

**Applicant Factors contributing to Interview Selection, Ranking Determination, and Judgement of “Fit” Among Health Service Psychology Internship Training Programs**

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### **Abstract**

The predoctoral internship training year is the capstone training experience for health service doctoral students. Previous research has explored what applicant characteristics are desired by internship sites and has not thoroughly explored differences between types of sites or criteria importance at different stages of applicant consideration (interview versus ranking). We evaluate perceptions of doctoral student internship applications based on a sample of 186 internship training directors of APA-accredited sites. Results indicate that internship sites were generally consistent in their criteria rankings; however, there were also some differences. Intern applicant “fit” continues to be the most important criteria by which applicants are judged at all stages of consideration. Qualitative analysis found that “fit” varied by site across themes of treatment, applicant, and site characteristics. We discuss implications in their preparation of internship applications. In addition to the practical guidance for students, we discuss how program changes can increase applicant site competitiveness.

*Keywords:* Training, Internship, Health Service Psychology, Graduate Education

### **Public Significance Statement:**

This study examines the importance of different training criteria amassed during doctoral education as they relate to internship application evaluation. It also evaluates differences by sites. Results provide practical guidance for students, clinical supervisors preparing recommendations and advising applicants, and directors of clinical training.

### **Applicant Factors contributing to Interview Selection, Ranking Determination, and Judgement of “Fit” Among Health Service Psychology Internship Training Programs**

The final clinical milestone prior to receiving a doctoral degree in health service psychology is the completion of the predoctoral internship (APA, 2013). Since 1998, the Association of Psychology Postdoctoral and Internship Center (APPIC) has overseen the internship “match”. However, each internship site independently selects applicants for interviews and ranks these applicants using their own criterion.

Previous research has investigated which characteristics make internship applicants the most competitive for predoctoral internships (*e.g.*, Ginkel *et al.*, 2010; Petzel & Berndt, 1980; Rodolfa *et al.*, 1999; Spitzform & Hamilton, 1976). Training directors, along with psychologist staff members, at internship sites consistently rate “fit” as one of the most important evaluated characteristics within the internship application (Ginkel *et al.*, 2010; Rodolfa *et al.*, 1999). However, “fit” is poorly defined and studies show that the emphasis on specific application components shift over time. For instance, the emphasis placed on volunteer experience increased dramatically between 1999 and 2010 while an applicant’s indication that the site was their first choice declined significantly over this same time. Likewise, letters of reference were far less important in the last published study on internship application materials (ranked 12<sup>th</sup> out of 38; Ginkel *et al.*, 2010) compared to studies conducted prior to the implementation of the match process where they were the most important application component (Spitzform & Hamilton, 1976; Petzel & Berndt, 1980). These relative changes in criteria evaluation highlight ways in which the field evolves and underscores the necessity of an updated evaluation summarizing current perspectives on internship application materials.

The last study of internship applications (Ginkel *et al.*, 2010) provided a snapshot of the match process during the height of the “internship crisis” when match rates were the lowest (Baker *et al.*, 2007; Brock *et al.*, 2015). As such, the extent to which these findings generalize to today’s internship process remain unclear. Moreover, the pool of available internship placement has grown steadily, and individual sites may have undergone changes in the rotations they offer or types of interns they prefer. Beginning in 2018, APPIC also enacted a policy that only students from accredited doctoral programs (or that have been granted an accreditation visit) are eligible to utilize the match system. Thus, the results of the previous research on the internship process likely does not reflect current practices at internship programs.

In addition to the changing context of match, a striking limitation of previous research on internship ranking is that training directors have often been combined into a single group composed of all sites that have responded to the study survey. As such, the importance of materials presented within those studies is naturally weighted by the frequency of different site types within the match system (e.g., Veteran Affairs Medical Centers [VA], Counseling Centers, Community Mental Health Centers, Psychiatric Hospitals, etc.) and does not account (or allow) for the potential of discrepancies between distinct clinical settings. This represents a substantial gap in our understanding of selection criterion and “fit” as related to the internship match process. That is, it is difficult to believe that there are no variations in what is valued within internship applications. For instance, a Veteran Affairs site with neuropsychological rotations might be expected to place greater emphasis on prior work with military or veteran clients, as well as assessment-related experience, while a college counseling center or community health center may not, given the relative frequency of those clinical activities and types of clients seen at each site. In short, guidance available to internship applicants about what sites value is

ambiguous and does not provide the nuance needed to meaningfully aid trainees and their supervising faculty in making decisions about how to maximize an applicant's competitiveness and tailor their materials for this critical educational and professional milestone. Understanding these is essential for students and faculty within the broad field of clinical psychology and health service psychology more generally as diverse training experiences and career goals are the norm and not the exception for our students.

This study aims to provide updated information regarding the criterion used by specific types of internships to rank and evaluate applicants at multiple stages in the process and attempts to operationalize the seemingly elusive construct of, "Fit," used by many internships to determine applicant rankings. Specifically, we examined criteria used to evaluate applicants across site types and at two time points during the process: (1) prior to the interview to determine if applicants will receive an invitation for further consideration and (2) after the interview when sites determine rankings. We also qualitatively analyzed descriptions of "fit" across sites to explore ways that sites differ in their conceptualization of ideal candidates. It is hypothesized that fit will remain a critically important aspect of the internship application and that the definition of fit will vary across site type, reflecting unique combinations of application materials.

## **Method**

### *Participants*

The 618 APA-accredited, US-based internship sites listed in the APPIC directory in Spring of 2019 was the population of interest for this study. Internship training directors (TDs) at 610 APA-accredited sites were successfully contacted and asked to participate in our study. The remaining eight sites had invalid email addresses listed on the APPIC website as evidenced by

their return to us as undeliverable. This return of address may be due to several reasons including a typo in the APPIC directory or a change in TD employment which was not updated in APPIC. Of the APPIC sites surveyed, we received 186 responses from TDs (30.5% response rate). This return rate is consistent with other studies in this area (see Ginkel *et al.*, 2010; Petzel & Berndt, 1980; Rodolfa *et al.*, 1999). Further, participation rate was similar across site types represented in the match. Descriptive information about sites and a comparison to the 2020 APPIC survey are provided in Table 1.

### *Instrumentation*

For this study, 40 aspects of application materials were evaluated at pre-interview ( $n = 29$ ) and post-interview ( $n = 11$ ) applicant evaluation stages. Application components were included if they represented a substantive area of the APPIC Application for Psychology Internship (AAPI), or if they were included in previous research on internship application process (e.g., Ginkel *et al.*, 2010; 61% of items within this study). For instance, pre-interview criteria encompassed items that are commonly assessed in an applicant's AAPI application, including applicant "fit", supervision hours, assessment hours, number of publications, and letters of reference. Conversely, post-interview criteria included items that would be assessed by an internship site following an applicant's interview, such as demeanor of applicant, conceptualization of case material, personal reactions, and in-person interview attendance. Items for the post-interview stage were adopted directly from Ginkel et al (2010) or formed from conceptually related pre-interview criteria (e.g., we combined written materials into a single item [essays and cover letter]). At both stages, respondents rated criteria on a scale of 1 (*not at all important*) to 7 (*extremely important*), consistent with the rating scale utilized previous research

examining internship criteria (Ginkel *et al.*, 2010; Rodolfa *et al.*, 1999). The survey was distributed electronically and was administered using Qualtrics.

### *Procedure*

Following approval to conduct research by the Institutional Review Board, TDs identified on the APPIC directory site were sent an email containing a brief description of the research question and the link to the survey. After obtaining consent, respondents completed the survey and were thanked for their participation. Reminder emails were also sent to programs two and a half months following the initial recruitment email. On average, the survey took 15 minutes to complete. TDs were not compensated for participation.

Our analytic plan included both quantitative and qualitative analyses. Prior to any quantitative rankings, participants were asked “What does your internship program look for in applicants with good fit?”. This description of fit, therefore, includes evaluation of applicants at both interview and ranking stages. Qualitative coding was used to examine definitions of site fit, and this coding was inputted into MAXQDA 2020 to generate a cluster map to visually represent these analyses. In hierarchical cluster analysis, distances between the codes represent how similar the codes appeared within the qualitative data. Closer distances between codes means that participants more often shared responses between codes. The use of a spatial clustering map helps group multiple themes into overarching clusters or dimensions, providing a framework for qualitative interpretation (Henry *et al.*, 2015). Quantitative comparison of rankings on pre- and post-interview criteria were planned for all site types with a sufficient sample size using an ANOVA with post-hoc testing. In cases where site types had an insufficient sample, we planned to create groupings by combining responses from conceptually similar sites.

### **Results**

### Qualitative Analysis of Applicant Fit

Qualitative methods were utilized to examine responses from TD when they were prompted to define fit. Content analysis was used to analyze the qualitative responses. A codebook was created, and two separate coders reviewed the data independently with the codebook as a reference. Kappa statistics were calculated to ensure inter-rater consistency and all Kappa values were at or above .82, indicating excellent agreement (McHugh, 2012). Analysis was conducted in MAXQDA 2020. Of the 186 respondents to the survey, most (97.3%;  $n = 181$ ) provided written information to the prompt asking them to define fit at their institution (“What does your internship program look for in applicants with **good fit**”). There were 370 descriptive codes induced from the 181 responses, for an average of 2.04 codes per response. Ten themes were induced from participant responses. Theme description, code frequency, and examples of verbatim responses are provided below.

**Experience in Similar Site.** Experience in a similar site ( $n = 85$ ) was the most common code when individuals described fit, with experience in the site type often being necessary to be considered a “good fit”. Some training directors explained that the prior experience in a similar site helped, “adequately prepare interns for training-related activities.”

**Interest in Similar Site.** Career aspirations for a similar site and interest in training to prepare for a related career ( $n = 50$ ) was also important. Respondents sometimes described exact matches to career trajectory as important (e.g., “interest in working in a rural VA,” “interest in working in a college counseling center”). Others preferred candidates who communicated a “match between our rotations and their career goals.” Finally, some wanted individuals who had interest in their site, but not explicitly for their career.

**Interest in Population.** Another common theme was that applicants should have communicated an interest in working with the population seen at the site ( $n = 31$ ). This could include respondents having noted (e.g., “interest working with an underserved/disadvantaged population” or “interest in working with Chinese immigrants and Chinese Americans”).

**Applicant Interpersonal Skills.** Fit was often described in terms of an applicant’s interpersonal skills, as well as how well applicants appeared to mesh with staff and potential supervisors ( $n = 39$ ). Some training directors were very specific when describing desired interpersonal skills (e.g., “has a sense of humor,” “personality matches with supervisor,” “bright, hardworking”). At other times, responses were less specific, indicating more general descriptors instead (e.g., “strong social skills”).

**Focus on Diversity and/or Social Justice Issues.** Another important aspect for many sites was the level of focus an applicant had on diversity and/or social justice issues ( $n = 36$ ). Some respondents wanted to ensure that applicants “[had] an appreciation and willingness to learn multicultural approaches to therapy.” Others wanted applicants to, “fit with [their] values, mostly around multiculturalism and inclusion.”

**Flexibility and Adaptability.** Coding for this theme reflects statements which indicate that it is important to have trainees who are flexible and adaptable across various situations ( $n = 27$ ). Often, this theme was expressed explicitly, with responses like, “flexible,” and “adaptable.” Other descriptions included, “ability to go with the flow”, “comfort with ambiguity”, and “Interns that will be able to adjust to our sites and supervisor.”

**Trainability.** Another theme was the applicant’s trainability ( $n = 28$ ). This theme was composed of comments like, “eager to learn”, “investment in lifelong learning”, and “ability to

own/admit mistakes”. Some responses specifically referenced supervision (e.g., “openness to supervision” or “willingness to learn/be supervised”).

**Experience with Treatment Population.** Respondents identified experience with the treatment population ( $n = 31$ ) as important. Most responses for this theme included “experience with population” or “experience with [defined specific population of treatment, e.g., sex offenders, veterans, children, etc.]”. Some defined the experience in terms of clinical issue with the population including “suicide management with students,” or “worked with children who experienced trauma,” but generally referenced previous practicum experience with a specific population rather than a clinical issue within that population.

**Therapy/Theoretical Orientation.** Applicant theoretical orientations and/or experience with specific therapeutic interventions ( $n = 25$ ) were also identified. Often (48% of responses with this code), there was a preference for “prior therapy experience especially in EBPs [evidence-based practices]” and a few mentioned specific theoretical orientations. Others were less specific, stating “orientation incorporating importance of therapeutic relationship” was important in considering applicants.

**Information on Application.** A small number of responses focused on information provided in the application ( $n = 14$ ). These responses described the number of client contact hours, letters of recommendation, essays, cover letters, and progress on the applicant’s dissertation.

### ***Code Intersectionality***

Multiple themes were often shared by individuals when they defined fit. To understand intersections between themes, a spatial clustering map was generated via MAXQDA 2020 using hierarchical cluster analysis (Figure 1) (see Henry et al, 2015). A response had a code

intersection if more than one code was present in the qualitative response about fit. For example, in the response “willingness to learn, short-term therapy experiences, University Counseling Center (UCC) setting experience,” *willingness to learn* was noted in the code *trainable*, and *short-term therapy experiences* and *UCC setting experience* was noted as *experience in similar site*. This one response contained two codes, *trainable* and *experience in similar site* and are considered to intersect. To ensure intersection frequencies were meaningful, at least 5% of the respondents ( $n = 9$ ) needed to mention the intersecting codes in their specific responses.

Nine of the ten themes contained significant intersections (all but *Information on Application*). These nine codes aggregated into three distinct clusters: *Applicant Characteristics*, *Treatment Characteristics*, and *Site Characteristics*. The cluster *Applicant Characteristics* contained themes referencing the applicant such as: an applicant’s interpersonal skills, how flexible and adaptable they are, and their focus on social justice and diversity. *Treatment Characteristics* contained the three themes of specifically experience with the treatment population, interest in the treatment population, and the therapy or theoretical orientation. Lastly, *Site Characteristics* included an applicants’ interest in and experience working at a similar site. Interestingly, the *Site Characteristics* cluster had significant intersections with *Applicant Characteristics* and *Treatment Characteristics*, but the latter two clusters did not have significant intersections themselves. Not only did three distinct clusters emerge on how fit is described, but the importance of each cluster varied depending on the type of internship setting. Some examples of the differing value of these clusters in defining fit are apparent in the three largest internship sites in the current study: VA hospitals, University Counseling Centers, and Community Mental Health Centers. For instance, the most often mentioned theme by training directors at VA Hospitals was *Site Characteristics* (49.2%), while at UCCs it was *Applicant Characteristics*

(56.3%). At Community Mental Health Centers, it was more evenly split between the three clusters. Results indicate that fit definitions vary based on internship site setting (Table 4).

### **Quantitative Analysis of Intern Applicants**

The 16 site types listed in the APPIC directory were combined into seven more general site categories: **(1)** Veteran Affairs ( $n = 33$ ); **(2)** University Counseling Centers ( $n = 44$ ); **(3)** Community-based sites ( $n = 28$ ; sites identified as Community Health or Community Mental Health); **(4)** Medical Settings ( $n = 25$ ; sites identified as Academic Health Center, Medical School, or Private/General Hospital); **(5)** Child-focused (Child site or School District); **(6)** Psychiatric Hospitals ( $n = 18$ ; State/Public Hospital or Private Psychiatric Hospital); and **(7)** Other ( $n = 20$ ; Psychological Department, Consortium, Corrections, Private Outpatient, Armed Forces Medical Centers, and Other). The other group includes those sites with lower response rates (i.e., Psychological Department, Corrections, Private Outpatient, Armed Forces Medical Centers), those that did not fit clearly into the general categories described above (i.e., Consortium) or those that identified other as their site type.

Consistent with the methods employed by Rodolfa and colleagues (1999), the relative importance of internship criteria were determined by examining the average rating and rank-ordering this information. For pre-interview criteria (Table 2), the top 10 rated items included applicant “fit”, completed program level milestones, the cover letter, professionalism of materials, number of intervention hours, clarity of goals, essays 2 and 3, and letters of recommendation. At post-interview criteria evaluation (Table 3), the top five rated items included the interview, the professional demeanor of the applicant, diversity in the intern group, the ability to conceptualize case material, and the demonstration of insight. Supplemental materials include all pre- and post- interview stage ranking information separated by site type.

***Pre-Interview Criteria***

A one-way multivariate ANOVA was conducted using a Bonferroni correction (.05/29 criteria = .0017) and post-hoc comparisons to examine differences in ratings across site type for pre-interview criteria,  $F(174,830)=2.32, p < .001$ . Results indicate that approximately a quarter of the criteria ( $n = 6$ ; 21%) differed by site type (Table 2). Bonferroni corrected post-hoc tests (.05 / 7 site types = .007) found that Medical Settings rated essay 2 (*i.e., theoretical orientation*) lower than all site categories except Veteran Affairs and Psychiatric Hospitals, essay 3 higher than all site types except University Counseling Centers, and rated number of publications higher than Other site categories. University Counseling Centers rated essay 3 (*i.e., diverse population experience*) higher than Veteran Affairs, number of assessment hours and number of integrated reports lower than all site categories, and number of publications lower than Veteran Affairs, Child-Focused settings, and Medical Settings. Conversely, Veteran Affairs rated the importance of number of publications higher than Psychiatric Hospitals and Other site categories. Community-based settings rated the importance of fluency in another language higher than Veteran Affairs, University Counseling Centers, and Psychiatric Hospitals.

***Post-Interview Criteria***

A one-way multivariate ANOVA was conducted using a Bonferroni correction (.05/11 criteria = .004) to examine potential differences in ratings across site type for post-interview criteria,  $F(66, 888.34) = 3.37, p < .001$ . Results indicate that less than a quarter of the criteria ( $n = 2$ ; 27%) differed by site type (Table 3). After examining post-hoc Bonferroni corrections (.05/ 7 site categories = .007) found that University Counseling Centers rated the importance of an in-person interview less than all site types. Additionally, Veteran Affairs' rated in-person interview importance less than Community-based settings, Child-Focused settings, Medical Settings, and

Psychiatric Hospitals. University Counseling Centers rated the importance of research productivity less than Veteran Affairs, Child-Focused settings, and Medical Settings. Additionally, Medical Settings rated the importance of research higher than other site categories.

### **Discussion**

This study evaluated the importance of internship application components using a nationally recruited sample of Training Directors (TD) at APPIC listed internship sites. Qualitative analyses evaluated the definition of fit. Application criteria were examined at two timepoints (pre- and post-interview) and differences between site types were evaluated quantitatively. Findings indicated several important implications for internship applicants and faculty supervisors within doctoral programs. First, “fit” between a site and an applicant remains the most important part in considering in who will be extended an interview, with definitions of fit differing in meaningful ways between site types. Second, applicant cover letters and description of internship goals are also valued highly across all sites along with clinical intervention prior to the interview offer; however, surprisingly, and somewhat disconcertingly, these objective factors are also less influential in ranking determinations relative to information obtained during the interview. Third, differences have emerged in the relative importance of certain criteria since the last study on this topic. Finally, there are also some differences in criteria importance across site types at both pre- and post-interview stages.

Broadly speaking, “fit” describes the degree to which an applicant is perceived to match the professional identity and the practice components emphasized at a site. Fit has remained the most crucial aspect of internship applicant evaluations over the past decade (Ginkel *et al.*, 2010). This ongoing emphasis makes a comprehensive understanding of fit critical to an applicant’s success during the internship match. Our qualitative analyses suggest that sites vary in how they

define fit across themes of site, applicant, and treatment characteristics. Some sites emphasize demonstration of interpersonal relatedness, while others are more concerned with the concordance between their training rotations and the applicant's career aspirations. Sites with military and veteran populations, for instance, define fit as reflecting similar experience and long-term career interest in the setting, while public health settings value site, applicant, and treatment components relatively equally.

Some definitions of fit include concepts that are difficult to evaluate objectively and may be difficult for applicants to convey succinctly in their materials (e.g., trainability in applicant characteristics may be harder to assess and convey than theoretical orientation). However, our data suggest the interview process itself may provide an applicant the opportunity to convey these characteristics, although the extent to which information gained during interview is reliable and predictive of success is highly questionable in general (Kreiter & Axelson, 2013). Thus, trainees should consider framing their application materials in such a way as to emphasize their "fit" in a manner consistent with the values of specific training site types and using the interview stage to reinforce these traits. Our results offer explicit, empirically based guidance on how to do so. For instance, the cover letter should contain clear internship goals reflecting clearly articulated areas in which the applicant desires to learn, and the applicant can provide concrete examples of the experiences a particular site provides that can help them achieve this goal both in their cover letter as well as during the interview. Similarly, those writing letters of recommendation may wish to speak explicitly to adaptability, or trainability, particularly for applicants seeking sites which place a greater emphasis on those characteristics (e.g., University Counseling Centers). Another conveyable theme in fit is professionalism and while this may be thought of most frequently as something which is conveyed during the interview, applicants

should be attentive and detail oriented in their applications, avoiding grammar and spelling mistakes. Given the frequent emphasis on evidence-based practice amongst internship sites which consider therapy experience and theoretical orientation as part of fit, trainees will benefit from focus placed by their doctoral programs on promoting and training these skills.

Compared to previous studies on internship applications (Ginkel et al., 2010; Rodolfa et al., 1999), several rankings (both mean scores and item rank) have changed. At the pre-interview stage, clarity of training goals and completion of competency exams have both increased in ranked importance. Number of therapy intervention hours is ranked higher than it was in the survey conducted by Ginkel et al (2010); however, in the Ginkel et al survey the item assessing intervention hours also combined intervention and assessment hours which means these findings may not be directly comparable to the current study. Conversely, letters of reference have continued to decline in importance along with graduate grade point average. When sites were asked about the importance of criteria for ranking, diversity had a substantially higher mean score than previously observed, potentially reflecting an awareness of the need for psychology to address the field's lack of diversity (Callahan et al., 2018). Other post-interview criteria were also slightly lower compared to scores observed in Ginkel et al. (2010)'s study. It will be important for future studies to investigate the degree to which these changes (and rankings themselves) relate to meaningful differences in decision making about applicants.

Moreover, applicants should be aware that approximately half of the ranked criteria differing for pre-interview require earlier planning in the graduate career to achieve (*i.e.*, assessment and research production). While some of these were valued low at Counseling Centers, other sites more likely to receive applications from clinical program students (*e.g.*, Medical settings) gave them substantially more weight in the evaluation process. This means it

may be easier to transition away from sites placing low value on those components at a later stage of training if an individual is undecided about their professional goals or employment objectives. Thus, we recommend a planful approach to obtaining necessary research and assessment experiences for individuals wishing to pursue internship training in a hospital or academic medical center setting. Starting early, these experiences ensure a maximum amount of flexibility in the internship application. Relatedly, we believe it would be helpful for programs to design course schedules to prioritize early engagement in research and assessment coursework to maximize a trainee's competitiveness at these types of internship sites. Conversely, while assessment and research will require greater time commitments earlier in programs, other highly ranked components, which contained between site variability, are easier to adapt during the time of application (e.g., essays).

Findings related to research also warrant additional attention. During both pre- and post-interview stages of applicant evaluation, research (*i.e.*, Essay 4, publications, and presentations) was rated near the bottom of all ranked criteria overall; however, this pattern differed somewhat between site types. Understandably, research may be viewed as less central to the predoctoral internship experience when compared to other clinical criteria (e.g., intervention hours or clarity of internship goals). However, in the age of evidence-based practice (APA, 2006), it is curious to us the degree to which some sites value research experience so much less than other criteria. Exemplifying this concern, publications (reflecting a more intensive and polished research product) are ranked lower in importance than presentations, which undergo substantially less peer review. Likewise, publications also rank only slightly higher than professional organization affiliation, which may require nothing more than a fee to join.

While ranked lower than many other criteria, we believe research should translate into clinical practice and training. Research skills might, for instance, translate well into program evaluations as part of evidence-based treatment promotion (APA, 2006). Incorporating empirical literature reading into pre-doctoral internship curriculum is also useful for training (Callahan & Watkins, 2018; Stewart & Chambless, 2007), and research skills are also necessary for interns to fully read and appreciate the findings of those articles. Given the frequent desire for training in evidence-based practices observed in qualitative coding (i.e., *Therapy/Theoretical Orientation*) and that favorable views of research are also related to positive perceptions of evidence-based treatments (Cooper *et al.*, 2008), the reason for a lack of emphasis on research production seems somewhat unclear. Tangible research products may not be the only way in which trainees can demonstrate this competence. However, it is a reasonable presumption that these products are a concrete proxy of these skills and are a readily available metric upon which sites can evaluate these abilities within intern applicants. One potential implication of our findings is that the low value on research as an evaluative criterion for applicants within certain settings (most especially university counseling centers and community-based settings) may indicate research is viewed as not very meaningful to the clinical work conducted there, potentially reflecting a research-practice divide (Stricker & Goldfried, 2019).

Another important finding from this study relates to a difference between sites during post-interview ranking decisions. Namely, site differences in the ranking of in person interview attendance highlights an important area of future research given its relationship to application costs, and the difficulty that such ranking places on economically disadvantaged students. We question if in person interview attendance itself should be considered so highly relative to other application materials given the poor reliability and predictive validity of interviews themselves

(Kreiter & Axelson, 2013). Because virtual interviewing and recruitment is recommended exclusively for the 2021-2022 applicant class (APPIC, 2020), importance of this criterion is likely to change at least in the short-term during disruption caused by COVID-19 and represents a timely topic for future research (Bell et al., 2020).

This study should also be taken within the scope of its limitations. First, not all training directors responded to our survey request underscoring that these findings may not be entirely generalizable to all sites. Nonetheless, our response rate consistent with prior studies in this area and was generally representative of the different types of internship placements in the match. Second, results indicate that variations emerged on how applicants are evaluated. These site-type differences may also reflect the mix of training rotations and experiences available within similar internships. As such, a productive area for future research will determine if the specific training experiences provides a better explanation of a site's preferences than the site-type itself. For instance, a site with a neuropsychological track will value assessment highly regardless of site type and is more common in medical settings than counseling centers. Our use of a site type-based approach reflects how the APPIC directory is often searched by applicants and that, rotation specific information would likely be sought within the context of a specific training environment. Third, relative to the portion of sites listed on the APPIC directory, some common site types were under-represented (e.g., consortiums). Other site types with only a few listings (e.g., school districts or armed forces medical centers) had limited inclusion in our study. Accordingly, our findings should be generalized in a more restricted manner to settings not well represented and should be limited for the 'other' site type given the homogenous collection of internship sites which comprise it. Lastly, future research will benefit from measuring how internship applicant characteristics relate to their subsequent performance/competence, given the

nascent stage of research on performance-based metrics (Ingram et al., in press). Additionally, research is needed on potential systematic biases which occur within the match process and on the degree to which rating differences reflect meaningful decision-making differences by TDs.

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Table 1.  
*Descriptives of Internship Site Type Represented in Sample at Time of Study*

Site Type	2020 APPIC Listing		Sample Descriptive Information									
	n	%	Our Study			# of Staff		# Applications		# of Interns		Offer Postdoc
			n	%	% APPIC	M	SD	M	SD	M	SD	%
University Counseling Center	164	21.1	56	23.2	34.1	9.7	5.0	68.1	31.5	3.5	0.9	60.7
Veteran's Affairs	119	15.2	47	19.5	39.5	28.5	22.0	102.7	69.8	5.5	2.9	72.3
Community Mental Health Center	90	11.5	31	12.8	34.4	8.6	4.3	76.5	34.8	4.9	3.0	74.2
State Hospital	66	8.4	20	8.3	30.3	15.5	6.6	80.0	56.7	4.6	2.2	60.0
Consortium	62	7.9	9	3.7	14.5	23.7	22.0	88.2	69.5	7.2	3.2	44.4
Academic Health Center	41	5.2	24	10.0	58.5	22.6	22.1	171.7	84.1	7.5	3.4	77.4
Child Setting	38	4.8	16	6.6	42.1	21.4	20.8	106.9	77.3	4.6	2.6	87.5
Medical School	37	4.7	6	2.9	16.2	26.2	11.9	152.5	32.0	6.3	2.9	83.3
Corrections	31	4.0	6	2.5	19.4	6.3	2.8	70.0	55.2	3.7	0.8	83.3
Other Site type	28	3.6	4	1.7	14.3	6.6	4.5	49.0	46.1	2.8	1.6	80.0
Private Outpatient Clinic	28	3.6	5	2.1	17.9	8.6	3.0	91.6	42.3	3.8	0.4	100.0
Private General Hospital	22	2.8	1	0.4	4.5	8.0	-	40.0	-	3.0	-	100.0
Private Psychiatric Hospital	16	2.0	5	2.1	31.3	32.0	14.4	195.0	38.0	6.4	1.3	60.0
School District	14	1.8	3	1.2	21.4	12.3	2.5	75.0	13.2	5.7	2.0	66.7
Armed Forces Medical Center	10	1.2	1	0.4	10.0	10.0	-	35.0	-	6.0	-	100.0
Community Health Center	7	0.8	6	2.4	85.7	12.5	8.0	110.8	44.5	4.3	1.3	83.3
Psychology Department	5	0.6	1	0.4	20.0	11.0	-	95.0	-	-	-	100.0
Total	778		241									

*Note.* APPIC percentages taken from the 2020 Internship APPIC Directory Statistics. Mean ratings are reported for the number of on-site positions, number of staff, total applications received, and number of intern spots for each site type. Postdoctoral training offerings include formal positions offered through APPIC, as well as informal training experiences and includes sites where positions may occur on a semi-regular basis depending upon funding as well as an annual basis.

Table 2.  
Pre-Interview Criteria Differences Between Types of Internship Sites

Applicant Criteria	M	SD	ANOVA	Site Types Differences
Applicant Fit	6.44	0.70	$F(6, 218) = 2.65$	
Completed Competency Exam	6.33	1.01	$F(6, 218) = 1.99$	
Completed Coursework	6.09	1.22	$F(6, 218) = 2.10$	
Professional Presentation of Application Materials	5.92	1.03	$F(6, 218) = 1.21$	
Cover Letter	5.90	1.18	$F(6, 218) = 3.29$	
Number of Intervention Hours	5.86	0.92	$F(6, 218) = 1.35$	
Clarity of Goals for Internship	5.79	1.06	$F(6, 218) = 1.59$	
<b>Essay 1 (Autobiographical Essay)</b>	<b>5.76</b>	<b>1.11</b>	<b><math>F(6, 218) = 6.63^*</math></b>	$UCC_M=6.3, SD=0.8 > VA_M=5.5, SD=1.2^{MD .73}, AHC_M=5.1, SD=1.2^{LG 1.10}, PH_M=4.9, SD=1.5^{LG 1.09}$
<b>Essay 3 (Experience/Training with Diverse Populations)</b>	<b>5.60</b>	<b>1.15</b>	<b><math>F(6, 218) = 9.16^*</math></b>	$UCC_M=6.3, SD=0.8 > VA_M=5.4, SD=1.0^{LG .97}, AHC_M=5.0, SD=1.0^{LG}, PH_M=4.5, SD=1.4^{LG}, SH_M=5.0, SD=1.3^{LG 1.43}$
Letters of Recommendation	5.51	1.09	$F(6, 218) = .52$	
Experience with a Specific Population	5.34	1.14	$F(6, 218) = 3.53$	
Essay 2 (Theoretical Orientation)	5.04	1.26	$F(6, 218) = 2.11$	
Number of Supervision Hours	4.93	1.22	$F(6, 218) = 2.17$	
<b>Number of Assessment Hours</b>	<b>4.90</b>	<b>1.52</b>	<b><math>F(6, 218) = 21.40^*</math></b>	$UCC_M=3.2, SD=1.5 < VA_M=5.3, SD=1.1^{LG 1.53}, CMH_M=5.4, SD=1.2^{LG 1.52}, AHC_M=5.4, SD=0.8^{LG 1.82}, PH_M=5.3, SD=1.5^{LG 1.33}, SH_M=5.6, SD=1.0^{LG 1.8}, Other_M=5.6, SD=$
Similarity of Practicum Settings with Site	4.83	1.24	$F(6, 218) = 2.98$	
<b>Number of Integrated Reports</b>	<b>4.63</b>	<b>1.64</b>	<b><math>F(6, 218) = 21.40^*</math></b>	$UCC_M=2.9, SD=1.6 < VA_M=5.0, SD=1.4^{LG 1.44}, CMH_M=5.1, SD=1.1^{LG 1.63}, AHC_M=5.1, SD=1.4^{LG 1.50}, PH_M=4.9, SD=1.8^{LG 1.22}, SH_M=5.4, SD=0.8^{LG 2.00}, Other_M=5.5, SD=$
Doctoral Program's Reputation	4.49	1.31	$F(6, 218) = 2.72$	
Grade Point Average	4.20	1.38	$F(6, 218) = .75$	
Informal Input for Applicants' Advisor/Supervisor	4.18	1.60	$F(6, 218) = 1.06$	
Relevant Volunteer Experience	4.15	1.32	$F(6, 218) = 1.34$	
Theoretical Orientation	3.94	1.57	$F(6, 218) = 3.05$	
Community Outreach	3.89	1.27	$F(6, 218) = 2.55$	
Completed Dissertation Defense	3.82	1.50	$F(6, 218) = 1.23$	
<b>Professional Presentations</b>	<b>3.63</b>	<b>1.44</b>	<b><math>F(6, 218) = 4.33^*</math></b>	$UCC_M=3.0, SD=1.3 < AHC_M=4.5, SD=1.0^{LG 1.22}$
<b>Essay 4 (Research Experience and Interests)</b>	<b>3.62</b>	<b>1.42</b>	<b><math>F(6, 218) = 5.13^*</math></b>	$UCC_M=2.9, SD=1.5 < VA_M=4.1, SD=1.3^{LG .92}, Other_M=3.9, SD=1^{MD .77}$
<b>Number of Publications</b>	<b>3.22</b>	<b>1.73</b>	<b><math>F(6, 218) = 9.33^*</math></b>	$UCC_M=2.2, SD=1.1 < VA_M=3.8, SD=1.6^{LG 1.19}, AHC_M=4.5, SD=1.3^{LG 1.96}, Other_M=3.5, SD=1.4^{LG 1.03} \text{ and } CMH_M=3.0, SD=1.4 < AHC_M=4.5, SD=1.3^{LG 1.10}$
Professional Affiliations	3.20	1.34	$F(6, 218) = 1.77$	
Clinical Peer Supervision	2.94	1.32	$F(6, 218) = 1.16$	
<b>Fluency in a Language other than English</b>	<b>2.88</b>	<b>1.66</b>	<b><math>F(6, 218) = 10.64^*</math></b>	$CMH_M=4.4, SD=1.6 > UCC_M=2.5, SD=1.5^{LG 1.26}, VA_M=2.0, SD=1.3^{LG 1.66}, SH_M=2.3, SD=1.4^{LG 1.43}, PH_M=2.2, SD=1.4^{LG 1.50} \text{ and } VA < AHC_M=3.5, SD=1.6^{LG 1.01}$

Note. Applicant criteria were rated on a 7-point Likert scale ranging from 1 (not at all important) to 7 (extremely important). Post-hoc analyses utilized a Bonferroni of  $p \leq .007$ , \* Met Bonferroni correction of  $p \leq .001$ . Cohen's effect sizes are noted in superscript by post-hoc comparisons, SM = small ( $d > .2$ ), MD = medium ( $.5 \leq d < .8$ ), LG = large ( $d \geq .8$ ). VA = Veteran Affairs, UCC = University Counseling Center, CMH = Community Mental Health Center, SH = State Hospital, PH = Private Hospital/Medical School, AHC = Academic Health Center. Means and standard deviations are provided separately for each setting in which evaluative criteria were rated differently.

Table 3.

*Post-Interview Criteria Differences Between Types of Internship Sites*

Applicant Criteria	M	SD	ANOVA	Site Types Differences
Interview	6.41	0.77	$F(6, 230) = 2.94$	
Professional Demeanor of Applicant	6.37	0.78	$F(6, 230) = 1.00$	
Diversity in Intern Group	6.16	0.93	$F(6, 230) = 1.86$	
Conceptualization of Case Material	5.94	0.85	$F(6, 230) = 2.22$	
Ability to Demonstrate Insight	5.94	0.90	$F(6, 230) = .775$	
<b>Essays and Cover Letter</b>	<b>5.80</b>	<b>0.97</b>	<b><math>F(6, 230) = 3.77^* \text{ ns}</math></b>	
Clinical Experience	5.72	1.03	$F(6, 230) = .71$	
Personal Reactions to Applicant	5.64	1.09	$F(6, 230) = .60$	
Letters of Recommendation	5.31	1.21	$F(6, 230) = .19$	
<b>In Person Interview Attendance</b>	<b>4.46</b>	<b>2.23</b>	<b><math>F(6, 230) = 27.86^*</math></b>	$UCC_{M=2.1, SD=1.8} < VA_{M=4.0, SD=2.1}^{LG 1.00}, CMH_{M=5.5, SD=1.3}^{LG 2.21}, ACH_{M=6.0, SD=1.2}^{LG 2.58}, PH_{M=5.9, SD=1.2}^{LG 2.55}, SH_{M=5.6, SD=1.4}^{LG 2.19}, Other_{M=5.2, SD=2.0}^{LG 1.65}$ and $VA < CMH^{LG .85}, AHC^{LG .85}$
<b>Research Productivity</b>	<b>3.06</b>	<b>1.66</b>	<b><math>F(6, 230) = 10.13^*</math></b>	$UCC_{M=1.9, SD=1.0} < VA_{M=3.6, SD=1.7}^{LG 1.19}, AHC_{M=4.5, SD=1.4}^{LG 2.25}, Other_{M=3.4, SD=1.5}^{LG 1.16}$ and $CMH_{M=3.0, SD=1.5} < AHC^{LG 1.12}$

Note. Applicant criteria were rated on a 7-point Likert scale ranging from 1 (not at all important) to 7 (extremely important). \* Met Bonferroni correction of  $p \leq .004$ . Significant post-hoc analyses met a Bonferroni corrected alpha of  $p \leq .007$ . Cohen's effect sizes are noted in superscript by post-hoc comparisons, SM = small ( $d > .2$ ), MD = medium ( $.5 \leq d < .8$ ), LG = large ( $d \geq .8$ ). Means and standard deviations are provided in subscript separately for each setting in which evaluative criteria were rated differently. VA = Veteran Affairs, UCC = University Counseling Center, CMH = Community Mental Health Center, SH = State Hospital, PH = Private Hospital/Medical School, AHC = Academic Health Center.

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Table 4.

*Categories and subcategories of internship setting types*

General/Specific Setting Type	Frequency
<b>Military-Related</b>	<b>47</b>
Veterans' Administration Medical Centers	46
Armed Forces Medical Center	1
<b>Academic/Educational</b>	<b>87</b>
University Counseling Centers	53
Academic Health Centers	24
School Districts	3
Psychology Departments	1
Medical Schools	6
<b>Public Health</b>	<b>84</b>
State/Public Hospitals	21
Private Hospitals	5
Community Health/Mental Health Centers	37
Child Mental Health Providers	16
Private Clinics	5
<b>Prison/Correctional Facilities</b>	<b>6</b>
<b>Consortiums</b>	<b>9</b>
<b>Other</b>	<b>5</b>