


# Virtual interviewing in the COVID-19 era: A survey of graduate program directors

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## Abstract

**Purpose/Objective:** Due to the coronavirus pandemic, virtual interviews became a mainstay of graduate dental and medical education selection processes. To gain a handle on how to navigate lingering uncertainties about how interviews should be conducted in the future, this study examined the benefits and pitfalls of the virtual interview process (VIP) and assessed program plans to implement in the next interview cycle.

**Methods:** An anonymous online survey, for completion by one program representative (director or associate director), was sent to graduate medical education (GME) and advanced dental education programs at West Virginia University ( $N = 74$ ).

**Results:** Fifty-two (52) of the programs (70%) completed the survey. Zoom was the most frequently used interview platform (78.8%). Approximately two thirds (65.4%) of the interviewers thought VIP allowed the program to promote the university, the school, and their program and also reported experiencing video-conferencing fatigue. About six in 10 perceive VIP can introduce bias in selecting applicants (59.6%) and potentially disadvantage some applicants (67.3%). Compared to the previous in-person cycle, 67.4% of programs invited more applicants, and 73.1% interviewed more applicants. Regarding the 2021–2022 interview cycle, 55.8% of programs plan to offer either an in-person or VIP, while 7.7% plan to keep their process completely virtual.

**Conclusion:** Graduate programs in this study demonstrated the indispensability of technology in transitioning from in-person to virtual interviews during COVID-19 pandemic. VIP has several advantages and disadvantages; this style of interview is forecasted to have a presence in applicant selection in the future.

## KEYWORDS

COVID-19, dental education, graduate medical education, survey, virtual interview

## 1 | INTRODUCTION

The coronavirus (COVID-19) pandemic compelled graduate medical education (GME)<sup>1–3</sup> and advanced dental education programs<sup>4</sup> to suspend in-person and implement virtual interviewing in the 2020–2021 cycle. Virtual meetings replaced the traditional in-person interviews due to travel restrictions, stay-at-home, or shelter-in-place requirements, and social distancing guidelines put forth by the Centers for Disease Control and Prevention. The Coalition for Physician Accountability,<sup>3,5</sup> which includes the Accreditation Council for Graduate Medical Education, recommended all programs commit to online applicant interviews for the entire 2020–2021 cycle and then again in the 2021–2022 cycle. Due to ongoing uncertainties and impact of the pandemic on applicant interviewing and selection processes, program directors are pondering if the method of interviewing should return to in-person or if virtual interviewing has a permanent role in the GME and advanced dental education recruiting process.

Although virtual interviews for GME have been performed in the past, limited data have been published about the virtual interview process (VIP) in the era of the COVID-19 global pandemic.<sup>6–9</sup> Previous studies identified VIP advantages such as improved cost effectiveness, improved ease of scheduling, and increased applicant pool.<sup>6–9</sup> These studies also delineated virtual interviewing disadvantages, such as applicants' inability to visit campus and interact personally with program personnel.<sup>6–9</sup> The importance of the interview day to applicants' rank list selections has been documented; hence feedback about the benefits and pitfalls of VIP versus in person interviews is of interest to GME programs.<sup>10,11</sup>

Utilizing an online questionnaire, the objective of this study was to seek graduate program directors' feedback about VIP at our tertiary care institution by examining how individual programs instituted virtual interviews, assessing overall experiences with virtual interviewing, and ascertaining a plan to retain or eliminate VIP options in the future.

## 2 | METHODS

In February 2020, after local institutional review board's approval (Protocol #2101220183), an anonymous voluntary 25-question online survey was sent to directors and associate directors of GME and advanced dental education programs ( $N = 74$ ) at West Virginia University. The aim of this study was to assess virtual interview experiences and identify future planned interview format in light of the COVID-19 global pandemic.

The questionnaire, comprised of multiple-choice and short-answer items, was developed collaboratively by the authors who have specific expertise in medical or dental education. The Delphi technique was employed to reach group agreement on survey questions. Directors and associate directors received a transmittal email describing study purpose and containing link to the survey, which was housed in the institutional secure online environment Study Observe Learn Engage (SOLE) portal. To bolster survey participation, follow-up reminders were sent 5 days and 2 weeks later to nonrespondents. Responses were accepted until the last day of the month. Respondent survey data for all questions were pooled. Aggregate analysis was performed using Microsoft Excel 2016, Redmond, Washington, USA 98052–6399 to code and collate both closed and open-ended responses. Descriptive statistics (counts and frequencies) are reported in the table based on the type of analysis (Table 1).

## 3 | RESULTS

Fifty-two (52) of the 74 program directors completed the 25-item online survey, yielding a 70% completion rate. Slightly more than two thirds (69.2%) of respondents reported they had never performed virtual interviews prior to the COVID-19 pandemic. Yet, 92.2% indicated they were prepared when implementing interviews via virtual platform. Respondents used Zoom (78.8%), Thalamus (15.3%), or multiple unidentified (5.8%) videoconferencing software to interview applicants in the 2020–2021 interview cycle. All respondents rated the overall virtual interview experience as satisfying (11.5% slightly satisfied, 51.9% moderately satisfied, 36.5% very satisfied). The overwhelming majority (94.2%) agreed with the statement "The VIP was user-friendly." Compared to last year's in-person interview format, 67.4% of programs invited more applicants to interview, while 28.8% and 3.8% invited approximately the same number or less applicants, respectively. Regarding the number of actual interviews, most programs (73.1%) conducted more interviews than previous years. Only 1.9% interviewed less, and 25% interviewed approximately the same number of applicants by comparison to the previous interview cycle.

"Interview hoarding," defined as the act of interview slots being taken by the same strong applicants limiting meeting times for other candidates, was considered to negatively impact programs' VIP by 65.4% of respondents.

Time allotted to interview each applicant ranged from less than 30 min (77.4%) to 30–45 min (20.8%) to 45–60 min (1.9%). The mean number of applicants interviewed was  $10 \pm 7$  candidates per program in a single day. Among all respondents, 63.4% reported residents also interviewed

TABLE 1 Virtual interview process (VIP) survey questions (data presented as count with percentage, or median with interquartile range [IQR])

A					
Question	Yes	No	Total	Total	
1. Have you conducted virtual interviews prior to the COVID-19 pandemic?	16 (30.8%)	36 (69.2%)	52 (100%)	52 (100%)	
10. Did you experience video conferencing fatigue (zoom fatigue) when interviewing candidates?	34 (65.4%)	18 (34.6%)	52 (100%)	52 (100%)	
14. Do you think future applicants will prefer virtual interviews to save money on travel expenses?	46 (88.5%)	6 (11.5%)	52 (100%)	52 (100%)	
15. Do you think some applicants interviewed for your program because the virtual interview process was available?	47 (90.4%)	5 (9.6%)	52 (100%)	52 (100%)	
24. Did your current residents formally interview applicants?	33 (63.5%)	19 (36.5%)	52 (100%)	52 (100%)	
25. Has “interview hoarding” by applicants negatively impacted the virtual interview process for your program? Hoarding is defined as top applicants taking up the majority of available interview positions limiting availability for other applicants.	18 (34.6%)	34 (65.4%)	52 (100%)	52 (100%)	
B					
Question	Median	(IQR)	Very satisfied	Total	
2. If yes (you did conduct virtual interviews prior to the COVID-19 pandemic), approximately how many?	3	(0–5)	19 (36.5%)	52 (100%)	
9. On average, during the 2020–2021 application cycle, approximately how many applicants did you interview via videoconferencing in a single day?	8.5	(6–12)	5 (9.6%)	52 (100%)	
Question	Not at all satisfied	Slightly satisfied	Moderately satisfied	Very satisfied	Total
3. Rate your overall experience with the virtual interview process (VIP) this year (2020–2021 match cycle).	0 (0%)	6 (11.5%)	27 (51.9%)	19 (36.5%)	52 (100%)
4. Rate your overall experience with the in-person interview process if performed this year (2020–2021 match cycle).	0 (0%)	2 (3.8%)	2 (3.8%)	43 (82.7)	52 (100%)

(Continues)

TABLE 1 (Continued)

<b>C</b>						
<b>Question</b>	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Agree</b>	<b>Strongly agree</b>	<b>Total</b>	
5. The virtual interview process (VIP) was user-friendly.	1 (1.9%)	2 (3.8%)	31 (59.6%)	18 (34.6%)	52 (100%)	
6. I felt prepared to conduct virtual interviews using a virtual platform like Zoom, Thalamus, or Interview Broker.	1 (1.9%)	3 (5.8%)	24 (46.2%)	24 (46.2%)	52 (100%)	
7. The virtual interview process (VIP) allowed us to promote the university, school, and program.	4 (7.7%)	14 (26.9%)	30 (57.7%)	4 (7.7%)	52 (100%)	
11. The virtual interview process (VIP) can introduce bias in interview rank selection.	4 (7.7%)	17 (32.7%)	26 (50.0%)	5 (9.6%)	52 (100%)	
Question	Less than 30 min	30–45 min	45–60 min	More than 60 min	Total	
8. How much time was allotted to each individual interview?	40 (76.9%)	11 (21.2%)	1 (1.9%)	0 (0.0%)	52 (100%)	
<b>D</b>						
<b>Question</b>	<b>In-person only</b>	<b>Virtual only</b>	<b>Offer either in-person or virtual to the applicants</b>	<b>Hybrid with virtual interview for initial screening followed by in-person for those rated highly</b>	<b>We no longer plan to offer interviews</b>	<b>Total</b>
12. If COVID restrictions are lifted by next cycle, how will you interview candidates for the 2021–2022 match cycle?	14 (26.9%)	4 (7.7%)	29 (55.8%)	5 (9.6%)	0 (0%)	52 (100%)
<b>Question</b>	<b>Yes</b>	<b>No</b>	<b>No difference</b>	<b>Total</b>		
13. Do you think virtual applicants are at a disadvantage versus in-person applicants?	35 (67.3%)	12 (23.1%)	5 (9.6%)	52 (100%)		
<b>Question</b>	<b>Virtual interviews cost more</b>	<b>Virtual interviews cost less</b>	<b>No cost difference between virtual and in-person</b>	<b>Total</b>		
16. Have virtual interviews proved to be financially beneficial for your program?	1 (1.9%)	43 (82.7%)	8 (15.4%)	52 (100%)		

(Continues)

TABLE 1 (Continued)

E						
Question	Thalamus	Zoom	Interview broker	Multiple platforms	Other	Total
17. Which interview platform did you use?	8 (15.4%)	41 (78.8%)	0 (0%)	3 (5.8%)	0 (0%)	52 (100%)
Question	Virtual meeting the day of the interview	Virtual meeting the day before the interview	Virtual meeting after the formal interview	No direct resident interaction	Other	Total
23. How did applicants interact with residents in your program?	39 (75.0%)	9 (17.3%)	3 (5.8%)	0 (0%)	1 (1.9%)	52 (100%)
F						
Question	>51%–100% more	>11%–25% more	>1%–10% more	<11%–25% less	<26%–50% less	<51%–100% less
18. Compared to the last cycle, how many interview invitations did you send out?	7 (13.5%)	7 (13.5%)	5 (9.6%)	0 (0%)	1 (1.9%)	0 (0%)
19. How many applicants did you actually interview compared to last cycle?	4 (7.7%)	7 (13.5%)	8 (15.4%)	0 (0%)	1 (1.9%)	0 (0%)
Question	0%–10%	11%–20%	21%–30%	31%–40%	41%–50%	51%–60%
20. What percentage of applicants who initially accepted an interview invitation completed the interview?	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (1.9%)	3 (5.8%)
21. What percentage of applicants who received an interview invitation declined the invitation?	27 (51.9%)	16 (30.8%)	5 (9.6%)	4 (7.7%)	0 (0%)	0 (0%)
22. What percentage of applicants who received an interview invitation canceled their interview after initially scheduling?	35 (67.3%)	11 (21.2%)	2 (3.8%)	1 (1.9%)	1 (1.9%)	0 (0%)
Question	61%–70%	71%–80%	81%–90%	91%–100%	Total	Total
20. What percentage of applicants who initially accepted an interview invitation completed the interview?	3 (5.8%)	12 (23.1%)	18 (34.6%)	18 (34.6%)	52 (100%)	52 (100%)
21. What percentage of applicants who received an interview invitation declined the invitation?	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	52 (100%)
22. What percentage of applicants who received an interview invitation canceled their interview after initially scheduling?	0 (0%)	0 (0%)	1 (1.9%)	1 (1.9%)	0 (0%)	52 (100%)

applicants the day before (17.3%), day of (75%), or the day after (5.8%) the formal interview with faculty/directors. A comparable proportion of respondents (65.4%) indicated that they experienced video-conferencing fatigue (defined as exhaustion one feels from overusing online video conferencing). Similarly, 65.4% of the respondents opined that the VIP allowed them to promote the university, the school, and their program.

In response to the statement “the VIP can introduce bias in interview rank selection,” 59.6% agreed. When asked if they believe applicants who interview virtually are at a disadvantage in comparison to applicants who interview in-person, 67.3% selected response choice yes, while 23.1% selected no, and 9.2% marked no difference, respectively.

A high percentage (90%) of respondents is of the opinion that some applicants interviewed for their program due to availability of the VIP. Another (83%) feel virtual interviews proved to be financially beneficial for their program. When asked to speculate about the 2021–2022 application and interview cycle, and if pandemic conditions allow, approximately one fourth (26.9%) of programs endorse resuming in-person interviews only by comparison to 7.7% favoring virtual interviews only. More than half of respondents (55.8%) would offer either in-person or virtual interview, and 9.6% would offer a hybrid with virtual interview for initial screening followed by in-person interview with highly rated applicants.

## 4 | DISCUSSION

Interviewing applicants is an essential component of admissions processes, allowing programs and applicants the opportunity to clarify and expound upon information in applications and gauge institutional fit.<sup>3,10,11</sup> Many unavoidable consequences of the COVID-19 global pandemic forced graduate program directors to employ VIPs in order to successfully complete residency selections.

This study aimed to assess the virtual interviewing processes and experiences of graduate medical education and advanced dental education program leaders at West Virginia University during the pandemic. Even though a strong majority of survey respondents had no prior virtual interviewing experiences before implementing VIP in spring 2020, nearly all felt prepared to interview virtually, characterized the teleconferencing software as user-friendly, and derived satisfaction from the experience. Zoom was the most frequently utilized video communication platform. VIP gave programs the opportunity to offer interviews to more applicants by comparison to number of in-person interviews conducted in the previous cycle. Additionally, most respondents found VIP to be convenient, efficient, and financially beneficial. These findings

augment previously reported advantages of virtual interviewing, including financial savings for both applicants and training programs, decreased applicant travel time, the potential for applicants to interview at more programs, and a larger applicant pool for programs.<sup>6–9</sup>

Reported disadvantages of VIP include technical challenges, increased time for training programs to plan and transition to new VIP, diminished personal connection between applicants and program personnel from trainees to attendings, and fewer opportunities for informal conversations and gatherings.<sup>6–9</sup> In addition, potential increased difficulty for applicants to evaluate the culture of a program, and the inability to have an in-person tour of the hospital campus and surrounding city are major drawbacks to virtual interviewing.<sup>7–9</sup> A similar concern about applicants' inability to tour programs in-person has been highlighted in the literature regarding dental and medical student selection during the pandemic.<sup>12,13</sup> In addition, virtual interviewing may put program directors in a quandary about selecting a person with whom they have not interacted socially.<sup>4</sup> These factors pose interesting questions about the future of interviewing, such as: What is the best way to organize the VIP? How will the experience gained from this interview cycle shape the years to come?

This study uncovered a few VIP shortcomings worthy of careful consideration. Notable shares of respondents indicated that VIP introduces bias in resident selection and hinders their ability to promote the university, school, and program. The introduction of potential bias against applicants who have less than optimal technological skills, internet service, or visual location backgrounds would be unique to interviewing virtually. Approximately six in 10 respondents report that VIP disadvantages some applicants. These findings, singularly or collectively, can undermine institutional strategies to promote diversity within residency programs. Therefore, program directors should ensure all interviewers complete unconscious bias training before participating in applicant interviews and also identify and implement strategies to help eliminate any potential disadvantage to applicants who interview virtually. The majority of respondents also acknowledged the VIP shortcoming of interview hoarding. Since interviewing virtually is associated with no travel, less cost, and more convenience, the strongest applicants may interview at more programs than they would have during a traditional interview season. When the strongest applicants interview at more programs due to the convenience of VIP, they are taking up the interview slots that traditionally would have been available to other applicants. Both programs and applicants suffer with the practice of interview hoarding during VIP because several programs will be ranking the same strongest applicants, while many other qualified applicants who received less or no interview invitations will

have less programs to rank and in turn have less programs to rank them.

Based on our survey results, VIP will remain an important component of the applicant interview process even after social distancing pandemic guidelines are relaxed or lifted. Evaluating interviewees' opinion could shine additional light on advantages and disadvantages of virtual interviews and provide comparative feedback about factors influencing a quality interview such as videoconferencing fatigue or technical challenges. Furthermore, despite successfully completing the interview cycle and filling training slots, questions still remain, such as each candidate's ability or inability to assess institutional climate and culture via virtual interviewing, and positive or negative impressions formed by viewing the virtual tour as part of the interview process. This study examined a single institution's implementation of virtual interviews; hence, the results may not be generalizable across all training programs at other institutions. In addition, the study did not explore the amount and type of training interviewers completed prior to participating in virtual interviews nor did it glean information about variations in each program's interview structure.

Although this study involved only one institution and two disciplines (dentistry and medicine), the information gathered about VIP may be useful for other institutions and disciplines to consider. Moving forward, best practices may include the permanent option of virtual interviewing for applicants experiencing special circumstances such as financial hardship, military deployment, and travel constraints. Virtual interviewers must be well-prepared and knowledgeable about the program.<sup>14</sup> Requesting that each applicant use an identical green screen background supplied by the institution may eliminate a source of bias, along with implicit bias training for selection committee members.

## 5 | CONCLUSIONS

This study examined the effectiveness of virtual interviewing at one institution amid the COVID-19 global pandemic. All respondents reported varying levels of satisfaction with virtual interviewing. A strong majority identified VIP as user-friendly and financially beneficial. In comparison to the previous year in-person interview format, program directors/associate directors generally interviewed more applicants using VIP. Videoconferencing fatigue and perception that virtual interviewing disadvantages applicants and potentially introduces bias in interview rank selection are notable drawbacks. Because VIP will likely be integral to applicant selection procedures in years to come, programs directors should be cognizant of and address

videoconferencing shortcomings that can potentially compete with institutional efforts to achieve diversity and inclusiveness.

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## CONFLICT OF INTEREST

The authors declare no conflict of interests.

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