

**What Are We Talking About When We Talk About Holistic Review?  
Selective College Admissions and Its Effects on Low-SES Students**

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## **What Are We Talking About When We Talk About Holistic Review? Selective College Admissions and Its Effects on Low-SES Students**

### **Abstract**

This mixed method study uses open-response survey data, focus groups, and an experimental simulation to explore how 311 admissions officers define and use concepts of holistic review in selective college admissions. We find that three distinct definitions of holistic review predominate in the field: whole file, whole person, and whole context. We explore these concepts qualitatively and use the coded data to predict decision making in an experimental simulation. We find that admissions officers with a “whole context” view of holistic review are disproportionately likely to admit a low-SES applicant in our simulation. Inconsistent definitions of a core admissions concept make it more difficult for the public to comprehend the “black box” of college admissions, and a more consistently contextualized view of holistic review may also have real-world implications for the representation of low-income students at selective colleges.

Today, competition for admission to selective college and universities is more intense than ever before. At many higher education institutions in the United States, the number of college applications submitted has increased annually for the past 15 years. The documented growth in applications is due in part to increases in the number of high school graduates—which peaked with the 2012 graduating class—but also to greater numbers of applications submitted per student (Snyder & Dillow, 2015). Over 80% of first-year students applied to three or more colleges in 2013, an increase of nearly 20% since 1993; nearly one-third of students submitted seven or more applications in the same year (Clinedinst, Koranteng, & Nicola, 2016).

This increased competition has negative consequences for both low-income students (Bastedo & Jaquette, 2011) and students of color (Posselt et al., 2012), as students from underserved high schools have fewer resources to compete in a winner-take-all admissions system. Low-income students have less access to the advanced course taking opportunities, such as Advanced Placement or International Baccalaureate, that are crucial for selective college admission, as compared to their more affluent peers (Rodriguez & McGuire, forthcoming). Outstanding performance in extracurricular activities often requires access to financial resources and a lack of competing work or family obligations, often placing low-income students at a disadvantage (Weininger, Laurau, & Conley, 2013). Finally, higher-income students have massive advantages in the quality of information, counseling and advising they receive on the nuances of elite college admissions practices (Weis, Cipollone, & Jenkins, 2014).

As admissions competition to selective institutions intensifies, students are increasingly concerned about the evaluations their applications will receive in the admissions process. To the average student, the selective admissions process seems opaque at best and at worst, fraught with mistrust, subjectivity, and special interests (Killgore, 2009), and this is particularly true for low-

income students (Holland, 2014; McDonough, 1998). What also seems clear is that admissions offices lack a consistent definition of what is meant by the holistic review, and the academic literature has yet to engage the question of how these definitions seem to vary across the field.

Although strong quantitative evidence points to factors in the aggregate that predict acceptance to elite colleges and universities, relatively little is known about the processes that institutions enact to develop selection criteria and review prospective students' application materials. Very few studies have examined actual admissions policies, defined as the criteria that govern decisions of inclusion and exclusion, the procedures for assessing applications, and the practices of the office of admissions. Although it is well established that admissions policies at many institutions are not focused exclusively on academic achievement (e.g., Stevens, 2007), the gatekeeping processes that drive admissions decisions at college and universities remain unclear.

Many selective institutions report using holistic review in their admissions processes (Espinosa, Gaertner, & Orfield, 2015) or its primary attributes (Clinedinst, Koranteng, & Nicola, 2016). Nevertheless, holistic review seems to vary greatly from institution to institution, and definitions of holistic review are often vague (College Board, 2002). Elite colleges often assert their concern with the merit of the whole person, which includes both academic and nonacademic characteristics (Killgore, 2009). Academic accomplishments, such as standardized test scores and high school GPA, are weighed against other dimensions like character, leadership experience, athletic talent, community involvement, and school and family context. Each element may receive more or less emphasis in admissions decisions, depending on institutional priorities related to enrollment targets, prestige, and tuition revenue. While admissions officers

have fairly precise information from transcripts and standardized tests, they have comparatively weak information on high school contexts (Bastedo & Bowman, 2017; Gaertner & Hart, 2013).

This dearth of empirical research on admissions decision-making processes at selective institutions requires an examination of the black box of admissions to better understand the often-opaque policies underlying admissions practices at selective institutions. This study extends the work of existing research on admissions by exploring holistic admissions practices at selective colleges and universities. In particular, we examine 1) how admissions officers define holistic admissions, and 2) whether these definitions influence decision outcomes when evaluating applicants' files.

In this study, we use a mixed method approach to examine how admissions counselors conceptualize holistic review. Using survey data of 311 admissions officers at 174 selective colleges and universities, in addition to focus groups with 15 of these officers, we find that admissions officers offer a broad range of definitions when asked to describe the meaning of holistic admissions. We use this data to produce a grounded typology of holistic review. We then conducted a randomized-controlled experimental simulation and explored whether providing high-quality information on applicants' high school contexts increases the likelihood of admitting low-SES applicants, when taking into account how respondents operationalize the concept of holistic admissions. In a high-information condition, admissions officers who espoused a definition of holistic admissions emphasizing educational and family contexts were significantly more likely to admit a low-income applicant from an underserved high school.

### **Holistic Review in Selective Admissions**

Holistic review is both a very new and very old idea in college admissions. While the idea of individualized review is often lauded today, it is rooted in religious and ethnic

discrimination. When higher education institutions were first established in the seventeenth and eighteenth centuries, students were admitted almost exclusively on the basis of academic criteria, including the ability to read and write in classical languages (Broome, 1908). As greater numbers of students sought a college education in the decades preceding World War II, the most elite institutions – Harvard, Yale, and Princeton – became increasingly troubled with influxes of Jewish students who often had strong academic profiles but who they believed did not have the kind of “character” or “personality” that they wanted to cultivate (Karabel, 2005; Synott, 1978; Wechsler, 1977). This blatant anti-Semitism led selective institutions to devise new admissions requirements that also encompassed non-academic criteria such as character, personality, and leadership (Stampnitzky, 2006). These new policies, referred to as the “whole man” standard, provided increased discretion to admit applicants on the basis of highly subjective measures that strongly favored affluent, masculine, white Protestant men.

After World War II, the concept of merit was again redefined in selective admissions. With the advent of college entrance exams in the 1950s, colleges and universities gradually adopted standardized tests as a component of their admissions standards. Early advocates of college entrance exams (e.g., SAT and ACT) viewed these tests as a more fair and equitable assessment of applicants, as they seemed to provide objective measures that mitigated subjective preferences in college admissions (Lemann, 2005). This new meritocratic system promised to sort students into higher education on the basis of academic potential rather than social status (Jencks & Riesman, 1968). At the most elite colleges, these ideas of character, personality, leadership were combined with the use of high school grades and standardized test scores and later institutionalized into the form of college admissions practices seen today. This form of

review greatly served the needs of these colleges to continue relationships with wealthy white communities – and their feeder schools – that were essential to their survival (Karabel, 2005).

The move toward holistic review was reinforced by legal developments. Although *Bakke v. University of California* (1978) is most often today noted for the establishment of the diversity rationale for race-conscious admissions, Justice Potter rooted his decision in his admiration for Harvard's process of individualized review. "So long as the university proceeds on an individualized, case-by-case basis," Justice Potter said, "there is no warrant for judicial interference in the academic process" (*Bakke v. University of California*, 1978, footnote 59). Public institutions were thus strongly incentivized to move away from formula-driven practices to accommodate legal demands with respect to race-conscious admissions (Hirschman, Berrey, & Rose-Greenland, 2016; Stulberg & Chen, 2014).

The concept of holistic review crystallized in response to criticism of the increased reliance on standardized test scores. In 2001, University of California President Richard Atkinson called for the abolition of the use of the SAT in undergraduate admissions, arguing that test-preparation hysteria was "compromising our educational system" (Atkinson, 2001, p. 2) and gave unfair advantage to affluent students who could afford expensive tutoring services. "In many ways, we are caught up in the educational equivalent of a nuclear arms race... We know that this overemphasis on test scores hurts all involved, especially students. But we also know that anyone or any institution opting out of the competition does so at considerable risk" (p. 3).

To combat the academic arms race, Atkinson proposed a more comprehensive evaluation process that included high school quality and home environment as admissions criteria to assure "a student who has made exceptional progress in troubled circumstances [is] given special attention" (Atkinson, 2001, p. 6). These ideas became especially relevant after the passage of

SP-1 and Proposition 209 in California, which prohibited race-conscious admissions. Although many alternatives were ultimately tried at UC, holistic review in context – known at UC as comprehensive review – was both legally viable (Contreras, 2005; Pusser, 2001) and produced the greatest degree of racial diversity (Traub, 1999). Atkinson promoted comprehensive review as a means to eliminate the SAT – he loathed the word “holistic,” inserted in his speech by an unidentified young staffer – but ultimately the word stuck (Atkinson, 2005). The College Board, meanwhile, accommodated Atkinson’s criticisms in its revision of “the new SAT,” and ultimately the University of California never eliminated its SAT I requirement.

The use of the phrases “holistic review” or “holistic admissions” were surprisingly uncommon until fairly recently. It is not used in major histories of college admissions (e.g., Karabel, Synott, Wechsler) or in College Board reports presenting “best practices” in admissions (e.g., College Board, 2002; 2011). In early newspaper articles, the word “holistic” was generally used with distancing quotation marks, as if the word was both largely unknown and vaguely disreputable. The word is never used in *Gratz v. Bollinger* (2003), either in the decision or the University of Michigan brief, but the Court in *Grutter v. Bollinger* (2003) famously valorizes the law school’s “highly individualized, holistic review” (p. 4). The Court thus echoes the *Bakke* (1978) decision in arguing that “truly individualized consideration demands that race be used in “a flexible, nonmechanical way” (p. 22). This argument is embraced in *Fisher v. University of Texas* (2016), where Justice Kennedy uses the word “holistic” no less than 19 times. A more holistic review of applicants, the argument goes, will be legally viable and reduce inequalities in college access; yet there remains little consensus among college admissions officers about what holistic review should entail and how it should be enacted.

## Research Design and Qualitative Methods

This study draws upon a randomized controlled trial, open-response survey data, and focus groups to explore how holistic admissions is operationalized by practitioners in the admissions field and whether these definitions affect admissions decision making. Our research strategy embraces a mixed method design (Greene, 2007; Johnson & Onwegbuzie, 2004) where the collection of qualitative survey and focus group data informed the creation of a conceptual typology to better understand holistic review. This typology was then used in the analysis of experimental data collected from the same group. We thus seek to yield the benefits of creating a dialogue between grounded theory driven data collection – with concepts defined by the informants themselves – and the causal inference that may be drawn from a randomized-controlled trial.

### Participants and Analysis

*Open-ended survey responses.* Survey participants were 311 admissions officers working at 174 different U.S. colleges or universities within the top three tiers of Barron's (2013). Barron's *Profile of American Colleges* is frequently used in higher education research to capture college selectivity levels, as it ranks four-year schools into a six-tiered hierarchy of competitiveness based on high school class rank, high school grades, standardized test scores of the incoming class, and the institution's selectivity rate. In 2013, there were 397 colleges and universities categorized in the top three tiers of Barron's Admissions Competitiveness Index. Survey participants therefore represented 44% of institutions in these Barron's categories.

Participants were recruited from attendees of the 2014 annual meeting of National Association of College Admissions Counseling (NACAC); we limited invitations to those who worked at a selective college or university and whose job title implied that they would regularly

review applications (e.g., directors of enrollment management at large institutions, whose responsibilities generally involve managing other employees and working with university administrators, were not invited). Among conference attendees, 1017 admissions officers met the criteria for participation in our study and thus received invitations to participate in the experiment and subsequent survey. Admissions officers received \$50 for their participation. Of the 311 participants (31% response rate), 57% were female, 77% were White/Caucasian, 10% were Black/African American, 9% were Latino/Hispanic/Chicano, 6% were Asian American/Pacific Islander, 1% were American Indian/Alaska Native, and 2% were from other racial/ethnic groups (these racial/ethnic figures add up to slightly more than 100%, as participants were allowed to choose multiple categories). Because census data on admissions officer characteristics is not collected on a national level, it is unclear to what extent these participants are representative of college admissions officers at universities in the U.S. or within selective college admissions more specifically.

After the conclusion of the survey gathering process, the open-ended survey responses were open coded to develop emerging themes from the data, utilizing insights from grounded theory (Charmaz, 2014; Strauss & Corbin, 2014; Suddaby, 2006). Particular focus was paid to response to our first question, “What does holistic admissions mean to you?” After open coding all of the responses, anchoring concepts (or axial codes) were developed that organized the responses into a three-part typology (whole file, whole person, whole context). Data were further coded to examine rival definitions and schema that did not fit neatly into our emerging typology (institutional fit, contribution to community, demonstrated interest).

*Focus groups.* Although we found our initial framing of the data compelling, we sought to use focus group interviews to allow us to interact with informants and explore our emerging

ideas in greater depth. Drawing upon a subset of the 311 survey participants, we recruited 15 participants in three focus groups to delve further into the survey findings (Morgan, 1997). Specifically, we sent recruitment e-mails to all 311 survey participants, drawing a convenience sample of 15 admissions representatives from 15 different colleges and universities in the top three Barron's tiers. In our recruitment materials, we emphasized that participation was entirely voluntary, and participants' name and institution would not be linked to their responses.

We sought to triangulate our survey findings through additional data collection (e.g., focus group data and experimental data), multiple methodologies, and multiple researchers examining the same data (Mathison, 1988). Participants received an additional \$50 gift card for their participation in the focus groups. Like the survey, each of the participants was an admissions officer at a selective college who reads applications during the reading season. The participants were generally deans of admission and associate deans of admissions, or their equivalent. Each focus group interview was led by a member of the research team paired with a partner who took notes and managed logistics. The interview protocol sought to delve more deeply into their beliefs about holistic review, and the role of various key components in a holistic process (e.g., test scores, non-cognitive factors, personal qualities, institutional fit).

In each focus group, participants spoke at length about their admissions review processes, often engaging one another with questions about different office policies and procedures. Participants seemed at ease and even eager to discuss the topic of holistic review, with discussions often exceeding the scheduled 60 minutes. Two researchers separately coded the focus group data, looked for consistencies and inconsistencies with our emerging typology, and asked questions to specifically engage alternative logics, discrepant evidence, and plausible rival explanations and frameworks of holistic review. Thus, we sought to fully explore both our own

emerging ideas, rival explanations, and negative cases presented in the data (e.g., Lincoln & Guba, 1995; Marshall & Rossman, 2014; Maxwell, 2004).

### **Qualitative Findings**

Nearly 95% of respondents in our survey stated that they use holistic admissions in their admissions decision-making process. However, we found a wide variety of definitions of holistic review among our informants. Coding the 311 responses to this question revealed several themes with respect to how admissions officers evaluated prospective applicants. These themes resulted in a typology of holistic admissions consisting of the following categories: “whole file,” “whole person,” and “whole context.” A small number of responses (2%) were categorized as “not holistic.” Table 1 provides data supporting each category of the typology, as well as the percentage of responses that fall within each category by selectivity tier. Based on the survey results, we convened three focus groups with admissions officers to gain further clarification about the typology. Both the survey and focus group data suggest differences in the manner in which various admissions officers operationalize the concept of holistic admissions.

[insert Table 1 about here]

### **A Typology of Holistic Admissions Practices**

#### **Whole File**

Admissions officers practicing holistic review as “whole file” emphasized the importance of reading all parts of the application. Although this is rarely how holistic review is portrayed in the media, half of survey responses fell under this whole file category, and category was most evident among less selective institutions in our sample. “Every component of the application process is considered,” one admissions officer explained. “Rec[ommendation] letters,

academics, extracurricular activities, etc. It is an all-encompassing process.” Admissions officers who conceptualize holistic review as whole file extend evaluative criteria beyond measurable academic achievements, such as grade point average and standardized test scores, to assure that all submitted application materials are considered when rendering admissions decisions. This is consistent with some statements about holistic review that talk about moving beyond formulas (College Board, 2002).

Admissions officers enacting whole file review assigned value to many areas in the application, but the ways in which non-academic factors were used was often vague or ambiguous. “Holistic admission means that we will evaluate all of the components of the application and not rely on any one component as the determining factor in our decision,” one admissions officer shared. “All aspects of the application from testing to transcript to extracurricular activities and the personal statement are important to our evaluation.” Another response added, “No one criteria supersedes the other criteria. Holistic admission means considering all parts of the application and weighing them together for a result.” As suggested by these statement, admissions officers who conceptualize holistic review as whole file tend to extend evaluative criteria beyond measurable academic achievements (e.g., GPA and standardized test scores) to assure all submitted application materials, including non-academic qualifications, are considered when rendering admissions decisions.

However, all aspects of the application are not necessarily weighed equally. As one focus group participant shared, “We can place emphasis on any piece of the applicant’s file. We can read the application and make subjective decisions. We view all aspects on the application, but the focus or emphasis can shift on each applicant.” These explanations illustrate how demonstrated achievement in one area, such as academics, does not guarantee admission, and

each piece of the application is considered in decision-making processes. As another participant shared, ““Holistic admission means that we will not rely on any one component as the determining factor in our decision.” Rather, all components of the application are concerned. However, these responses made no mention of how academic or family contexts might influence these value assignments, and it was often difficult to determine from these responses how admissions decision making was not simply arbitrary or idiosyncratic to individual cases.

### **Whole Person**

Admissions officers practicing holistic review as “whole person” valued treating the applicant as a unique individual, in addition to considering all elements of the file. About 20% of respondents described this type of review. Admissions officers who use whole person review seek to evaluate academic achievements in light of the applicant’s character, personality, or ability to contribute to the community in a unique way. “We value getting to know the whole person—beyond just grades and scores,” one officer said. “Our job is really to shape the class and if we are indeed committed to creating a diverse, interesting, and vibrant community, we must value the applicants as individuals.” A second admissions officer built upon this description: “Holistic [review] is not simply relying on academic performance, such as GPA and test scores, but rather considering the whole person. This includes such attributes as their involvement, leadership, background, and what potential benefits they will bring to our community.” A whole person review thus evaluates the applicant’s unique characteristics and achievements, but does not describe consideration of an applicant’s context or environment. This view is consistent with statements about holistic review that talk about moving beyond academic qualifications and assigning ratings to personal characteristics.

Whole person review also strives to humanize applicants. “We assess each part of the applicant--the heart and the mind,” one admissions officer said. Another said, “I would describe holistic review as getting to know the whole kid and their whole story...understanding when to rely on the humanity side of your head rather than the math side.” In addition to examining multiple layers of each applicant, admissions officers practicing whole person review often defended the use of subjective measures. “Holistic means looking beyond just the objective like test scores and GPA to really try to get to know the applicant as a student and as a person,” one officer said. “It means putting similar emphasis on academic record as additional supplemental materials like essays, resumes, etc.” A second officer further supported the use of subjective measures by explaining, “We are trying to get as detailed a picture of the student as possible, seeing them as a person rather than numbers and letters. Personality counts.” In adhering to these principles, officers practicing whole person reviews created three-dimensional portraits of applicants to understand their unique stories.

Whole person review was also emphasized at schools that considered the “fit” and contribution to community of the applicant. Our data revealed that 8% of respondents consider institutional fit—the perceived alignment of an applicant’s academic ability, extracurricular interests, and/or overall character with their institution—as part of holistic admissions. One officer shared:

I would say something that's important is reading holistically to determine if the student is going to really fit into the community and into the curriculum, into the way in which the coursework is taught and that they're going to be successful and have the ability to take advantage and grow within the curriculum and what the school has to offer.

Fit was seen as important not only for a student’s academic success, but also for their general happiness on campus. “The fit factor is probably the most important part of our application process,” one admissions officer said. “We try and divide out is who will really be

happy and successful at our particular type of institution....Who fits with the personality of campus?" These admissions officers tended to describe their campus as having its own unique personality or culture.

In addition to identifying ways in which applicants might "fit" with their campus, admissions officers were also concerned with how a student will engage in the community once they arrived. One officer expressed that campus involvement and student success go hand-in-hand: "There are studies that have shown that students who are involved in high school are going to get involved in college. They're going to attach to their university and they're going to do well and do better at their institution." A second officer similarly explained that contribution to the community is "vitaly important" because her institution is a small, residential campus that relies on student participation and involvement to build community. These admissions officers often rely on students' past behavior, in the form of high school involvement or leadership, to determine whether they will contribute to their campus communities. Yet, admissions officers practicing whole person review did not mention students' opportunities for involvement in high school (or lack thereof) or how students' high school or family context may influence these aspects of the application. These admissions officers also sought students who can make distinct contributions while benefiting from campus life. When evaluating an applicant, one admissions officer emphasized that it is important to ask, "Will the campus be improved by their presence?" Whole person review, then, went beyond all parts of an application file to include projections about how an applicant might perform academically or enhance the campus community based on their reading of the application, but stopped short of considering the context of students' educational opportunities.

## **Whole Context**

Admissions officers practicing holistic review as “whole context” considered all elements of the application and valued treating applicants as unique individuals, but placed those applicants in the context of the opportunities available in their family, neighborhood, or high school. Approximately 30% of survey respondents described holistic review this way, and this form of review was far more common at the most selective institutions in our sample. Such evaluations extend beyond comparisons among applicants to a more nuanced consideration of opportunities afforded each individual. Responses in the whole context category take into account academic opportunity in the high school, family background, ongoing hardships, extenuating circumstances, or other contextual factors. “We look at each student within his or her context,” one admissions officer said. “Our philosophy is that it is impossible to understand the achievements of a student without also understanding the various external influences - school setting, socioeconomic status, ethnic background, geographic background, and family background - that have contributed to his or her journey.”

Admissions officers who described whole context review often seemed knowledgeable about how differences in K-12 contexts – in wealth, college counseling, access to advanced courses, standardized test preparation, and many other factors – can perpetuate inequities in college admissions (e.g., Bastedo & Jaquette, 2011; McDonough, 1998; Park & Becks, 2015). While admissions officers who conceptualize holistic review as whole person considers influences of achievement at the individual level, those who espouse a whole context process transcend individual characteristics to consider environmental factors such as socioeconomic background, racial identity, and school and family context that have shaped a student’s academic and extracurricular achievements. These admissions officers contemplate how applicants

maximize available educational offerings and push themselves academically within their unique contexts (Bastedo, Howard, & Flaster, 2016). As one admissions officer explained, “We look at each applicant individually in terms of what their school offers and how they've challenged themselves in the environment available to them.” When making comparisons between applicants from different socioeconomic backgrounds, for instance, these officers recognize differences in high school contexts and availability of resources with making admissions decisions. A counselor illustrated this process by stating:

The thing that I think makes the difference in the read for me is looking at context, the context that the student came from and the context that they're achieving within. If they're in a low-socioeconomic family and a low-socioeconomic school and they're achieving at the highest level that we've seen from a student from that school, then likely they're going to adapt to their environment and succeed when they're provided opportunity.

Explicit consideration of school profile, resource availability, and family background in addition to individual attributes is a key differentiator between whole context and whole person review. Officers practicing whole context admissions often situated quantitative measures like standardized test scores within the broader educational environment. They not only recognized persistent gaps in the performance of different student sub-groups on the SAT, but also acknowledged how differential levels of resources might affect test scores. When evaluating test scores, an admissions officer explained that he considers whether “this is someone who has the time or the means to take a \$3,000 standardized test prep course” and if students “only have the option to take [the SAT] once or whether time and money” restricts their ability to take multiple college entrance exams. “For us, thinking holistically about test scores is really looking at the broader view of the student. What options are available to them both within their family and their area and their school?” Another counselor similarly explained, “We know that students have very different resources and very different options in terms of test preparation or lack thereof.

It's something that you again contextualize based on the background, school, and the family resources of the student when we try to understand what those test scores represent.”

Admissions officers who operationalized holistic review as whole context also acknowledged how differences in students' environments may affect the quality of the application.

What we look for in the application, especially for our low-income students or underrepresented students, are hints of what their lives might look like in ways that they weren't able to say within the application. So, how can we be better advocates of the students because they might not be able to advocate themselves, like the more polished students in a prep school who have known they are going to college since they were born and just have had a lot of help with that... So we look at what parents do, languages at home, classes taken, a lot of times that might even lead us to the websites of high schools, especially large public schools, to figure out what is it that we should know about this school that a student is not able to tell us.

This officer describes a process of “reading between the lines” to determine whether a student's access to resources and information may have influenced his or her application. Whereas students from well-resourced high schools or familial contexts may have received specialized support for developing their college applications (e.g., essay-writing assistance, test-prep services), others may have had little help or guidance. “Some kids are really savvy” about the college admissions process and have resources and guidance at their disposal to guide them through the process, as one admissions officer described her most well-resourced applicants.

They come from a high-performing public or independent school. They hire independent counselors. There are a whole lot of people on their team. Then there's that student who is working hard, really hard, and their parents have not gone to college or have only a little bit of college and they aren't aware of these ways and the little ins and outs that they need to do, so that's part of the decision-making process.

These officers recognized the “unequal playing field” that students face in their primary and secondary school careers and attempted to use contextualized review to account for these disparities in the admissions decision-making process.

Interestingly, we often found that even within individual institutions, there could be wide variation in the definitions of holistic admissions among admissions colleagues. For instance, we solicited responses from eight admissions representatives at one large, public university and found that half of the counselors described whole file review, whereas the other half described whole context review. “Holistic admission review requires that students are reviewed in the context of their high school and the opportunities available to them,” one of these admissions officers said. “Every piece of their lives that we have access to needs to be considered in order to assess their level of preparation, motivation, and potential for success.” However, one of their colleagues defined holistic admissions as “looking at all academic indicators as well as the personal characteristics and traits of the student.” Looking at our data within institutions, we suspect there is a great deal of variation among admissions officers in their use or disuse of whole context review.

## **Experimental Design**

### **Materials and Procedure**

The survey-response data were drawn from an experimental study on college admissions (see Bastedo & Bowman, 2017, for a full description). Although the experiment randomly assigned participants to conditions that were unrelated to holistic review, the availability of both data sources within the same study makes it possible to consider how the type of holistic review may interact with attributes of the admissions file. Admissions officers (n=311) were asked to review three simulated admissions files and to use the same standards that they would use when reading files at their own institution. Participants were presented simulated admissions files for three male applicants. Each application contained information about the applicant’s high school, academic qualifications, extracurricular activities, and personal statement. One applicant had

strong academic credentials and attended an upper-middle-class high school. Another applicant attended an upper-middle-class high school, but his grades, coursework, and standardized test scores were all lower than the first applicant. A third applicant received good grades and took the most difficult courses offered at the lower-SES high school that he attended, but his courses were less advanced, and his standardized test scores were lower than those of the first applicant. Grades, coursework, and test scores were adjusted across selectivity tiers to simulate applicants at the margin of admission. To avoid confounding effects, the race, ethnicity, gender, college, and major were identical across applications.

Participants were randomly assigned to have different information about the high school and applicants' performance relative to their high school peers. The two experimental groups did not differ significantly on any demographic or admissions variables in the study, including their definition of holistic review ( $ps > .11$ ). Participants in the limited-information condition ( $n = 154$ ) were provided with the following: high school name (fictitious), state, institutional control (public), number of students, and graduation rate. Participants were also given the applicants' parental education, so they knew at least one dimension of applicants' SES.

All information provided in the limited-information condition was also provided in the detailed-information condition ( $n = 157$ ). Moreover, the applications in the detailed-information condition contained additional data about the high school: enrollment rates at four-year and two-year colleges, average test scores, percentage of students who meet federal eligibility criteria for free or reduced-cost lunch, percentage of students with limited English proficiency, number of AP courses offered, and percentage of students who receive a credit-bearing AP score (3 or higher). The detailed condition also contained each applicant's percentile within his high school for weighted and unweighted high school GPA as well as number of honors/AP classes. The

median ACT and SAT scores at the high school were also shown for each section of these exams. By providing enhanced contextual information, we sought to give admission officers multiple ways in which applicants' performance could be considered in context.

### **Measures**

The dependent variable was an ordinal measure of admissions recommendations (1 = deny, 2 = wait list, 3 = accept). Institutional attributes included dummy-coded variables for being tier 2 (highly competitive) and tier 3 (very competitive), with tier 1 (most competitive) as a referent group. Based on survey participants' qualitative responses to the open-ended question, "What does holistic admissions mean to you?" a binary variable for whether institutions conducted a whole context review was used (0 = no, 1 = yes). This independent variable was derived from the qualitative survey data, and responses that fell into the not holistic, whole file, and whole person categories were collapsed and coded as zero. Another variable indicated the experimental condition of whether participants received detailed information about the high school and students' performance relative to peers (0 = no, 1 = yes). Several participant attributes were also used, including race/ethnicity (given the small sample sizes for some groups, this was combined into a single dichotomous indicator in which 0 = White/Caucasian, 1 = Non-White), sex (0 = male, 1 = female), parental education (1 = elementary school, to 9 = graduate degree), experience working in admissions (1 = less than one year, to 7 = 21 years or more), and whether they were working at the same institution from which they received their bachelor's degree (0 = no, 1 = yes).

### **Analyses**

Ordinal logit regression analyses were conducted predicting the admissions recommendation for each applicant. The independent variables were whole context review;

detailed high school information; selectivity tier; and participants' race/ethnicity, sex, parental education, admissions work experience, and whether they were working at their alma mater. Two-way interactions between whole context review and detailed high school information, along with three-way interactions between whole context review, detailed information, and selectivity tier, were also examined. When constructing the interaction terms, the original variables were standardized so that including the interaction term in the analysis did not alter the results for the main effects (Jaccard & Turrisi, 2003). (The substantive results were identical with and without the interactions in the model.) Most analyses were conducted with the full sample and also separately for each selectivity tier. However, the three-way interactions were only conducted with the entire sample, since they included tier within the interaction term. Ordinal logit analyses have an assumption of parallel lines (Long, 1997); for a three-category outcome, this means that the slopes for the predictors are the same when examining the lowest outcome response category versus the two highest categories as when examining the two lowest categories versus the highest category. Twelve of the 14 analyses satisfied this parallel line assumption ( $ps > .05$ ); the two exceptions were the full-sample analyses with the high-SES, high-achieving applicant that contained three-way interactions and those with only two-way interactions. For those analyses, logistic regressions using a binary outcome yielded substantively identical results to those reported here.

Hierarchical generalized linear modeling analyses were also conducted, with applicants (level 1) nested within participants (level 2). A substantial proportion of the variance in admissions recommendations occurred between participants, as indicated by an intraclass correlation coefficient of .32. This outcome was treated as ordinal within the multilevel analyses. A slopes-as-outcomes model was used to examine whether the link between holistic

admissions and admissions decisions varied significantly across applicants. Independent variables at level 2 were the use of holistic admissions, along with participants' race/ethnicity, sex, parental education, years of admissions experience, and whether the participants were working at their alma mater. Binary variables at level 1 were used to indicate the applicant. All predictors at both levels were grand-mean centered.

### **Experimental Results**

Table 2 displays the results for regression analyses with the two-way interaction. Whole context review has a marginally significant negative relationship with admissions recommendations for the high-SES, high-achieving applicant in the full sample; this relationship is significant when examined separately for Tier 1, which represents the most selective colleges in our sample. No other main effects of whole context review are present. Detailed high school information has a positive relationship within the full sample only for the low-SES applicant. Detailed information is also positive and significant in Tier 3 for both the low-SES and the high-SES, middle-achieving applicants, whereas it has a marginally significant and negative association in Tier 2 for the high-SES, middle-achieving student.

Moreover, a significant, positive interaction between whole context review and detailed information is present within Tier 1 for these same two applicants. This finding means that providing detailed information about high school context provides a significantly greater increase in admissions recommendations when a whole context review process is used. The result is intuitive for the low-SES applicant, since this file-reading approach should help admissions officers view the student's credentials and experiences through the lens of his life circumstances (e.g., the challenges associated with attending an underresourced high school). However, we can only speculate about the results for the high-SES, middle-achieving applicant,

since that student's file did not indicate any obstacles that he had to overcome. It is possible that this combination of whole context reading and detailed information made the strong high school environment more salient and more likely to be considered within a holistic admissions framework. Admissions readers may have placed more value on the fact that this student was coming from a strong high school and therefore would have stronger academic preparation on entrance. This boost did not occur for the highest achieving applicant, because he already performed well by any objective standard, which led to his having high overall recommendations across conditions (which may have also resulted in a ceiling effect).

Additional analyses were conducted to explore further the combination of whole context review, detailed information, and selectivity tier (Table 3). All three-way interactions for the low-SES and the high-SES, middle-achieving applicants are significant; the negative coefficients indicate that the combination of whole context review and detailed information lead to more favorable admissions recommendations within Tier 1 than within Tiers 2 and 3. Thus, the nuanced read afforded by a whole context perspective may be more important at Tier 1 institutions (given their low acceptance rates) than at less selective institutions.

Multilevel analyses explored whether the link between whole context review and admissions recommendations varied across applicants. Based on this typology, conducting a whole context read should have a more positive relationship for the low-SES applicant (whose academics and extracurricular activities will be considered more favorably in the context of his environment) than for the high-SES applicants. This prediction is generally supported, as evinced by the significant cross-level interactions. As shown in Table 4, the first model indicates that the link between whole context review and admissions recommendation is greater for the low-SES applicant than for the high-SES applicants combined. The second model contrasts each

of the two high-SES applicants with the low-SES applicant (who serves as the referent group). Relative to the low-SES applicant, the relationship between whole context review and admissions recommendation is significantly more negative for the high-SES, high-achieving applicant, and it is marginally more negative for the high-SES, middle-achieving applicant.

### **Conclusion**

Given the commonality of the phrase “holistic review” or “holistic admissions,” we sought to take a deeper exploration of a concept that is relatively opaque to outsiders. At a surface or symbolic level, holistic review is widely diffused, with 95% of respondents saying they practice holistic admissions. Using focus group and open-response survey data from our informants, we derived a three-part typology that most accurately described our informants’ self-concept of holistic review: whole file, whole person, and whole context. Contrary to how holistic review is often discussed publicly, we found that only 29% of our informants espoused a whole context view of holistic admissions.

We further hypothesized that in a simulated application review, our whole context informants would be more likely to admit a low-SES applicant when provided with more detailed information on the high school context. Supporting the hypothesis, we found that these readers were significantly more likely to recommend admission for the low-SES applicant. Previous work suggests that admissions officers may be more likely to admit low-income students when provided high-quality information about high school contexts (Bastedo & Bowman, 2017). This research builds upon previous work by demonstrating not only that a range of definitions of holistic review exist, but these definitions serve as important differences in cognition among admissions officers. Those admissions officers that think about holistic review in a contextualized way may be more likely to respond to interventions that seek to

improve the admissions chances of low-income applicants. Thus, we should consider not just our interventions, but the training and norming practices that engage admissions officers around these interventions.

Our qualitative results also help to explain why there is significant confusion among students, parents, and the public about holistic admissions. Admissions officers themselves simply do not have a common definition of holistic review beyond “reading the entire file.” What is talked about in public or among relatively elite actors inside the selective college admissions community has not diffused consistently to admissions officers throughout the field, particularly those at less selective institutions. There may be legitimate reasons why contextualized holistic review is not yet pervasive in the field, including large and rising numbers of applications, the costs of time-intensive holistic review processes, and the financial aid expenditures needed to support low-income students. While holistic review may be a necessary symbol to maintain status and legitimacy, it fuels the perception of an admissions black box that is arbitrary and impenetrable to the people it serves.

A lack of transparency only serves to feed the admissions consulting industry among wealthy families (McDonough, 1994; Weis, Cipollone, & Jenkins, 2014), the arms race of extracurricular activities (Friedman, 2013; Weininger, Lareau, & Conley, 2015), and the influence of college rankings (Bastedo & Bowman, 2009; McDonough, Antonio, Walpole, & Perez, 1998). It also exacerbates information asymmetries in admissions knowledge between wealthy and poor students (Bell, Rowan-Kenyon, & Perna, 2009; Engberg & Allen, 2011; Engberg & Wolniak, 2010; Holland, 2014) and facilitates the undermatching of low-income students (Bastedo & Flaster, 2014; Smith, Pender, & Howell, 2013). These forms of gaming and manipulation – not to mention opportunity hoarding – are all facilitated by the ambiguity and

seeming arbitrariness in college admissions decisions, with demonstrably negative effects on the well-being of students and families (Weissbourd, 2016).

This research is meant to be the beginning of a dialogue about how we define and communicate what is meant by holistic review. Ultimately, however, this discussion has to be led and reconstructed by admissions professionals – its leaders, professional organizations, and the colleges they serve. This effort may be crucial to understanding why we have made so little progress in reducing the stratification of higher education, along with serving as a first step toward a more consistent set of admissions language and practices that better serve our highest ideals for fair, just, and equitable access to selective colleges.

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**Table 1: Typology of Holistic Admissions Practices**

	Definition	Tier 1	Tier 2	Tier 3	Total	Example Statements
<b>Whole File</b>	Admissions decisions are determined by reading the whole file and/or all parts of the application.	33%	50%	56%	50%	<p>“We review, consider, and evaluate all information provided when rendering an admission outcome.”</p> <p>“Holistic admission means that we will evaluate all of the components of the application and not rely on any one component as the determining factor in our decision. All aspects of the application from testing to transcript to extracurricular activities and the personal statement are an important [part] of our evaluation.”</p> <p>“We consider the five traditional areas: rigor, GPA, and testing are the three on the academic side, and then extracurricular activities and the written pieces, the essays and recommendations. We don’t make or break a decision based on a particular test score. I think in a holistic way, we are very in tune to the ups and downs of every file.”</p>
<b>Whole Person</b>	Admissions decisions consider the applicant as a unique being in light of individual characteristics and achievements.	20%	19%	19%	19%	<p>“Holistic means looking beyond just the objective like test scores and GPA to really try to get to know the applicant as a student and as a person. It means putting similar emphasis on academic record as additional supplemental materials like essays, resumes, etc.”</p> <p>“It means that we value getting to know the whole person—beyond just grades and scores. Our job is really to shape the class and if we are indeed committed to creating a diverse, interesting, and vibrant community, we must value the applicants as individuals.</p>
<b>Whole Context</b>	Admissions decisions consider the whole person within the context of their family and school environments; considers hardships, extenuating circumstances, and/or educational opportunities.	47%	25%	24%	29%	<p>“In addition to looking at testing, we also take into consideration personal statements, family background, socioeconomic background, teacher recommendations, extracurricular activities, etc. We also look carefully at the school(s) a student has attended and the opportunities (academic and extracurricular) that a student has had access to throughout their high school career.”</p> <p>“Students are reviewed in their individual context. When reviewing an application, it’s important to consider each student’s unique circumstances including family, school, opportunities available to them etc.”</p> <p>“Placing a student’s academic performance and curriculum in context of their school and life to really get a sense of what opportunities have been available to them and which of those they have chosen.”</p>

*Note.* A small percentage of survey responses (2%) were categorized as “not holistic” so some tier columns and total reporting may not add up to 100%.

**Table 2. Results of ordinal logit regression analyses predicting admissions recommendations overall and by selectivity tier**

Sample/ selectivity	Predictor	Applicant		
		Low-SES	High-SES, middle-achieving	High-SES, high- achieving
Full sample (all tiers)	Detailed high school information	.313* (.122)	.018 (.122)	-.177 (.227)
	Whole context review	.134 (.129)	.002 (.115)	-.355+ (.204)
	Detailed x whole context	.156 (.125)	.187 (.124)	.007 (.203)
	Tier 1			
Tier 1	Detailed high school information	.103 (.269)	-.256 (.270)	-.534 (.438)
	Whole context review	-.215 (.242)	-.172 (.240)	-.678* (.335)
	Detailed x whole context	.693* (.291)	.937** (.308)	.458 (.384)
	Tier 2			
Tier 2	Detailed high school information	-.133 (.212)	-.354+ (.209)	
	Whole context review	.281 (.230)	.133 (.220)	--
	Detailed x whole context	.011 (.236)	.091 (.227)	
	Tier 3			
Tier 3	Detailed high school information	.762** (.216)	.484* (.219)	-.424 (.486)
	Whole context review	.344 (.229)	.034 (.220)	-.432 (.449)
	Detailed x whole context	-.100 (.225)	-.045 (.220)	.108 (.450)

*Note.* Standard errors are in parentheses. Detailed high school information and whole context review were standardized before creating the interaction term; therefore, as intended, the inclusion of the interaction term did not substantively alter the main effects. Control variables were participants' race/ethnicity, sex, parental education, admissions work experience, and whether they are working at their alma mater. The full-sample analyses also controlled for institutional selectivity. All participants who received detailed high school information, used whole context review, and worked at tier 2 institutions recommended accepting the high-SES, high-achieving applicant. Because the interaction term for that applicant and tier combination therefore perfectly predicted the outcome, the subgroup analysis could not compute a valid regression coefficient and standard error.

+ $p < .10$  \* $p < .05$  \*\* $p < .01$

**Table 3. Results of ordinal logit regression analyses with three-way interactions predicting admissions recommendations**

Predictor	Applicant		
	Low-SES	High-SES, middle-achieving	High-SES, high- achieving
Detailed high school information	.276* (.127)	.024 (.126)	-.245 (.229)
Whole context review	.182 (.135)	.024 (.129)	-.388+ (.203)
Tier 2	.461** (.165)	.635** (.166)	.681* (.269)
Tier 3	.632** (.168)	1.088** (.175)	.902** (.257)
Detailed x whole context x Tier 2	-.362* (.161)	-.345* (.158)	-.376 (.232)
Detailed x whole context x Tier 3	-.394* (.164)	-.404* (.161)	-.028 (.212)
Nagelkerke pseudo R-square	.194	.268	.290

*Note.* Standard errors are in parentheses. Detailed high school information, whole context admissions, and selectivity tier were standardized before creating the interaction term; therefore, the inclusion of the interaction term did not substantively alter the main effects. Control variables in all models were participants' race/ethnicity, sex, parental education, admissions work experience, and whether they are working at their alma mater. All possible two-way interactions between detailed information, whole context admissions, and selectivity tier were also included for the low-SES and high-SES, middle-achieving applicants. Because of the same issue described in Table 2, models containing two-way interactions with tier could not be conducted for the high-SES, high-achieving applicant, so the results presented in the last column do not include two-way interactions. Preliminary analyses showed that the results for the other two applicants were substantively identical with and without the two-way interactions, so this analytic decision likely also did not affect the findings for the high-achieving applicant.

+ $p < .10$  \* $p < .05$  \*\* $p < .01$

**Table 4. Results from hierarchical generalized linear modeling analyses predicting admissions recommendations**

Predictor	Model 1		Model 2	
	B (SE)	OR	B (SE)	OR
<b>Level 1 x Level 2</b>				
Low-SES applicant x whole context review	.575* (.283)	1.777		
High-SES, middle-achieving applicant x whole context review			-.627+ (.356)	.534
High-SES, high-achieving applicant x whole context review			-1.371** (.523)	.254
<b>Level 1</b>				
Low-SES applicant	-.727** (.126)	.483		
High-SES, middle-achieving applicant			-.201 (.155)	
High-SES, high-achieving applicant			2.599** (.267)	13.450
<b>Level 2</b>				
Whole context review	.072 (.242)		-.093 (.299)	

*Note.* SE = standard error; OR = odds ratio. Odds ratios are only provided for statistically significant results. Analyses modeled admissions recommendations (level 1) nested within participants (level 2). Additional control variables in all analyses were selectivity tier as well as participants' race/ethnicity, sex, parental education, admissions work experience, and whether they are working at their alma mater (all entered at level 2).

+ $p < .10$  \* $p < .05$  \*\* $p < .01$