# Analysis of Bias in International Education from the Perspective of Intersectionality Theory

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Abstract: International students encounter more psychological, structural, and social challenges that negatively affect their mental health, academic engagement, and college readiness. Collectively, these challenges have a crucially negative effect on their academic achievement. To be specific, previous researchers often attribute international students' lower academic performance to experiences of sexism or racism alone. However, intersectionality theory suggests that harmful stereotypes can compound and lead to heightened discrimination; for instance, black female students experience significantly more discrimination than white male students, thereby considerably limiting their opportunities to achieve excellent academic success and engage in university social activities. Thus, by reviewing previous findings, the current study argues that the multiple disadvantaged identities of international students compound to negatively affect their academic performance, particularly when they have intersections of both underprivileged gender and race. The current study highlights the critical role of intersectional identities in international students' differential vulnerability, making them more vulnerable to intersectional biases than native students. Furthermore, the up-todate intervention proposed to promote education equity for international students is discussed. Fortunately, numerous classroom designs attempt to engage international students in classroom education and are deployed to satisfy international students' diverse needs, the most sophisticated of which is the flipped classroom.

*Keywords:* Intersectionality, Education equity, International students, Flipped classroom, Academic achievement.

#### 1. Introduction

Globalization has made international education increasingly popular. Students can have better opportunities to pursue their academic goals while studying abroad, particularly those from disadvantaged countries with insufficient educational resources. However, it is notable that international students face more challenges than native students, such as language barriers and discrimination, which directly predict lower academic achievement, academic engagement, and college readiness [1]. Even though there is much excellent research done in this field, the design of focusing on the single facet, either gender or race, of stereotypes related to this problem reveals a limitedly generalizable nature of inequity. Researchers usually concentrate on students' single identities, such as gender or race alone, and overlooking the others [2-4]. Unfortunately, those outstanding biases do not occur on a single-axis basis. Instead, discrimination, particularly the

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intersectionality of gender and race, often operates in an additive manner, compounding one another and resulting in more vulnerability [5-8]. For instance, people typically assert that females encounter more challenges than males, and people of color face more difficulties than white individuals. In this sense, females of color are the subject to be most frequently discriminated against. Additionally, the paradigm of "differential vulnerability" sheds light on the fact that students have varying susceptibility to overcome stresses [3, 5-6]. In this background, international students who depart from their home countries to pursue their studies abroad are particularly susceptible to overcoming discriminatory practices and bias. Given that international students typically hold multiple identities, their susceptibility to confronting intersectional biases is significantly reduced. That is, they are supposed to be the comparably vulnerable victims of the intersectional biases. However, this population does not attract much attention from researchers. Thus, the main objective of this paper is to analyze the barriers and biases that hinder the academic performance of international students from the perspective of intersectionality theory. The plausibility of applying the flipped classroom technique to promote educational equity for international students is also discussed [9-10].

# 2. The Rise of Biases from the Perspective of Social Identity Theory

Even though Darwin's idea of natural selection posits that humans evolve collectively as a species, Henri Tajfel and John Turner introduced Social Identity Theory in 1979 to elucidate the origins of discrimination. They argued that human drive to maintain a positive self-concept, seek affection, and experience a sense of belonging compels individuals to actively engage in identifying themselves in social groups [11]. In this context, people naturally gravitate towards others who share common characteristics. Some group affiliations, such as those related to family or culture, are voluntary, as individuals do not choose their familial or cultural backgrounds. Conversely, some social identities, such as friendship or club memberships, are voluntarily chosen. Interestingly, humans appears to possess an innate ability to categorize themselves and others without explicit instruction. This process is akin to in infants, who are biologically predisposed to bond with their caregivers (i.e. mothers) through behaviors such as smiling. As infants engage in reciprocal interactions with their mothers, they learn to build an attachments, leading to an "initial social categorization" that distinguishes between family and strangers [12]. This early categorization lays the groundwork for a broader conceptualization of people in our group ("us") versus people in other groups ("them"). Individuals with strong group identification often engage in social comparison, focusing on group-level distinctions while neglecting their shared humanity [11]. This tendency can engender both favorable and unfavorable impressions of out-group members, which are referred to as "stereotypes." Positive stereotypes may promote inter-group relations, whereas negative stereotypes can foster hostility toward specific groups [11].

Such stereotypes could be erroneously generalized to all members of out-groups due to a cognitive bias known as "out-group homogeneity," which assumes that the members of other groups are perceived as more similar than they actually are. This inherent bias in social comparison cultivates a dichotomy between us and them, a distinction that has significant implications. A notable study illustrating this phenomenon involved participants from either Rutgers or Princeton University who viewed a video of a male student making a decision. When informed that the male was either a Rutgers or a Princeton student—given the historical rivalry between the two—participants were more likely to assume that a student student from the rival university would make a similar choice, exemplifying the concept of "out-group homogeneity" [13]. This finding indicates that the presence of negative stereotypes can result in harsh discrimination against individuals based solely on their identities such as ethnicity, gender, race, and ability. When educators succumb to out-group homogeneity and stereotype students, they jeopardize educational equity and reinforce biases. This issue is particularly pronounced for international students, who often face homogenization as a

monolithic group. Their multiple identities are often overlooked; instead, they are categorized as a whole population. This oversight can lead to discrimination among these students, predicting adverse academic outcomes. To promote educational equity, it is incumbent upon educators and policymakers to mitigate the detrimental effects of such stereotypes. The following section further explores negative impacts of these biases on international students.

#### 3. Intersectional Biases in Education

#### 3.1. Gender Bias

Women are not inferior nor less capable in their pursuit of academia; in fact, they often excel in academic achievement. Contrary to prevailing beliefs, the impact of gender on academic performance is minimal. Many studies indicate that female students outperform their male counterparts, driven by a labour market that values academic achievement more for females than for males, thereby motivating greater effort among female students [2]. However, a historical context of gender suppression in educational rights has long marginalized women's access to education. Historically, there was a widespread belief that women did not require formal education, which underscores the persistence of gender bias in educational settings. Paradoxically, in western societies, gender bias in education tends to receive less attention than racial bias. This could be attributed to the successful gender revolution in these regions, where education—particularly higher education—promotes more liberal values and equity. Nonetheless, this does not imply that gender biases have been eradicated globally. In many developing countries, pro-male biases continue to obstruct girls' educational opportunities. For instance, studies conducted in India reveal that many families in the country still have a strong preference for sons. Daughters have a lower likelihood of completing secondary education, and factors such as mothers' educational level, employment during adolescence, and early reading skills predict daughters' likelihood of completing secondary education [14]. Similarly, research in Paraguay reveals a troubling pro-male bias in education that, while prevalent, remains unrepresented in available data, indicating that quantitative measures may fail to capture the full extent of this issue [15]. The perception that gender bias has been eliminated in education may be illusory. Gender bias remains a significant issue, particularly in developing countries, underscoring the urgent need for advocacy on behalf of women.

#### 3.2. Racism and Its Silent Nature in Modern Society

In recent decades, racism has become a popular topic. It is defined as inappropriate or hostile behaviors or perceptions toward a group of people based on their racial identities. In response to the discrimination faced by the BIPOC population (Blacks, Indigenous people, and People of Colour), governments and educational institutions have implemented a range of policies aimed at establishing racially-based laws [16]. While these measures have effectively reduced explicit discrimination and form inclusive social norms, contemporary racism has evolved into more implicit and even unconscious forms. Individuals may harbor racist perspectives without conscious awareness, rendering these subtle manifestations of discrimination particularly detrimental and challenging to control [17]. Some researchers have termed this phenomenon "silent racism," highlighting its pervasive yet understated nature in modern society [3]. The silent racism can intersect with other forms of biases and cause overwhelmingly crucial harms to the underprivileged people. Within educational environments, racial inequity severely impacts minority students, who often experience marginalization and isolation in the classroom—key indicators of silent racism. Such experiences correlate with lower levels of academic engagement, mental health challenges, and diminished academic performance. This negative effect have been especially salient during the pandemic. Those ethnic minority students have less chance to interact with others outside of the family because there is an overall reduction in face-to-face interactions [4]. This phenomenon validates the differential vulnerability paradigm, which postulated that individuals possess different levels of susceptibility to deal with stressful events. Specifically, students of color have reported experiencing more adverse effects than their white peers during the pandemic [3].

## 3.3. Intersectionality of Gender, Racism and International Students

According to Crenshaw's intersectionality theory, either gender or racial biases are never a singledimensional problem. Instead, they compound to create heightened discrimination against individuals with multiple underprivileged identities, such as black females [7]. Intersectionality is not a mutually exclusive framework for understanding gender and race; it also encompasses various disadvantaged identities, including social status, nationality, and disabilities, which can intersect to generate more severe forms of discrimination [8]. However, this paper will primarily focus on the intersectionality of gender and race, as these are the most prominent forms of discrimination affecting international students. The theory of intersectionality derived from cases exemplifying these two biases. A notable legal case, DeGraffenreid v. General Motors, illustrates this issue. The company's policies severely and only violated the rights of black women, leading to the termination of only black female employees in 1970. When five black females sued the company, the court asked them to demonstrate they had encountered either sex discrimination or racial discrimination and rejected accepting the combination of both. Paradoxically, the company did not terminate all black individuals or all females, which resulted in the black females' case failing [18]. Undoubtedly, there was discrimination against black females, but the laws of that era did not address the intersection of sexism and racism. This case sparked Crenshaw's ideas and broadened the scope of discrimination beyond a single dimension. Subsequent research employing a mixed-methods approach, which included both quantitative and qualitative data, asked participants to recount stories about their grandparents from a first-person perspective. The study revealed that the intersectionality of minority race and underprivileged gender increases an individual's vulnerability to life stress events [5]. Based on Crenshaw's intersectionality theory and differential vulnerability paradigm, this paper argues that international students possess identities that extend beyond race or culture. Racism directed at specific groups or cultures cannot adequately account for the challenges faced by international students compared to their domestic counterparts. In other words, international students are a unique population that possesses a collective identity. Specifically, a recent study in the USA found that international students report a lower level of college readiness and education engagement compared to domestic students and students speaking English as their home language. These factors are strongly correlated with academic achievement [1]. This finding suggests that international students are more likely to struggle with schoolwork or classroom activities when studying abroad.

Despite the significance of these issues, few studies examine the intersectional identities of international students in relation to their domestic counterparts. Most research tends to focus on differences among international students themselves. For example, one study found that female Korean international students exhibited a higher level of adjustment to the new environment than their male counterpart [19]. Future research is needed to explore the inequities that international students face regarding the intersectionality of multiple identities.

### 4. The Role of Flipped Classroom in International Education

# 4.1. Advancements in Flipped Classroom Models and Their Impact on Education Equity

Fortunately, educators makes numerous efforts to eliminate inequality, despite numerous biases. Educators have designed the most prominent classroom practice, known as the flipped classroom.

The theoretical foundation of this design primarily lands in self-determination theory, which suggests that students' learning potential increases with intrinsic motivation (enjoying learning). When students have a high level of autonomy, relatedness, and competence (being somewhat competent in the learning), their intrinsic motivation can be activated. The flipped classroom aims to maximize those qualities for students by providing a more engaging, collaborative, and autonomous classroom. To be specific, it replaces the traditional teaching pattern, where teachers output knowledge and students passively absorb it in the classroom with in-class discussions and activities. Students acquire knowledge before the classes via online resources or recorded lectures and apply it in the classroom, which allows them to learn autonomously. The role of teachers is to guide students' learning processes and answer students' questions. This teaching approach optimally makes use of out-of-classroom and in-classroom time to give students the maximum freedom to learn knowledge [9]. Additionally, a flipped classroom can enhance educational equity. In a quasi-experimental study that implemented the flipped classroom with 33 undergraduate students, researchers found that participants perceived greater equity in the flipped classroom than those in the traditional classroom. In this case, the collaborative classroom discussions with classmates and instructors may significantly enhance equity by fostering inter-group contacts. Students may not only discuss with the instructors in the classroom but also out-of-classroom via digital platforms [20]. It suggests that the flipped classroom is a feasible practice to promote educational equity.

# 4.2. Limitations and Revisions of Flipped Classroom in International Education

As the construct of a flipped classroom tends to be student-driven and based on verbal communication, international students may find it challenging to fit in the classroom due to their relatively low English proficiency. Their language barriers are exacerbated in the flipped classroom because they are supposed to be actively engaged in interactions with classmates and instructors. In this sense, the effect of a flipped classroom on international students is limited and even counterproductive. Therefore, it is necessary to adapt the flipped classroom to account for the language influence of international students. By interviewing with undergraduate international students in Australia, Singh et al. provide suggestions for a revised version of the flipped classroom. There are three main ways to reduce the effect of low language fluency. First, instructors can offer shorter online lectures and reading materials. Second, the flipped classroom approach should not completely remove the instructors from the classroom and switch to solely online lectures, given that many international students, especially Chinese students, are more accustomed to face-to-face instruction. Lastly, the first students usually find it hard to register and navigate the online platforms, so instructors should offer instructions to help students access the online resources [10].

#### 5. Conclusion

This paper reviews the recent theories and research on the formation of bias. From a social identity perspective, biases are caused by shaping the abstract categorization of groups. This leads to a social comparison between "us" and "them," which in turn creates a misconception of out-group homogeneity. Besides, the impact of intersectional bias of sexism and racism in education is discussed, revealing the problems from the perspective of both educators and students. These findings confirm the widely recognized thought that bias, regardless of its origins in gender, race, or intersectionality, negatively impacts students' academic performance. Particularly, by focusing on the international student, it is found that this group of students faces more challenges than the domestic students at university due to higher psychological vulnerability, a lack of proficient language skills, and lower academic engagement. This educational inequity cannot be solely explained by racism or sexism because international students possess a collective identity. Additionally, the flipped classroom is

also discussed. Its flexible and autonomous classroom designs are tested by previous studies that can promote educational equity. However, researchers should also consider the potential counterproductive impact of the flipped classroom on international students. Teachers can modify it to meet the diverse needs of international students, taking into account their relatively low language proficiency, unfamiliarity with technology, and preference for an in-person classroom. Even though this paper primarily focuses on the intersectionality of gender and race, it does not mean that intersectionality only comprises these two forms of discrimination. Future studies can focus more on investigating the other intersectional identities of international students, given their relatively low susceptibility to overcome biases.

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