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# Do Multiple Mini-Interview and Traditional Interview Scores Differ in Their Associations With Acceptance Offers Within and Across Five California Medical Schools?

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**Abstract**

**Purpose:** In single-school studies, multiple mini-interview (MMI) and traditional interview (TI) scores are associated with acceptance offers. Unexamined is whether scores at one school are associated with acceptance at *other* schools; such analyses would mitigate single-school design biases and better estimate how well interviews capture desired applicant attributes. Using data from the five California Longitudinal Evaluation of Admissions Practices (CA-LEAP) public medical schools, the authors examined associations of MMI and TI scores with acceptance offers within and across schools.

**Method:** The analyses included applicants who interviewed at ≥1 CA-LEAP school during the 2011-2013 admissions cycles, when three CA-LEAP schools employed TIs and two employed MMIs. Interview scores were standardized (z-scores: mean = 0, SD = 1) and associations with acceptance offers were examined within and across schools in analyses stratified by school, adjusting for applicant sociodemographics, academic metrics, year, and total number of interviews.

**Results:** Of 4,993 applicants interviewed, 428 (8.6%) interviewed at both MMI schools, 681 (13.6%) at ≥2 TI schools, and 1,327 (26.6%) at ≥1 MMI and ≥1 TI school. For each school, acceptance was associated with interview score at that school and also with interview scores at the other four schools. Cross-school associations of MMI versus TI scores with acceptance did not differ statistically.

**Conclusions:** Interview score at a given CA-LEAP school was associated with acceptance at the other four schools, with no significant differences in associations for MMIs versus TIs. The findings suggest both MMIs and TIs captured attributes valued by admissions teams across CA-LEAP schools.

The medical school admissions process can be viewed as a multi-component measure designed to facilitate the selection of applicants likely to succeed in medical training and eventual practice. Applicant interviews are one key component of the admissions process.[1] The attention paid to interview scores in acceptance decisions stems from the notion that interviews have utility in identifying applicants thought to possess attributes that make them suitable for training and practice.

Reliability (i.e., consistency) is an initial, necessary step in determining a measure's validity.[2] Accordingly, many U.S. medical schools have shifted their admissions interviews from traditional one-on-one interviews (TIs) to multiple mini-interviews (MMIs)—in which applicants work through a series of brief, interactive, semi-structured assessment stations attended by trained raters[3]—as research suggests higher reliability for MMIs than for TIs.[4-9]

A key limitation of research on the role of medical school interview scores in acceptance decisions is that studies examining this issue have been conducted at single institutions employing either an MMI or TIs. The findings of such studies are useful but of limited utility in exploring the *relative* abilities of MMIs and TIs to help admissions teams identify applicants they deem suitable for training. Studies examining the associations of interview scores with medical school acceptance offers in a common pool of applicants completing *both* interview types are currently lacking.

Also lacking are studies examining whether MMI or TI scores at one medical school are associated with acceptance offers at other schools that, when making their acceptance determinations, do not have access to that school's interview scores. Such cross-school studies are important to pursue, because single-school studies, for several reasons, may tend to yield biased (overly optimistic or pessimistic) estimates of the ability of interviews to identify

applicant attributes of general interest to educators. First, within any school, the association of interview score with acceptance may in part reflect that the interview captured attributes of parochial concern to the school, apart from the interview's ability to capture attributes of more general interest. Parochial concerns, such as mission-driven training priorities, are known to inform admissions interview processes within schools and to vary widely among schools.[3,7,10-12] Second, the association of interview score with acceptance within any given school may partly reflect the influence of an unconscious cognitive bias known as the *availability heuristic*: the tendency to overvalue the most easily remembered or vivid information when making a judgment about something (in this context, applicant suitability for medical training).[13,14] At U.S. medical schools, admissions committees consider a number of factors in making acceptance decisions. The interview, however, typically affords the only direct opportunity to observe several qualities of interest, such as interpersonal communication, critical thinking, and problem-solving, and therefore is likely to represent a particularly memorable or vivid data point. Given the high premium admissions personnel place on applicant interpersonal, critical thinking, and problem-solving skills,[15] and the effects of availability bias,[13] the within-school interview score may be overvalued by admissions teams in making acceptance determinations.

Third, single interview scores suffer from the regression to the mean phenomenon.[16] Simply put, a single interview score that falls well above (or below) the mean is statistically more likely to include significant error contributing to the high (or low) score than to be solely an accurate indicator of superior (or inferior) performance. Other interview scores (i.e., scores at other schools) for the same applicant who received that high (or low) score are likely to fall closer to the mean of all applicants.

Due to the net influences of parochial interests, the availability heuristic, and statistical chance, single-school studies are likely to yield inaccurate estimates of the ability of admissions interviews to help in identifying applicants suitable for medical training. By contrast, if a cross-school study were to find acceptance offers at a given school to be associated with the interview scores at *other* schools, it would better support the notion that medical school interviews can be helpful in identifying suitable applicants. The associations of interview scores with acceptance offers in such a cross-school study likely would be less biased than the associations in a single-school study, because the cross-school study design would mitigate parochial influences, the availability heuristic, and regression to the mean.

In this study, we examined the associations of MMI and TI scores with acceptance offers *within* and *across* the five public medical schools of the California Longitudinal Evaluation of Admissions Practices (CA-LEAP) consortium: David Geffen School of Medicine at UCLA (UCLA); University of California, Davis, School of Medicine (UCD); University of California, Irvine, School of Medicine; University of California, San Diego, School of Medicine (UCSD); and University of California, San Francisco, School of Medicine (UCSF). The purpose of the CA-LEAP consortium is to evaluate medical school interview processes and outcomes.

Prior studies have reported higher reliability for MMIs than for TIs, which could contribute to a greater ability of MMIs to help admissions committees discern applicants suitable for medical training.[4-9] Also, many researchers and thought leaders have asserted that MMIs represent an advance over TIs,[11,17,18] and substantial resources have been invested in MMIs at institutions using this approach.[11,19] Therefore, belief in the ability of MMIs to help admissions committees discern the highest quality applicants may be greater than for TIs. For these reasons, we

hypothesized that both the *within-school* and *cross-school* associations of MMI scores with acceptance offers would be stronger than those associations for TI scores.

## Method

We conducted this retrospective study during July 2014–June 2017 using data from the 2011–2013 admissions cycles of the CA-LEAP consortium medical schools. We obtained ethics approval from the institutional review boards of the five participating schools via the University of California Reliance Registry (protocol #683).

### Study population

The study population included applicants who completed one or more medical school program interviews at CA-LEAP schools during the 2011–2013 admissions cycles. Applicants to the following medical school tracks, which had non-standard interview or selection processes, were excluded from the study: MD–PhD programs; UCSD combined bachelor's–MD program; UCSD PRogram in Medical Education (PRIME) program; UCLA DDS–MD program; UCLA PRIME program; Charles R. Drew/UCLA Medical Education Program; and the University of California, Berkeley–UCSF Joint Medical Program

### Interview processes

During the 2011–2013 admissions cycles, MMIs were used at two CA-LEAP schools (MMI-1 and MMI-2) and TIs were used at three schools (TI-1, TI-2, and TI-3). Details of these interview processes are provided below and summarized in Table 1.

**MMI schools.** The MMIs at MMI-1 and MMI-2 consisted of individually scored 10-minute stations (10 and 7 stations, respectively), most of which were adapted from commercially marketed content.[20] All stations were multidimensional: At every station, a structured rating form was used to assess interpersonal communication ability along with one or more additional

competencies (e.g., integrity/ethics, professionalism, diversity/cultural awareness, teamwork, ability to handle stress, problem solving). Stations at both schools were attended by one rater, except for one station at MMI-2 attended by two raters. Raters interacted directly with applicants at some stations and observed applicant interactions (e.g., with actors) at others. Raters at both schools included physician and basic science faculty and medical students. Raters at MMI-1 also included alumni, nurses, patients, lawyers, high-level administrative staff, and other community members. At both schools, raters received 60 minutes of training before each admissions cycle; at MMI-2, raters also received a 30-minute re-orientation prior to each circuit. Raters were given no information about applicants. Raters at both schools assigned a single global performance score (higher score = better performance), although each school employed a different scale (MMI-1: 0–3 points; MMI-2: 1–7 points).

**TI schools.** Applicants at each TI school completed two 30–60 minute unstructured interviews, one with a faculty member and one with a medical student or another faculty member. At all TI schools, at least 60 minutes of training was provided to interviewers before each admissions cycle. At TI-1 and TI-2, interviewers reviewed the candidate's application prior to the interview, with academic metrics redacted at TI-1. At TI-3, interviewers reviewed the candidate's application after assigning initial interview ratings, but then could adjust their ratings (if desired) after reviewing the application, yielding a final interview rating (used in our analyses). Interviewers at all three schools rated applicants using standardized scales, although the domains rated and scales differed. At two schools, interviewers assigned a single global interview rating, at TI-1 using a 1–5 scale (5 = exceptional, 4 = above average, 3 = average, 2 = below average, 1 = unacceptable), and at T-3 using a 1–3 scale (3 = unreserved enthusiasm, 2 = moderate enthusiasm, 1 = substantial reservations). At TI-2, interviewers rated candidates in four domains,

using a 1–5 scale for each domain (thinking/knowledge, communication/behavior, energy/initiative, and empathy/compassion); these domain scores were summed to yield a total score (range 4–20).

**Acceptance recommendation**

At each school, the admissions committee met periodically during the admissions cycle to review each candidate's interview (MMI or TI) performance at that school, American Medical College Application Service (AMCAS) application, and secondary (school-specific) application. Subsequently, the committee recommended acceptance or rejection. None of the admissions committees had access to interview scores at other schools, including the other CA-LEAP schools.

**Measures**

We converted the total interview scores—calculated from the means of individual station scores (MMI-1), the sums of individual station scores (MMI-2), or the means of the two TI scores (TI schools)—to z-scores (mean = 0, standard deviation = 1) based on all scores within a given school and application year. We employed interview z-scores to allow direct comparisons across schools and application years. Acceptance recommendation was dichotomized to acceptance offer (coded as 1) or rejection (coded as 0). Applicant characteristics obtained from the AMCAS application included age; sex; race/ethnicity category (non-Hispanic white vs other); self-designated disadvantaged (DA) status (yes/no); cumulative undergraduate grade point average (GPA); total Medical College Admission Test (MCAT) score; and application year.

**Analyses**

Analyses were conducted using Stata (version 15.0, StataCorp, College Station, Texas). For the 2012 and 2013 admissions cycles, the analyses included data from all five schools. For 2011, TI-

3 provided no data. In logistic regression analyses stratified by school (i.e., five separate analyses), we examined the association of interview score at a given school with acceptance offer (versus rejection) at that same school (i.e., *within-school* association of interview score and acceptance). In these within-school analyses, each applicant appeared only once. While 60 applicants (0.8% of the total sample of applicants) did apply to a given CA-LEAP school in two different study years (none applied in all 3 study years), in our analyses we retained only the last (most recent) application for these individuals, making the assumption that no school had accepted them on the first application.

In *cross-school* analyses, we examined all pairs of CA-LEAP schools; each of these analyses included only those applicants who interviewed at both schools in the pair. We again used logistic regression analyses to examine the association of acceptance at each school in the pair with the interview score at the *other* school. All within- and cross-school analyses were adjusted for the following applicant characteristics: age; sex; race/ethnicity; DA status; GPA; total MCAT score; and total number of interviews across CA-LEAP schools during the three consecutive study admissions cycles (to capture interview experience or practice effects[21]). Two applicants had missing GPA data. Additionally, at the TI schools, seven applicants received only one interview (rather than the planned two). In these instances, the single TI score (rather than the mean of two scores) was used as the total score in the analyses. There were no other missing data.

We also tested formally whether there were statistically significant differences among the study schools' MMI and TI scores in their associations with acceptance offers. We used the Stata program *suest* for these analyses.[22,23] The program uses model parameter estimates and their

associated covariance matrices to allow statistical testing (Wald tests) of differences among parameter estimates within and across models.

**Results**

There were 4,993 applicants who completed at least one interview at a CA-LEAP medical school during the study period; their sociodemographics and academic metrics are shown in Table 2. They completed a total of 7,516 interviews, of which 4,137 (55.0%) were TIs and 3,379 (45.0%) were MMIs. Of the 4,993 applicants, 3,226 (64.6%) interviewed at one school, 1,180 (23.6%) at two schools, 439 (8.8%) at three schools, 127 (2.5%) at four schools, and 21 (0.4%) at all five schools. Four hundred twenty-eight applicants (8.6%) interviewed at both MMI schools; 681 (13.6%) interviewed at more than one TI school; 1,327 (26.6%) interviewed at ≥ 1 TI school and ≥ 1 MMI school; and 119 (2.4%) interviewed in more than one application year. Of the 4,993 interviewed applicants, 2,425 (48.6%) received at least one acceptance offer: 1,863 (37.3%) from one school, 428 (8.6%) from two schools, 107 (2.1%) from three schools, 26 (0.5%) from four schools, and 1 (0.2%) from all five schools.

**Within-school analyses**

In adjusted analyses stratified by school, at all five schools the interview score was the characteristic most consistently associated with acceptance (Table 3). While the association of interview score with acceptance offer was greater at school TI-2 (adjusted odds ratio [AOR] 80.43) relative to other schools, the associations for the other four schools fell within a relatively narrow range (AORs 3.48–5.88). The average association of interview score with acceptance offer was greater for the TI schools than for the MMI schools ($z = 8.4$, $P < .001$).

In contrast to the relative consistency of the influence of interview scores on acceptance offers, the associations of other applicant characteristics with acceptance offers varied widely from school to school (Table 3).

**Cross-school analyses**

In pairwise analyses, for 16 of the 20 possible acceptance offer/interview score combinations, acceptance at a given school was statistically significantly associated with the interview score from the other school (range of AORs 1.27–2.26) (Table 4). Similar magnitude associations were also observed for three of the four remaining combinations, but these were not statistically significant (MMI1 interview score/TI-1 acceptance, AOR 1.27, $P = .06$; TI-3 interview score/TI-1 acceptance, AOR 1.34, $P = .09$; and TI-2 interview score/TI-3 acceptance, AOR 1.33, $P = .09$). The average association of *other* TI school interview scores with acceptance offers did not differ statistically from the average association of *other* MMI school interview scores with acceptance offers ($z = 1.53$, $P = .13$).

**Discussion**

Data from the 2011–2013 admissions cycles of the CA-LEAP collaboration's five medical schools facilitated analyses bearing on the relative abilities of MMIs and TIs to help admissions committees identify medical school applicants they viewed as suitable for training. Such analyses have not been possible in prior single-school studies of interview performance and acceptance offers. In this study, we (1) compared the *within-school* associations of MMI scores and TI scores with acceptance offers in a common pool of applicants, many of whom completed interviews at more than one school; and (2) examined how acceptance offers at one school were associated with other schools' interview scores unavailable to the school making the acceptance recommendations (i.e., *cross-school* analyses). These analyses, compared with single-school

analyses, likely yield more accurate estimates of how well medical school interviews capture attributes of broad interest to medical educators, because cross-school analyses are less susceptible to the biasing influences of parochial concerns within each school,[3,7,10-12] the availability heuristic,[13,14] and statistical regression to the mean.[16]

We had hypothesized that, in both the within-school and cross-school analyses, MMI scores would be more strongly associated with acceptance offers than TI scores would be, due to the higher reported reliability of MMIs and enthusiasm for the MMI process.[4-9,11,17,18] However, we found no systematic evidence suggesting that MMI scores were stronger determinants of acceptance offers than TI scores. Indeed, in the within-school analyses, TI scores were more strongly associated with acceptance offers than MMI scores were (Table 3). Further, in the cross-school analyses, the average association of "other school" TI scores did not differ statistically from the average association of "other school" MMI scores (Table 4). Our results indicate that despite the reported higher reliability of MMIs versus TIs—including in another CA-LEAP study we conducted[24]—both TIs and MMIs appeared to capture applicant qualities that admissions teams at the CA-LEAP schools believed to merit acceptance.

While MMI and TI scores were consistently and strongly associated with acceptance offers across the CA-LEAP schools, the associations of other applicant characteristics with acceptance varied widely among the schools (Table 3). The differences across schools in the findings related to these characteristics most likely reflect parochial influences, such as differing institutional priorities and varying admissions team compositions and processes.[3,7,10-12] Regardless of explanation, the differences in the associations of sociodemographics and academic metrics with acceptance offers among the schools further underscore the value of multi-school studies of admissions processes.

A strength of our study was the large sample of applicants to the five public medical schools in California, which is one of the most sociodemographically diverse states. Our study also had some limitations. The extent to which the findings apply to other medical schools is uncertain. Our analyses adjusted for potentially confounding applicant factors (e.g., sociodemographics, academic metrics) included in prior single-school admissions studies, as well as for other potential confounders (e.g., the total number of interviews across CA-LEAP schools). Nonetheless, there may have been confounding by unmeasured applicant factors or contextual (e.g., interviewer/rater) factors.

Our study focused on how MMI and TI scores were associated with acceptance offers and did not address the predictive validity of the scores—in other words, the scores' associations with future clinical rotation performance, licensing examination scores, and other relevant outcomes. Future CA-LEAP studies will address this important issue. As others have also observed,[7] current evidence for the predictive validity of MMIs stems from single-school studies (all conducted outside the United States). Such studies are limited by the lack of concurrent examination of TI validity, and by the relatively small proportion of interviewees who matriculate at any given school. By comparison, in a multi-school consortium pool of interviewees, a relatively higher proportion would be anticipated to matriculate at one of the schools, permitting a more robust examination of MMI predictive validity and concurrent comparison with TI predictive validity.

**Conclusions**

In conclusion, in analyses of data from a common pool of applicants who completed interviews at one or more of the five CA-LEAP medical schools in 2011-2013, we found interview score at a given school was associated with acceptance at that school and at the other four schools, with

no difference in the strength of association for MMIs versus TIs. The associations of interview scores with acceptance offers stemming from our cross-school analyses likely reflect more accurate (less-biased) estimates of the ability of interviews (both MMIs and TIs) to help admissions committees identify applicants they deem suitable for medical training, by mitigating several sources of bias in single (within) school analyses: parochial concerns, the availability heuristic, and statistical regression to the mean. Considered collectively, our findings suggest that despite current enthusiasm for MMIs, among the CA-LEAP schools, both MMIs and TIs were effective in helping to identify applicants that admissions teams believed to be suitable for medical training and eventual practice.

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## Table 1

**Multiple Mini-Interview (MMI) and Traditional Interview (TI) Processes, Application Review, and Scoring at the Five CA-LEAP Consortium Medical Schools, 2011–2013 Admissions Cycles[a]**

| | MMI schools | | TI schools | | |
|---|---|---|---|---|---|
| **Category** | **MMI-1** | **MMI-2** | **TI-1** | **TI-2** | **TI-3** |
| Interview process | 10 stations, 10 minutes each; raters include faculty, students, staff, alumni, and community members | 7 stations, 10 minutes each; raters include faculty and students | 2 interviews, 30–60 minutes each; one faculty interviewer, one student interviewer | 2 interviews, 45–60 minutes each; at least one faculty interviewer | 2 interviews, 60 minutes each; at least one faculty interviewer |
| Interviewer/ rater review of application | Raters blinded to application | Raters blinded to application | Application reviewed prior to interview, with GPA and total MCAT score redacted | Entire application reviewed prior to interview | Initial interview rating and narrative summary completed prior to application review, then additional comments and final rating entered |
| Interview scoring | Communication skills and content rated for each station on anchored 4-point scale (0–3 points); total score is mean of individual stations | Communication skills and content rated for each station using 7-point scale (1–7 points); total score is sum of individual stations | Overall interview scored on 1–5 scale; both interview scores averaged to yield final score | Each interview scored across 4 domains on 1–5 scale then domain scores summed; scores for both interviews averaged to yield final score | Overall interview scored on 1–3 scale; both interview scores averaged to yield final score |

Abbreviations: CA-LEAP indicates California Longitudinal Evaluation of Admissions Practices; GPA, cumulative undergraduate grade point average; MCAT, Medical College Admission Test.

[a]Table adapted from Henderson et al.[21]

## Table 2

**Characteristics of 4,993 Applicants Who Completed One or More Interviews at the Five CA-LEAP Consortium Medical Schools, 2011–2013 Admissions Cycles[a]**

| Applicant characteristic | Applicants (n = 4,993) |
|---|---|
| **Sociodemographics** | |
| Age, mean (SD)[b] | 24.4 (2.7) |
| Female gender, no. (%) | 2378 (47.6%) |
| Non-Hispanic white, no. (%) | 1776 (35.6) |
| DA, no. (%) | 962 (19.3) |
| **Academic metrics** | |
| GPA, mean (SD)[c] | 3.7 (0.2) |
| Total MCAT score, mean (SD) | 33.6 (3.7) |
| **Number of interviews, no. (%)[d]** | |
| 1 | 3,226 (64.6) |
| 2 | 1,180 (23.6) |
| 3 | 439 (8.8) |
| 4 | 127 (2.5) |
| 5 | 21 (0.4) |

Abbreviations: DA indicates disadvantaged (self-identified); GPA, cumulate undergraduate grade point average; MCAT, Medical College Admission Test; SD, standard deviation.

[a]Table adapted from Henderson et al.[21]

[b]Calculated as of July 1 of application year minus birthdate.

[c]Two applicants had missing GPA information.

[d]The total number of interviews was 7,516. The number of interviews reflects the number of CA-LEAP consortium schools at which each applicant interviewed.

## Table 3

**Within-School Adjusted Associations of Sociodemographics, Academic Metrics, and Interview Score With Acceptance Offers Among the 4,993 Applicants Who Completed One or More Interviews at the CA-LEAP Consortium Medical Schools, 2011-2013 Admissions Cycles[a]**

| | MMI schools | | | | TI schools | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | MMI-1 acceptance offer (n = 1,448[b]) | | MMI-2 acceptance offer (n = 1,931[b]) | | TI-1 acceptance offer (n = 1,489[b]) | | TI-2 acceptance offer (n = 1,652[b]) | | TI-3 acceptance offer (n = 994[b]) | |
| Applicant characteristic | AOR (95% CI) | *P* value | AOR (95% CI) | *P* value | AOR (95% CI) | *P* value | AOR (95% CI) | *P* value | AOR (95% CI) | *P* value |
| Age | 1.02 (0.97, 1.06) | .41 | 0.99 (0.94, 1.05) | .74 | 1.02 (0.97, 1.08) | .418 | 0.99 (0.93, 1.05) | .65 | 1.00 (0.94, 1.07) | .93 |
| Female gender | 1.45 (1.11, 1.88) | .006 | 1.17 (0.93, 1.46) | .18 | 2.07 (1.62, 2.63) | < .001 | 0.88 (0.61, 1.27) | .51 | 1.09 (0.78, 1.51) | .61 |
| Non-Hispanic white | 0.79 (0.59, 1.07) | .13 | 1.06 (0.83, 1.35) | .63 | 1.12 (0.87, 1.45) | .372 | 1.06 (0.72, 1.55) | .77 | 0.79 (0.55, 1.12) | .18 |
| DA | 1.22 (0.86, 1.73) | .27 | 2.13 (1.50, 3.04) | < .001 | 1.72 (1.16, 2.56) | .007 | 1.08 (0.61, 1.93) | .79 | 1.47 (0.88, 2.43) | .14 |
| GPA | 2.19 (1.15, 4.15) | .02 | 3.56 (1.72, 7.37) | .001 | 2.13 (1.10, 4.12) | .025 | 1.10 (0.40, 3.02) | .85 | 0.96 (0.51, 1.79) | .89 |
| Total MCAT score | 0.97 (0.93, 1.02) | .23 | 1.06 (1.02, 1.10) | .006 | 1.09 (1.04, 1.15) | < .001 | 1.04 (0.98, 1.11) | .18 | 1.07 (1.02, 1.13) | .01 |
| Local interview z score | 5.16 (4.32, 6.15) | < .001 | 3.95 (3.40, 4.59) | < .001 | 3.48 (2.99, 4.05) | < .001 | 80.43 (51.78, 124.93) | < .001 | 5.88 (4.72, 7.33) | < .001 |
| Total no. interviews at CA-LEAP schools[c] | 1.05 (0.92, 1.21) | .48 | 1.24 (1.11, 1.40) | < .001 | 1.12 (0.98, 1.27) | .096 | 1.23 (1.03, 1.47) | .02 | 1.09 (0.94, 1.28) | .25 |

Abbreviations: AOR indicates adjusted odds ratio; CA-LEAP, California Longitudinal Evaluation of Admissions Practices; CI, confidence interval; DA, disadvantaged (self-identified); GPA, cumulative undergraduate grade point average; MCAT, Medical College Admission Test; MMI, multiple mini-interview; TI, traditional interview.

[a]Logistic regression analyses, stratified by school. Adjustors in all analyses were applicant age, sex; race/ethnicity, DA status, GPA, total MCAT score, interview year (cycle), and total number of interviews during the three consecutive study admissions cycles.

[b]Number of applicants interviewed at the school during the three consecutive admissions cycles.

[c]Number of interviews for the student at all five CA-LEAP schools across the three consecutive admissions cycles.

## Table 4

**Cross-School Associations of Interview Scores With Acceptance Offers Among Applicants Interviewed at Two or More CA-LEAP Consortium Medical Schools, 2011-2013 Admissions Cycles[a]**

| | MMI schools | | | | TI schools | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | MMI-1 acceptance offer | | MMI-2 acceptance offer | | TI-1 acceptance offer | | TI-2 acceptance offer | | TI-3 acceptance offer | |
| | AOR (95% CI) [no.[b]] | *P* value | AOR (95% CI) [no.[b]] | *P* value | AOR (95% CI) [no.[b]] | *P* value | AOR (95% CI) [no.[b]] | *P* value | AOR (95% CI) [no.[b]] | *P* value |
| MMI-1 interview score | — | — | 1.75 (1.38, 2.22) [390] | < .001 | 1.27 (0.99, 1.63) [333] | .06 | 2.08 (1.58, 2.74) [316] | < .001 | 1.62 (1.17, 2.24) [219] | .004 |
| MMI-2 interview score | 2.26 (1.76, 2.91) [390] | < .001 | — | — | 1.38 (1.13, 1.68) [496] | .001 | 1.87 (1.50, 2.32) [469] | < .001 | 1.31 (1.01, 1.69) [274] | .04 |
| TI-1 interview score | 1.43 (1.13, 1.80) [333] | .003 | 1.35 (1.10, 1.65) [496] | .004 | — | — | 1.50 (1.19, 1.90) [376] | < .001 | 1.45 (1.02, 2.08) [192] | .04 |
| TI-2 interview score | 1.61 (1.22, 2.14) [316] | .001 | 2.00 (1.58, 2.53) [469] | < .001 | 2.03 (1.56, 2.66) [376] | < .001 | — | — | 1.33 (0.96, 1.84) [224] | .09 |
| TI-3 interview score | 1.58 (1.14, 2.19) [219] | .007 | 1.18 (0.91, 1.54) [274] | .22 | 1.34 (0.96, 1.88) [192] | .09 | 1.62 (1.20, 2.18) [224] | .002 | — | — |

Abbreviations: AOR indicates adjusted odds ratio; CI, confidence interval; MMI, multiple mini-interview; TI, traditional interview.

[a]These logistic regression analyses examined pairs of CA-LEAP schools; each analysis included only those applicants who interviewed at both schools in the pair. Adjustors in all analyses were applicant age, gender, race/ethnicity, self-designated disadvantaged status, cumulative undergraduate GPA, total Medical College Admission Test (MCAT) score, interview year (admissions cycle), and total number of interviews during the three consecutive study admissions cycles.

[b]Number of applicants who interviewed at both schools in the pair.