizing international students' negative experiences during the pandemic's onset (Alaklabi et al., 2021; Aucejo et al., 2020; Firang, 2020). This is not an interpretation that the pandemic's disruptions (which were neither an educational intervention nor an experimental manipulation in the present study) caused or were responsible for the class of 2020's positive graduation outcomes; only that these outcomes happened during disruptions accompanying the pandemic's onset (Liu, 2021).

The observed positive graduation outcomes extend recent evidence (Fass-Holmes, 2021, 2022) that the university's international undergraduates generally succeeded academically in SP20 despite the pandemic's educational disruptions (Bardill Moscaritolo et al., 2022; Hou & Wang, 2021; Liu, 2021), mental health symptoms (Aucejo et al., 2020; Bardill Moscaritolo et al., 2022; Zhang & Sustarsic, 2022), rising xenophobia (Hou & Wang, 2021; J. J. Lee, 2020), and stressors (English et al., 2022; Fass-Holmes, 2022). These students' positive graduation outcomes might be indicative of their resilience (ability to recover from and adapt to adversities and stress [Robbins et al., 2018]), immigrant advantage (Feliciano & Lanuza, 2016), focus on degree completion (i.e., spent more time studying while sheltered in place [Aucejo et al., 2020]), adaptation to online instruction (Blankstein et al., 2020), and/or benefit from enhanced institutional support (Fass-Holmes, 2022). Further research will be necessary to better understand exactly what factor(s) contributed to these students' successes.

Alternative possible explanations for these counterintuitive results that merit discussion are not supported by circumstantial evidence. They include increased cheating, grade inflation, and/or instructors' sympathetic grading specifically for international students (Fass-Holmes, 2017, 2022) during SP20 compared to SP19. These other explanations would require unreasonable stretching to compellingly account for the present results. For example, faculty and teaching assistants (TAs) would have needed to utilize ineffective and/or insufficient safeguards against cheating (contrary to established policies) to produce the present results' patterns. They also would have needed to expend time and effort determining which students were international, then inflate or sympathetically assign grades accordingly to produce the present findings. These explanations additionally seem improbable because faculty and TAs also had to cope with the pandemic's onset. Although further research would be necessary to conclusively rule out these alternative explanations,

they should be recognized as trivializing these students' successful academic and graduation outcomes during the pandemic's educational disruptions.

Another potential explanation for the present results is that they should be summarily dismissed because the university's international undergraduates were incapable of demonstrating positive graduation outcomes regardless of when they would have been expected to graduate. This negative explanation is based upon the racist idea and casteist assumption that these students, especially Chinese ones who constituted two-thirds of the university's international undergraduate population, were linguistically inferior and consequently could not have shown positive educational outcomes. Their presumed inferiority would be attributed to collective English weaknesses (Zhang-Wu, 2018, 2021). The present findings debunk, rather than support, this negative explanation. If the racist idea and casteist assumption of linguistic inferiority were advocated by a postsecondary institution's administrators, faculty, and/or staff, or by education researchers (such as generalizing international students' "lack of daily communication skills" [Jin & Schneider, 2019, p. 91] and/or referring to them as "cash cows" [Cantwell, 2015]), they would risk stigmatizing and/or alienating their institution's international students (Viladrich, 2021) which could jeopardize the institution's reputation among future international student applicants. American postsecondary institutions instead should identify existing practices and/or policies that produce inequities (e.g., unwelcoming campus climate; financial hardships; lost employment opportunities) for international students and replace them with ones that produce equity (Buckner et al., 2021).

Limitations

One limitation of the present study is its basis upon a single university. As such, the study's findings might not be representative of or generalizable to international undergraduates who were eligible to graduate from other American universities in SP20. Although resolution of this limitation would require replication studies at other institutions, the present results at the very least are consistent with recent findings from the same university showing international undergraduates' SP20 academic successes (Fass-Holmes, 2021, 2022).

Another limitation is that the present study was not designed to conclusively determine what caused the pandemic class of 2020 to show equivalent or better graduation outcomes (rather than poorer ones) compared to the pre-pandemic comparison class of 2019, or what factors limited the magnitude of the observed differences between the two classes. The study instead was expected to provide evidence that the former would show poorer outcomes, consistent with the literature's evidence of international students' negative experiences during the pandemic's onset (Alaklabi et al., 2021; Aucejo et al., 2020; English et al., 2022; Firang, 2020; Martirosyan et al., 2022). Further research with appropriate controls will be necessary to determine what specific disruptions and/or stressors individual students experienced, and how they responded to them.

Lastly, the university's international undergraduate class of 2020 had only one term remaining to graduate, and one term potentially was insufficient for these students to experience a detectable negative impact of the pandemic's disruptions, mental health symptoms, racism/casteism, and/or preexisting stressors on their graduation outcomes. This limitation should be recognized as speculation. The research literature currently does not include any a priori grounds or theory that would predict or hypothesize a "dose-response" curve relating the duration of exposure to the pandemic's educational disruptions,

mental health symptoms, racism/casteism, and/or preexisting stressors versus the magnitude of international undergraduates' graduation outcomes (with all other variables held constant).

Conclusion

This report contributes the research literature's first evidence of, and acknowledges, international undergraduates' positive graduation outcomes during the educational disruptions, mental health symptoms, rising xenophobia, and stressors accompanying the COVID-19 pandemic's onset. The present unexpected results disconfirm the prediction that the university's international undergraduate class of 2020 should have had poorer outcomes in SP20 than the pre-pandemic comparison class of 2019 would have had in SP19. Additionally, they debunk the racist idea and casteist assumption that these students (regardless of their expected graduation term) should have had poor outcomes associated with their presumed linguistic inferiority (cf. Zhang-Wu, 2021). The observed positive graduation outcomes could be indicative of these students' resilience (Robbins et al., 2018) and/or benefit from enhanced institutional support (Fass-Holmes, 2022; Tokify pinboard, 2020). The implications of this study are that educators and education researchers should 1) not infer from the extant literature that international students had *only* negative experiences during the pandemic's onset, 2) not generalize from some international students who have had verified negative outcomes/experiences during the pandemic to *all* international students, and 3) dismantle existing inequitable policies or practices that are defended by racist ideas or casteist assumptions attributing those outcomes/experiences to the students' presumed inferiority.

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