Geography and Internship Match Rates: Quantifying Competitiveness and Discussing Implications for the Internship Imbalance

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In response to the internship supply/demand imbalance, the field of psychology recognized a crisis and proposed solutions. With each passing year, however, graduate students face the real possibility that they may not match. Using four years worth of site match rates, competitiveness is quantified and analyzed with respect to implications for the field, APPIC, internship sites, graduate programs, and prospective interns. Results suggest geographic differences in match rates are less meaningful for applicant strategies than monitoring competitiveness using site match rates and submitting 10 to 15 applications. Discussion includes implications for students and how they may use match rate data to improve their site selection strategies and chances for a successful match.

Keywords: internship, supply demand, APPIC, imbalance, competition

All psychology doctoral students are required to fulfill a 1-year full-time or 2-year half-time internship to earn the doctoral degree. The Association of Psychology Postdoctoral and Internship Centers (APPIC) oversees the process of matching these students with potential internship sites throughout the United States. Despite the need for internship training, attaining a successful match is becoming increasingly competitive, time-intensive, and costly (Madsen, Hasan, Williams-Nickelson, Kettman, & Van Sickle, 2007), particularly when students look for internships that are accredited by the American Psychological Association (APA).

Ten years ago, research studies noted the decreasing supply and increasing demand for psychology internships and warned that the supply and demand imbalance was likely to continue (Oehlert & Lopez, 1998). In 2007, the imbalance reached a critical level when just 75.5% of applicants successfully matched to an internship (Keilin, Baker, McCutcheon, & Peranson, 2007). Concerns about the growing disparity between the number of internship positions and applicants were addressed in a special issue of Training and Education in Professional Psychology (“The Internship Match,” 2007). That issue outlined contributing factors and proposed long term, systemic solutions to the problem. Students just starting the match process, however, are likely to be more immediately concerned with this year’s match and the factors that will help them avoid a costly delay in their training.

Several resources exist to ameliorate applicant concerns by providing prospective interns with strategies for securing an internship (Williams-Nickelson & Prinstein, 2007; see also Azar, 2008; Mellot, Arden, & Cho, 1997). Invariably, these resources warn against applying only to highly competitive sites or limiting applications by geographic location. To date, however, there are no published data that define competitiveness or that measure the risk involved in limiting applications by geography. The hypothesis of the following research is that internship site match rates can be used to measure competitiveness, to better understand geographic differences in internship competition, and to inform an applicant’s site selection strategy.

Existing research measuring internship site competitiveness is based on surveys of internship training directors (e.g., Oehlert & Lopez, 1998) or was published prior to the availability of current APPIC data. Lopez, Oehlert, and Wettersten (1997) used the number of applicants and the number of internship slots from 1988 to 1997 to track the increase in competition for certain kinds of sites (e.g., VA hospitals, medical schools, university counseling centers, etc.). Their research supported the view that internships, in general, were becoming more competitive, since the number of applicants was increasing faster than positions. The following year, the first two authors published survey results concluding there was a “bottleneck effect” due to previously unmatched applicants applying again (Oehlert & Lopez, 1998). These articles
predate the current APPIC web site, the publication of applicant information by internship sites, and the computerized matching process. Those resources make tracking internship supply and demand easier.

Using the data publicly available on each internship’s web page through www.appic.org, internship site match rates can be calculated by dividing the total number of internship positions by the total number of applicants. The calculation yields the percentage of applicants that successfully match to that site. APPIC data can be used to calculate site match rates for last year’s match, as well as the previous two years. By adding together each year’s site match data, it is also possible to determine the total match rate for that site over the last three years. Such calculations yield a reasonable estimate of a qualified applicant’s statistical chances for matching to that site the following year. However, without knowing more about site match rates, such as the national average and standard deviation, it is impossible to determine if a site’s match rate is high (less competitive) or low (more competitive).

The concept of a match rate is not entirely new to those involved in the matching process. In 2006, APPIC published the percentage of students from each graduate program that successfully matched with an internship (APPIC, 2008a). While this established an important precedent for what kind of information should be disseminated to students, such match rates should not be confused with the internship site match rates discussed here. Site match rates, as they are used here, quantify the chance of matching to a specific internship site, regardless of the student’s academic program. Graduate program match rates are more useful to undergraduate students looking to understand their chances of matching to an internship if they are accepted to a specific graduate school. When the match rates for graduate programs were published, the current chair of the APPIC underscored the importance of such match rates as “one important outcome measure of educational programs that should be available to students and the profession” (McCutcheon, 2006, ¶2). Although graduate program match rates are potentially more useful for undergraduate students, the data below suggest that internship site match rates may be just as useful for graduate students and therefore worthy of publication.

In 1997, Robert Klepac, a past APPIC Chair, was quoted as saying the biggest barrier to a successful match is, “when students arbitrarily decide that they will not consider a wide range of geographic locations” (Mellot et al., 1997, p. 190). According to Greg Keilin (as quoted in DeAngelis, 2004), former APPIC chair and current coordinator of the internship match, “There are definitely very popular areas, such as New York and San Francisco,” he says. ‘I encourage students to apply to sites that range in competitiveness because even a very good student who applies only to highly competitive sites has a higher-than-usual chance of not being matched’” (p. 34). Keilin offered sound advice, but until now, no research has defined competitiveness or has applied any such measure to compare geographic areas. Unless applicants have more information, the much-needed advice may be difficult to incorporate into a specific application strategy.

Without an analysis of internship site match rates, the following questions remain unanswered. If students are limited to one geographic area, how does that affect their chances for matching? If applicants know the match rates for their selected sites, how are they to know if those match rates are relatively high or low? Are applicants’ sets of chosen sites balanced in terms of competitiveness, or are all of their selections highly competitive? How are advisors or academic training directors to measure risk and know if their students are applying to only highly competitive sites? At what stage in the application process is it appropriate to consider match rates, and what decisions should be based on the data?

The research for this article incorporates four years of APPIC match rate data to quantify competitiveness. The data are then used to compare match rates between sites and across cities and regions of the United States. The discussion addresses the implications for the field, APPIC, internship sites, graduate institutions, and prospective interns. Lastly, the conclusions and limitations drawn from this data are presented.

Method

Publicly available APPIC statistics from four consecutive match years, 2004, 2005, 2006, and 2007, were used to determine match rates for all APA accredited internship sites. One-year match rates were calculated by dividing the total number of internship positions offered by the total number of applications a site received for that year. This number was considered equivalent to the percentage of applicants matched for that year. Four-year site match rates, as they are referred to here, equaled the total number of positions offered from 2004 through 2007, divided by the total number of applicants for the same period. For site match rate data at the city and regional level, match rates refer to the total percentage of applicants matched for that geographic area.

APA accreditation for site and year was confirmed through the online listing of accredited internship sites (APAPA, 2008). The APA Office of Program Consultation and Accreditation was contacted directly to confirm the accreditation of sites previously, but not currently, listed with APPIC. Data were checked for change of site name, year of accreditation, and any disruption in accreditation status. Non-APA and non-APPIC sites were excluded due to the low number of applications per internship position and the higher rate of missing data on the APPIC web site. Affiliated internships were excluded since they only accept candidates from their own academic programs. Canadian internship sites were also excluded because Canadian cities are not tracked by APPIC, cannot be divided into states or regions using U.S. census data, and there are only 13 APA accredited Canadian sites and therefore the loss of these sites to the overall pool of internships analyzed was considered minimal. As data on the APPIC web site represented only the previous three matches, the 2004 match statistics were gathered in 2006, prior to the posting of 2007 data.

APA accredited sites were compared across three levels of geographic abstraction: sites, cities, and regions. Site match rates at each level were then ranked, compared, and tested for statistical significance using chi-square analysis. As a chi-square analysis requires that the data are independent, the number of positions was routinely subtracted from the total number of applicants before performing tests of significance.

Consistent with the model of tiers used in ranking colleges and universities (U.S. News & World Report, 2008), site-level tiers were based on the site’s quartile ranking. For these purposes, the first tier included the 25% of sites with the lowest match rates, the second tier included sites between the 26th and 50th percentile, and so forth. City-level tiers were grouped by percentage points and were divided as follows: cities with site match rates below 4%,
between 4.0 and 4.9%, between 5.0 and 5.9%, and 6.0% and above (see Table 1).

Only those cities tracked on the APPIC web site were included in this study. The web site’s search tools were used to choose specific cities and to exclude sites without APA accreditation. The results of that search were then taken to represent the total number of APA accredited internship sites for each city. Although city-level data referred only to the 13 APPIC tracked cities, readers should not assume that sites outside those cities were suburban or rural. In many cases, sites outside the 13 APPIC tracked cities were located in undeniably urban settings (e.g., in Hartford, Orlando, Detroit, etc.). The limitations and implications of following APPIC’s methods for a site’s city affiliation are further addressed below.

United States census guidelines were followed to group states into regions (U.S. Census, 2008). State-level data were not presented separately due to the wide range in the number of sites per state. For example, Alaska had no internship sites over the past four years while New York had 56. Grouping states into regions enabled more informative comparisons and yielded meaningful conclusions.

The data used for this article do not include site match rates from the 2008 match. However, it is likely that the median site match rate increased (i.e., became less competitive) from the 2007 match. That conclusion is based on the slightly higher reported percentage of applicants who matched compared to 2007 (79% v. 75.5%; APPIC, 2008a). The 2008 match is similar in terms of percentage of applicants who matched compared to 2007 (79% v. 75.5%; APPIC, 2008a). The 2008 match was higher in terms of the total median site match rate compared to 2007.

Results

Results are presented according to the level of data, beginning with site-level data and expanding upward to regional-level data. Unless otherwise indicated, “match rate” refers to combined rates for the previous four years. City and region data include chi-square analyses as tests for statistical significance.

Sites

Before comparing match rates across the country, it is important to understand the descriptive statistics of match rates at the site level. From 2004 to 2007, the total median site match rate was 5.49 applicants per 100 applications or 5.5%. As anticipated, the median match rate decreased each year between 2004 and 2007: 6.0%, 5.8%, 5.5%, and 4.9%. The distribution of match rates for all four years combined had a standard deviation of .047 and was positively skewed (skew = 5.05). The positive skew was also present in the distribution of match rates for each year of the match. Comparisons were made using medians, rather than means, due to the positive skew of the data.

The distribution of 4-year site match rates occurred along the following quartiles: Q1, 1.92–4.14%; Q2, 4.15–5.49%; Q3, 5.50–7.76%; Q4, 7.77–55.17%. Each quartile represented 114 of the 456 APA accredited sites. The quartile distribution indicated that 75% of sites matched with between 1.92% and 7.76% of applicants over the past four years. As discussed below, each quartile represented a tier of the site-level data with Q1 representing the top and most competitive tier.

Site-level data allowed for comparisons between individual sites based on their match rates. Combining the last four years, the five sites with the most competitive match rates were: Lenox Hill Hospital, New York (12 total slots and 624 total applications, for a match rate of 1.92%), Albert Einstein College of Medicine/ Montefiore Medical Center, New York (2.066%), New York Presbyterian Hospital/Weill-Cornell Medical Center (2.073%), University of California at Berkeley, Counseling and Psychological Services (2.15%), and Kaiser Permanente Medical Care Program, Los Angeles (2.297%).

Cities

Site match rates were compared between the 13 U.S. cities tracked by APPIC data. The combined match rate for all 13 cities over the 4-year period was 5.0%. Sites within the 13 cities accounted for 54% of the total applications, 48% of the total internship positions, and 44% of the total sites. Compared to the national combined match rate of 5.6%, the 13 major metropolitan areas together had a lower match rate than the country as a whole, $\chi^2(1, N = 229991) = 37.07, p < .001$.

Analysis of the city-specific data showed differences in site match rates among the U.S. cities tracked by APPIC. The city with the lowest combined site match rate over the past four years was Chicago (9183 applications for 365 positions, or 3.97%). Philadelphia was second at 4.43%; San Francisco ranked third at 4.48%; and...
Denver was ranked fourth with a match rate of 4.60%. Table 1 contains each city’s 4-year rank, tier, and match rate. Note that all figures were based on the cumulative data for the last four years.

**Regions**

Following lines drawn by the U.S. Census, states were divided into four regions: Northeast, South, Midwest, and West. Four-year site match rates across each of these regions were compared to test for regional differences. The results indicated that the Northeast had the lowest regional match rate (5.17%), followed by the West (5.38%), the Midwest (5.89%), and the South (6.09%). All chi-square comparisons (see Table 2) were statistically significant, with the exception of the South versus the Midwest, $\chi^2(1, N = 69130) = 1.11, p = .292$, and the Northeast versus the West, $\chi^2(1, N = 80795) = 1.71, p = .191$. According to this data, the Northeast and West regions are more competitive than either the Midwest or the South and this difference is statistically significant (see Table 2).

**Discussion**

The following discussion addresses site match rate data across sites, cities, and regions. Implications are then discussed as they contribute to the ongoing debate about the internship supply/demand crisis. Caveats to these recommendations are addressed under the limitations of the data.

Data from the 13 cities tracked by APPIC yield three notable conclusions. First, differences exist between cities in terms of their site match rates over a 4-year period. While the differences between cities were not all statistically significant, the 4-year match rates are the basis for a rank order. This list should supplement or replace previous, less empirical models of competitiveness between cities. While it is unclear what basis was used previously to determine a city’s competitiveness, site match rates are quantifiable and unbiased dimension along which all sites and cities can be compared.

Data from city-level classification support a second conclusion about differences in competitiveness: grouping cities by tiers, based on their site match rate, result in significant differences between the tiers. If students are considering internships only in these metropolitan areas, they can determine their general chances of matching by noting the city’s tier. In this way, the tiers further clarify the degree of risk that is associated with applying to a single city or a city within a specific tier. While a student can always alleviate this risk by choosing only high match rate sites, the rank order list and tier system in Table 1 is an adequate guide based on statistically significant differences between the tiers.

Site match rates from city-level data support a third conclusion: the combined site match rate for all APPIC-tracked cities (5.0%) was significantly lower and therefore more competitive, than the combined match rate of sites from the rest of the country (6.3%). As the difference is statistically significant, $\chi^2(1, N = 149833) = 118.04, p < .001$, this result appears to support the conclusion that applicants who limit their chosen sites to one APPIC tracked city decrease their chance for a successful match.

However, given the large variability of site match rates within the cities, applicants’ chances of matching depend more on the sites they choose and less on the city within which they choose to apply. For example, should applicants apply only to the 15 least competitive sites in Chicago, the total combined match rate for those sites, 11.6%, is significantly greater than both the national 4-year match rate of 5.6%, $\chi^2(1, N = 154942) = 331.74, p < .001$, and the 4-year match rate for all sites outside of APPIC-tracked cities of 6.3%, $\chi^2(1, N = 74774) = 220.07, p < .001$. Therefore, it is possible for applicants to apply only to the most competitive city, with the highest recommended number of applications (10 to 15 according to Williams-Nickelson & Prinstein, 2007), and end up with a significantly higher chance of matching. This possibility exemplifies a limitation, discussed further below, namely, city match rates are averages and do not reflect the chance of matching to a city if a student were to apply only to the city’s least competitive sites.

The most profound result from comparing 4-year site match rates across regions is that, with less than one percentage point difference between the most and the least competitive regions, the practical difference between regional match rates is negligible. That is, the South region matches about one more applicant in one hundred, compared to the Northeast region. This difference between site match rates, while statistically significant, is not substantial enough to make broad claims about one region’s relative competitiveness over another. For students who limit their applications to one region, it is fair to say they are no more advantaged or disadvantaged by doing so than a student limited to another region. Similarly, being limited to a region does not appear to change a student’s chances compared to a student who applies across all regions.

These results highlight the greater variability for site match rates within regions, compared to the relatively small differences between regions. Prospective interns should therefore be more concerned with city-level or site-level differences in match rates and can safely ignore the region-level data when selecting internship sites.

**Implications for the Field**

Ripples from the supply/demand crisis impact all involved in the field of psychology. From debating the influence of a student’s

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<th>Region (Match Rate)</th>
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academic training model (Neimeyer, Rice, & Keilin, 2007), to analyzing how many psychologists the market can bear (Rozensky, Grus, Belar, Nelson, & Kohout, 2007), the internship imbalance has members of the field questioning issues as fundamental as the models of training and the worth of psychologists in general. As this critical debate continues, and despite the extensive efforts of organizations like APPIC and APA, internship matches continue to take place in which 20% to 25% of applicants are unsuccessful in the match process. Deciding which direction the field should go is neither clear nor simple. What is clear, however, is that members of the field need this and other research to help inform decisions about how to proceed.

Some have proposed the field should find a way to immediately introduce new internship positions (Hutchings, Mangione, Dobbins, & Wechsler, 2007). Others have warned against merely patching up the supply side of the imbalance (Collins, Callahan, & Klonoff, 2007). Whether an advocate of increasing the quantity of internship positions, or for decreasing the numbers of students entering the pipeline, both sides can benefit from understanding internship site match rates and what the data mean in terms of student preferences for internship.

For those concerned with increasing the number of positions, city and region match rates reflect those geographic areas that are in highest demand. Systemic-level efforts to develop new internship positions could use site match rate data to ensure supply meets demand in low match rate areas of the country. If quality of training is a greater concern, sites with low match rates can serve as examples of those internships that provide the type of training most valued by prospective interns. While accrediting bodies ultimately determine the quality of training needed in internships, students effectively voice their preference for a type of training through their applications. Sites with consistently low site match rates may be standard bearers for the type and quality of training that is in highest demand.

Regardless of the differences in opinion about how the field should respond to the internship crisis, match rates are helpful because they quantify the demand for internships by indicating applicant preference for types and locations of programs. Therefore, these results could help inform the field as a whole as it addresses the internship supply/demand crisis.

The severity of the internship supply and demand imbalance was noted some 10 years ago (Oehlert & Lopez, 1998), although concern about a potential imbalance likely goes back even further. Most current research focuses on systemic level considerations rather than those concerns that may be more salient to students confronting the match each year. While APPIC should be commended for its ongoing efforts to provide applicants with data relevant to the internship match process, the field as a whole should bear the responsibility to conduct further empirical research on the type of information that can be most beneficial to applicants. Possible questions for further study include the following.

Can students predict their chances at matching to more or less competitive sites based on their school’s history of success in the match (i.e., the school’s match rate)? How do internship site match rates conform to student and advisor notions of competitiveness? For the average applicant, how many of his or her 15 recommended applications can reasonably go to first tier sites? How can a student determine if he or she is a strong enough candidate to justify an increase in the number of applications to low match rate sites?

These questions face psychologists who address the problems created by the internship supply/demand imbalance and are amenable to the type of research conducted by the field. The widespread concern is a positive sign that psychologists will seek to achieve a greater understanding of this complex issue through research. Doing so will meet the field’s responsibility to address the crisis faced each year by students involved in the match process.

Implications for APPIC

APPIC’s role in facilitating the exchange of information between internship sites and potential interns is an essential component of the internship selection process (APPIC, 2008c). The association ensures that all students have access to the same information in making decisions about where to apply. The amount of information and the mode of distributing information improved considerably with the introduction of the APPIC web site. Prior to the web site’s development, internship statistics were disseminated through the annual hard copy APPIC Directory. While directory listings included the number of applications completed in the previous year, the web site lists three years of applicant data. Considering the results presented here, publishing site match rates and their normative data may be another significant step toward giving prospective interns the best possible information.

By publishing data related to site match rates, APPIC would continue to support students through a difficult and increasingly competitive process. Annually updating the median match rates, quartiles, and individual site match rates would give students meaningful information about their statistical chances of matching. The data would also inform them of the relative level of competitiveness for their chosen sites. While calculating the site match rate is simple given information currently on the web site, students need additional information (e.g., the national average, standard deviation, and quartiles) to effectively compare match rates between sites. Without such benchmarks and reference points, students cannot appreciate how competitive a site is based on its match rate alone. Additional information, especially quartiles, is critical if students are to avoid applying to an excessive number of highly competitive sites. The data presented here suggest that, while publishing match rates for cities and regions may be helpful to potential interns in their site-selection process, it is even more useful to include descriptive statistics for national match rates and site-level data for all sites.

Research into city match rates revealed one potential problem if APPIC continues to have internship-training directors determine under which city their site should be listed. While the vast majority of sites fall within reasonable proximity of the city they claim, in some cases the site may be 45 miles or more away. APPIC may want to consider limiting the distance of each city’s “metro area.” As a temporary solution, APPIC could consider requesting more distant sites to reconsider their city affiliation.

Perhaps the greatest advancement in the collection and dissemination of information concerns a centralized application service or CAS. The online application service will result in greater accuracy in the data provided to applicants by APPIC. Using information from the CAS, site data (e.g., the number of applicants who
applied for that year, the average number of hours they reported, etc.) may be reported without relying on internship sites to track or calculate such data. The CAS will not only ease the burden on internship sites for tracking and reporting applicant data, but it will also ensure fewer errors in reporting and enable students to base their decisions on information collected directly from the application service. For these reasons, APPIC should continue its trend of innovation and pursue the CAS as planned.

While APPIC currently stands as the most innovative and progressive organization in addressing the internship imbalance, this research suggests a need for expanded support. Three specific efforts by APPIC could further aid students, internship programs, and the field as a whole. First, site-level match rates and descriptive statistics should be reported along with directory information currently provided on the APPIC web site. Second, changes to the ways in which a site’s metro area is defined are suggested to prevent future problems for students and researchers. Lastly, implementation of the CAS is recommended. The CAS offers great hope for streamlining the collection and dissemination of internship match rate data.

Implications for Internship Sites

As internship sites are currently responsible for reporting applicant data on their APPIC web page (APPIC, 2008b), internship training directors and staff should ensure that their web page has the most current and most accurate data available. Applicant strategies for applying to internships that use match rates are only as good as the information from which they are derived. Any errors in reporting the number of applicants or the number of interns will compromise the match rates and thus misinform applicants and others who view the online data. While there is no evidence that internship sites report false information, the system is without a mechanism to ensure data accuracy. Until such a mechanism exists, students who evaluate match rates will depend on internship sites for the best possible information.

Internship site training directors may wish to voice support of the CAS, as it will render the above suggestion moot and decrease the time spent tracking and reporting applicant data. Although there may be concerns that the CAS will result in more applications for sites to review, APPIC’s prior advances in improving the internship application process serve as a record of thoughtful, careful, and innovative solutions that consistently address concerns of all those involved.

Training directors should continue to work with APPIC to ensure the best process for informing applicants and reviewing application materials. The ability of the CAS to track applicant information could prove to be a valuable innovation for internship sites and prospective applicants.

Implications for Graduate Programs

Graduate programs in psychology are under increasing pressure to ensure their students are successful in the match process. With APPIC’s decision to publish each program’s match rate data, prospective graduate students may make decisions about where they apply for graduate training based on that institution’s success in matching their students to internship. It is therefore more necessary than ever for students and graduate schools to work together to ensure a successful internship match.

By understanding site match rates, student advisors can facilitate informed discussions about how to balance high and low match rate sites when helping students decide where to apply. While final decisions about site selection will remain with the student, advisors can be valuable in terms of gauging the student’s relative strength as an applicant and comparing their strengths to the match rates of the sites they have chosen. In this way, student advisors can determine whether or not an applicant’s set of sites is overly competitive (i.e., too many low match rate sites). If so, advisors could suggest that the student include more high match rate sites in their set of potential internships.

Site match rates carry an additional implication for graduate schools in that they provide an additional source of information to track students’ success during the match process. By gathering site match rate data from their students’ previous matches, it is possible for student advisors to determine their program’s typical level of competitiveness (i.e., average site match rate). That statistic could inform recommendations to students regarding the level of risk they should take when selecting their potential internship sites.

Implications for Prospective Interns

Intern applicants stand to gain the most from the informed use of internship match rates. While using this data will not create more slots or balance the supply/demand problem, effective use of the statistics may mean the difference between matching or not. The following recommendations are intended to guide students on how to use match rates most effectively.

First and foremost, applicants should follow the published recommendations regarding the total number of applications to submit. According to Williams-Nickelson and Prinstein (2007), that number is between 10 and 15 applications. When deciding where to send those applications, the applicant should consult the APPIC web site. If aspects of the student’s desired training are offered by a site, the match rate for that site should then be calculated and compared to the site-level data presented above. Should the match rate fall in the top tier (first quartile or roughly between 2 and 4%), the site should be considered highly competitive. As students accumulate sites they are considering, a tally of all site match rates should be kept, noting the corresponding tier. Applicants can then begin to recognize sites for which they are taking additional risk, as compared to sites at which they may have better odds of matching. Ultimately, a student’s set of chosen sites should be balanced to offset highly competitive sites. Tracking match rates will assist potential interns in achieving this balance.

If an applicant is limited to a single geographic region, determining the relative competitiveness of that area is only minimally useful. As statistical analyses of cities and regions show, the match rates of the specific sites, coupled with applying to the recommended number of 10 to 15 sites, are more salient than geographic restrictions alone. As has been previously advised, applying to fewer sites will greatly decrease an applicant’s chances of matching (Keilin, Thorn, Rodolfa, Constantine, & Kaslow, 2000). In 2005, among those who claimed there was a geographic restriction in their site selection process, most indicated that they were either limited to one metropolitan area (36%) or to one geographic region (38%; APPIC, 2006). For those who are limited by geography, it
is more likely that a low number of applications, or low match rates of the chosen sites, will limit the applicant’s chances for matching. The results presented here suggest that, regardless of geographic limitations, students have the best chance of matching if they apply to the recommended number of sites and to as many sites with relatively high match rates as possible. For geographic areas with fewer than 15 sites, students should at least recognize that they are limiting their chances in the match if they do not apply outside that area.

The strategies presented here are intended to increase a student’s chances for matching, but the following caveat is worth noting: “Students may remain unmatched for a variety of reasons (e.g., geographic restrictions, applying to too few sites or to sites that are highly competitive, shortage of half-time positions) and thus are not necessarily unplaced as a consequence of any specific training weaknesses or lack of competence” (Baker, McCutcheon, & Keilin, 2007, p. 289). Refusing to relocate or failing to heed suggestions regarding application strategies does not necessarily make someone a less-competent psychologist. However, not completing an internship may well prevent an otherwise competent person from becoming a psychologist.

As a counter point, some have suggested that internship short- ages will lead to an increasing number of students who are “more concerned with obtaining an internship than with the goodness of fit for their training needs or the needs of the internship site” (Hutchings et al., 2007, p. 280). While it may be tempting for students to focus solely on matching, their success during internship and their training needs are dependent on finding a good fit through the match. For this reason, strategies that take site match rates into account are most helpful only during preliminary site selection. The expectation is that students will make their final site selection decisions based on their training needs and the training opportunities offered by each site.

Limitations of the Data

Site match rates do not account for applicant variables, such as the number of integrated assessment reports completed, the number of practicum hours, or the type of program the applicant attended. Each of these variables is publicly available and may weigh heavily in an applicant’s view of which sites are highly competitive. However, as is the case with practicum hours (Erickson Cornish, 2004; Ko & Rodolfa, 2005), the value of any single applicant variable is subjective and may not be correlated with applicant competence.

The match rate statistic is also limited by not factoring in site variables, such as how many interns later attend postdoctoral fellowships, how far down the rank order list the site needed to go to fill its intern positions, how well the site tracks its applicant data, or if the site allows separate applications for specialty tracks. While the first of these concerns may be as subjective as the applicant variables listed above, the later limitations directly impact the validity of site match rates as a measure of competitiveness. For these reasons, and until further data is published, site match rates should be understood as the best empirical estimate of competitiveness currently available.

An additional limitation of this data concerns the notion of goodness of fit. That is, applicant decisions based on site match rates cannot improve the odds of a match to a site that is clearly a poor fit for the applicant’s experience, interests, theoretical orientation, or training needs. As such, applicants are discouraged from focusing on match rate data to the exclusion of variables that would disqualify the applicant from consideration by the site.

Conclusions

It is up to each student to decide where to apply and how to navigate the internship application process. Site match rates represent an empirically based estimate of the level of risk a student is taking when selecting potential internship sites. In an increasingly competitive field, such risks may be impossible to avoid, but at least they should be understood.

After analyzing the site match rates across four years, statistically significant differences were found in the competitiveness of cities and regions across the country. However, the practical significance of these differences is minimal considering the greater variability of rates within cities and regions. Such a finding lends support to the notion that students should apply to 10–15 total sites and avoid applying to only highly competitive (low match rate) sites. Following this advice will diminish any increased risk due to students’ decisions to limit their applications by geography.

In order for students and advisors to make determinations about the relative competitiveness of potential internship sites, it will be necessary to have access to published site match rate data. Such data will be improved by a centralized application service, an annual analysis of the normative data, and the publication of site match rates and normative data in APPIC’s online directory. Graduate schools and prospective interns would then be able to use such data to make more informed decisions for this critical step in their training. Although paying more attention to internship match rates may not increase supply or decrease demand, it will give some students an edge in, or at least a better understanding of, a complicated and increasingly competitive process.

References


