The Virtual Interview Experience: Advantages, Disadvantages, and Trends in Applicant Behavior

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Introduction: Residency programs and applicants were forced to hold virtual interviews during the 2020–2021 application cycle. Inability to evaluate a program and/or applicant in person has intangible drawbacks. However, there are obvious advantages: cost, convenience, and comfort. Do the advantages outweigh the disadvantages? How have applicant behaviors changed to learn about programs in a virtual-only interview process?

Methods: A survey was distributed to 302 applicants to a single plastic surgery residency program during the 2020 application cycle. Demographics, social media presence and utilization, and experience with the virtual application and interview process were analyzed. A 2018 survey from our institution was compared with a subset of questions for longitudinal analysis.

Results: Seventy-six respondents (25.2%) completed the survey. Most applicants (88.2%) spent less than $1000 during the interview and application cycle. Over half (56.6%) did not receive letters of recommendation from outside their home program. A significant minority (27.6%) of applicants attended more than one interview in a single day. Compared to 2018, applicants in 2021 were significantly more likely to access alternative digital resources (forums/discussion boards, social media, and podcasts) when learning about programs. Average number of interviews remains in the range of pre-COVID studies, but the percentage of interviews attended increased.

Conclusions: Applicants spent substantially less money on interviews and relied on alternative digital sources to learn about residency programs. This study objectively quantifies the advantages of virtual interviews. Disadvantages include inability to assess “fit” and lack of nonverbal communication. (Plast Reconstr Surg Glob Open 2022;10:e4677; doi: 10.1097/GOX.0000000000004677; Published online 22 November 2022.)
A recent survey of PRS program directors analyzing attitudes around the virtual interview process concluded that while 68% of respondents were satisfied with the virtual experience, three-fourths of them still preferred in-person interviews. Do applicants believe the benefits of virtual interviews outweigh the downsides? The answer to this question may differ depending on the specialty. One survey of medical students found the majority considered nonsurgical specialties as more conducive to virtual interviews over surgical specialties. Given the unheralded nature of the 2020–2021 application cycle, an investigation into plastic surgery applicant attitudes regarding different aspects of the application and interview cycle is warranted. In this study, we aimed to explore the applicant experience with the virtual interview experience and the factors students valued most when assessing programs.

METHODS

A list was generated of all individuals who applied to a single institution via the Electronic Residency Application Service during the 2020 application cycle. The total number of applicants was 302. After IRB approval, a survey was created (www.surveymonkey.com, Palo Alto, Calif.) and distributed via email to evaluate the applicant's demographics, social media presence and utilization, and experience with the 2020–2021 application and interview process.

A subset of the survey was carried over from prior studies at our institution, specifically categorizing the applicant’s social media presence and what resources the applicant accessed when researching a program. These questions were analyzed longitudinally to characterize any trends in applicant behavior during the years 2018–2021.

Applicant characteristics and survey responses were described using means ± standard deviations for continuous variables and percentages for categorical variables. Survey responses from 2018 and 2021 were then contrasted using Pearson’s chi-square statistic to determine independence of categorical outcomes with $\alpha = 0.05$. All statistical analyses were performed with R Statistical Software (version 1.1.447; R Foundation for Statistical Computing, Vienna, Austria).

RESULTS

Seventy-six responses were recorded out of 302 recipients, for a 25.2% response rate. Of the responses, 70 respondents (92.1%) were from US-accredited medical schools in 29 different states/districts, and six (7.9%) were international medical graduates. Average age was 28.5 years old (25–42). There were 44 applicants (57.9%) who identified as female, 25 (32.9%) as male, and one (1.3%) as transgender female. Applicants identified predominantly as White (60.5%), followed by Asian American/Pacific Islander (11.8%), Hispanic/Latino (7.9%), Black/African American (5.3%), and Asian American/Pacific Islander (5.2%), while some applicants (9.2%) chose not to disclose their racial identification.

Takeaways

**Question:** The transition to virtual residency interviews has significantly altered the dynamics of the residency application process. Are there objective advantages and disadvantages to the virtual process compared with in-person interviews?

**Findings:** Of all applicants, 27.6% attended more than one virtual interview in a single day. Applicants are significantly more likely to follow a PRS residency Instagram account in 2021 compared to 2018. Nearly 90% of applicants spent less than $1000 on interview-related expenses.

**Meaning:** Applicants spent significantly less on interview-related expenses and increasingly rely on alternative digital resources to learn about residency programs. Further optimization of virtual interviews may be beneficial to programs and applicants.
receive a letter of recommendation from faculty outside of their home institution.

Applicants on average received 16.6 interview offers from all specialties and 13.5 from plastic surgery programs. Applicants attended on average 14.2 interviews from all specialties and 11.5 plastic surgery interviews (Table 1). There were 21 applicants (27.6%) who reported attending more than one interview in a single day. Additionally, 27 applicants (35.5%) traveled to another city for the purpose of assessing a residency program. The match rate for US medical school seniors was evaluated. The 2020 match rate was 76.3%, and the 2021 match rate was 78.2%. Finally, the home program match rate was assessed. In 2020, 31 of 180 students (17.2%) matched at their home program. In 2021, this increased to 46 of 185 students (24.9%) which trended toward statistical significance (P = 0.074).

### 2018–2021: Social Media and Applicant Resource Utilization Trends

Applicants were asked a subset of questions identical to a prior 2018 survey from our institution. These results were compared for longitudinal analysis. In terms of social media accounts, applicants predominantly favored Instagram over Twitter, Facebook, or other platforms (Table 2). Applicants were significantly more likely in 2021 to have a Twitter account compared to 2018, but less likely to have a Snapchat or LinkedIn account. When asked whether applicants follow a PRS residency social media account, there was an increasing trend from 2018 to 2021. Applicants were significantly more likely to follow a PRS residency Instagram account in 2021 (Table 3).

Applicants continue to strongly prefer the program website (92%), mentor/faculty at their home institution (78%), and residents (74%) as the top-three rated resources when exploring residency programs (Table 4). Applicants were more likely to learn about programs via online forums or discussion boards, PRS residency social media accounts, and podcasts in 2021 compared to 2018. There was a strong utilization of the American Council of Academic Plastic Surgeons-sponsored meet and greets (64.5%), a new program designed during the transition to virtual interviews. Applicants were then asked what content they value most on a program’s social media account. Five categories (clinical experience, educational content, research/publications, resident life, and video content) were ranked from 1 being most important to 5 being least important (Fig. 4). Clinical experience and resident life were the most valued, and research/publications the least.

Finally, applicants ranked the importance of nine variables (1 = most important and 9 = least important) when formulating a rank list: location (cost of living, size of city, etc.); faculty interaction; research focus; clinical experience; program ranking; presence of fellowship; fellowship matches; and social media presence. Four of these were highly valued: clinical experience, faculty interaction, resident interaction, and location (Fig. 5).
DISCUSSION

This study quantifies the benefits of the virtual interview process from the perspective of the integrated plastic and reconstructive residency applicant. It also demonstrates the importance of a program’s “digital image,” including not only the residency program website, but also the Instagram account, representation on online forums, and podcast interviews. This highlights the fact that pathways for applicants to learn about residency programs are evolving, and programs need to adapt to ensure they meet applicants where they are—in the digital world.

The program website, faculty mentors, and residents are still the most valued resources when learning about programs. However, there is a significant increase in applicants relying on alternative digital resources—namely, Instagram, online forums, and podcasts. Although this may be a natural conclusion for this “millennial” applicant pool, this is the first objective description of these trends. Programs should focus their social media content on the clinical experience and day-to-day life of residents, with less priority placed on topics of research and educational content. Singh et al. provide a list of common interview questions and how programs can address these questions via social media.

Perhaps, the greatest benefit to applicants in the virtual interview era is the substantial cost savings. In our survey, nearly 90% of applicants spent $1000 or less throughout the application and interview cycle. With an average of 14 total interviews and 12 PRS interviews, the maximum cost-per-interview is $71. Prior to virtual interviews, studies have reported an average cost of $5000–$14,333 to attend between 10.2 and 19 interviews—a minimum average cost-per-interview of $500. This conservative estimate equates to a cost savings of roughly eight times that of in-person interviews, consistent with previous literature.

![Fig. 4. Applicant preference regarding residency program’s social media content (1 = most important and 5 = least important).](image)

![Fig. 5. Factors that applicants consider when formulating a rank list (1 = most important and 9 = least important).](image)
In this study, 27.6% of the applicants were able to attend more than one interview in a single day. This is only possible with virtual interviews. A potential drawback is this tactic disproportionately benefits top applicants. The highly competitive nature of plastic surgery residency results in applicants often applying to every program indiscriminately in the hopes of securing more interviews.\textsuperscript{18} Previously, top applicants with numerous interviews would have to cancel interviews either due to time conflicts or cost. With virtual interviews, applicants can essentially be in “two places at once” thereby increasing their chance of a successful match.\textsuperscript{21} This could theoretically result in an increase in the number of interviews accepted and/or attended. However, the number of virtual interviews attended in our study falls within the range of previously reported numbers.\textsuperscript{10,20} The key difference is in the average percent of interviews attended. These data show that applicants were able to attend 85% of interviews offered, which represents a substantial increase from previously reported attendance percentages closer to 70%.\textsuperscript{12,22} Virtual interviews did not impact the match rate of US senior medical students. Applicants who matched at their home institution increased by 7.7% from 2020 to 2021, though this did not reach statistical significance ($P = 0.07$).

The disadvantages of virtual interviews are mostly intangible but significant. Assessing the elusive “fit” of a program with a given applicant is easier to accomplish in person, but no formula or spreadsheet can quantify this. Programs have increased their social media presence,\textsuperscript{23} held resident “meet and greets,” and provided information to applicants that would traditionally be delivered during the in-person interview.\textsuperscript{24,25} These changes all seek to help students gain a better perspective of a program, but often are superficial in nature. Lost in the virtual interview is the intuitive feel an applicant gains when, in the program’s city, interacting with the residents in a social setting and having face-to-face conversations with faculty. Literature has also demonstrated that applicants and program directors prefer in-person interviews compared to virtual.\textsuperscript{15,26}

Insight into these intangible aspects is provided when applicants were asked what factors they consider most important when formulating a rank list. Of nine variables, the four highest were clinical experience, faculty interaction, resident interaction, and location. Arguably, only clinical experience can be adequately communicated via digital means. The physical and nonverbal communication with faculty and residents, and exploring the surrounding city of a program cannot be replicated virtually. This is highlighted by the fact that 35.5% of applicants chose to travel to another city for the purpose of evaluating a residency program.

The limitations of this study should be considered. The response rate is low at 25%, and given the extreme circumstances of the 2020–2021 application cycle in the midst of a global pandemic, caution should be taken when applying these generalizations to subsequent applicant pools. The survey was anonymous, and therefore, nonresponder analysis was unable to be performed. The survey is also self-reported and susceptible to response bias. This survey was distributed after the last interview, but prior to submission of rank lists to limit bias in responses by applicants who may have had an unsuccessful match. This survey was developed with input from applicants, but was not validated, nor was any pilot-testing performed. Further studies should investigate whether the virtual interview positively or negatively affected this applicant pool, and future surveys would benefit from pilot-testing and validation to provide a more robust analysis.

**CONCLUSIONS**

Virtual interviews offer a number of tangible advantages: an eight-fold cost savings compared to in-person interviews, the comfort of interviewing in a familiar location, and convenience of attending multiple interviews without the impendence of travel time or cost. These advantages should be weighed against the disadvantages, mainly the assessment of “fit” between an applicant and program. Programs should focus on their digital image by ensuring updated website information and increasing interactions on Instagram, forums/discussion boards, and podcasts.

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