

Post COVID-19: A Comparative Assessment of In-person and Virtual Academic Advising

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During the COVID-19 pandemic, academic advisors worked remotely and conducted virtual appointments. One higher education advising unit in the Southeast United States resumed in-person appointments while maintaining virtual appointments in Fall 2021. To address whether significant differences occur in appointment modalities, this study conducted dual surveys to students and advisors and assessed a quantitative comparison between virtual and in-person advising. Students preferred virtual appointments and found them convenient for scheduling. The study observed no meaningful differences in quality between the modalities, but statistically significant differences in the virtual developmental advising approach. Implications from this study inform the advising field as advisors navigate in-person and virtual appointments in advising models post COVID-19.

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Across the globe, the COVID-19 pandemic ceased in-person higher education classes and operations in Spring 2020; in response, many institutions completed semesters virtually (Smalley, 2021; Wang & Houdyshell, 2022). Faculty and staff had to rethink their operating procedures to continue teaching classes, advising, and meeting students' needs (Neuwirth et al., 2021).

Before COVID-19, academic advisors used various advising technologies to support students (Steele, 2014, 2016; Underwood & Anderson, 2018), however during COVID-19, predominantly on-campus institutions shifted primarily to remote work and virtual appointments. Within weeks, higher education faculty, staff, and students transitioned from on-campus, in-person classes and appointments to fully remote offer-

ings for all services. Many institutions based on geographic location and access to vaccines continued virtual offerings throughout the 2020-2021 academic year.

Academic advisors utilized various online virtual appointment platforms to connect with students during the pandemic. Video conferencing programs (Steele, 2014) such as Zoom, Google Hangouts, and Microsoft Teams (Wang & Houdyshell, 2022) are now commonplace throughout higher education. NACADA: The Global Community for Academic Advising (NACADA, 2017) encouraged the knowledge (Farr et al., 2018) and use of advising technologies as a core competency. Advising technology can contribute to the student experience, increase retention, improve student success, and improve student learning outcomes (Pasquini, 2011; Steele, 2016). Serving as potentially a student's only contact with a higher education professional during the pandemic, academic advisors provided opportunities for students to stay connected to resources and receive support during the COVID-19 pandemic as the students navigated online classes, isolation, and technology issues.

From Fall 2020 to Spring 2022, many institutions returned to in-person operations through a combination of vaccinations, masks, and social distancing policies and procedures (Chronicle of Higher Education, 2020; Smalley, 2021). With the return to in-person operations, academic advisors adapted to another change (Underwood & Anderson, 2018) as they conducted both in-person and virtual advising appointments. Those advisors at traditionally in-person institutions now had to balance both in-person advising and virtual appointments with students. Higher education professionals continue to navigate the post-pandemic world, and academic advisors must decide what advising modalities they will offer as students demand more flexible and accessible options.

As students opt for in-person and virtual appointments, it is important to know about the potential differences between these advising modalities when offered by the same advising unit. Online institutions that advise students remotely may not offer in-person options. Physical campuses may only offer remote advising to international students, students studying abroad, or part-time/non-traditional students.

Purpose and Research Questions

The purpose of this study was to compare in-person and virtual appointments conducted by an advising unit at one Southeast United States, Research-I institution. This quantitative study was guided by four research questions:

- R1. Are there differences in developmental advising quality between in-person and virtual advising appointments?
- R2. What are the students' motivations for selecting their advising appointment modality?
- R3. What issues arise during virtual academic advising appointments that may impact quality?
- R4. What are the advisors' perceptions of their health and safety during in-person appointments taking place in the midst of a viral pandemic?

Literature Review

NACADA encourages the use of advising technology (Pasquini, 2011; Steele, 2016) to enhance the student experience. NACADA's Informational component encourages the knowledge and use of "informational technology applicable to relevant advising roles" (2017). Leonard (2008) stated that advising technology was one of the greatest contributions to academic advising in the last decade. Particularly through the use of social media, blogs, and webinars, multiple means of communication with advisees now exist. Newer technology such as video conferencing allows academic advisors and students to engage face-to-face via a computer, tablet, or smartphone (Steele, 2014). NACADA (2017) encourages academic advisors to build relational connections with students and establish trustworthy, professional relationships that assist students to achieve their goals. Virtual advising appointments via video conferencing technology (Steele, 2014) provide opportunities for students and advisors to be engaged (Steele, 2016) and to

Table 1. Unique Advisees by Gender

Gender	Survey Respondents		Population	
	N	%	N	%
Female	151	55.5	606	50.8
Male	121	44.5	587	49.2
Total	272	100.0	1,193	100.0

Note. Total percentages may not add up to 100.0% due to rounding.

build rapport (NACADA, 2017) in different locations, sometimes across the globe. Software programs such as Zoom and Google Meet (Wang & Houdyshell, 2022) provide additional opportunities for advisors and students to share their screens. Screen-sharing options allow students the ability to see and engage in other advising technologies such as Student Information Systems (SIS), Learning Management Systems (LMS), and policies and procedures listed on institutional webpages (Steele, 2016).

However, the pandemic also revealed and highlighted that a "digital divide" (Leonard, 2008) persists in society. Students from lower-resourced or rural communities had less access to technology, high-speed internet, or safe and academically conducive environments during the pandemic (Campus Technology Staff, 2020). To assist continued online education, institutions provided computers and online hotspots to students, but not all institutions were able to provide the same resources to students. Further, increased demand for video cameras and laptops delayed access to technology for several months. Students with access to strong internet connections often competed for internet resources with family members who worked remotely from home and those engaged in remote schooling. During the COVID-19 pandemic, access to and usage of advising technologies (Steele, 2014, 2016) became critical to the continued success of students and academic advisors as they worked to support students.

Conceptual Framework

This study compared advising appointment modalities using the NACADA Core Competencies (2017) as a model. NACADA's core competencies (2017) include three content categories: Conceptual, Informational, and Relational. The Conceptual component includes the context and theoretical underpinnings of advising. The Informational component encompasses

institutional knowledge advisors need to be successful. The Relational component shows how advisors provide their knowledge and resources of the other components to their students. These core competencies provided a framework for what to ask students and advisors about their advising appointments. The NACADA competencies were designed to be applicable to faculty and professional academic advisors (Farr et al., 2018; NACADA, 2017). Institutions can use the competencies to inform their advising praxis by setting advising expectations for faculty and staff advisors, creating training and development programs, assessing advising outcomes, and improving advising on their campuses (Farr et al., 2018).

The academic advising unit in this study is a large, Research-I institution located in the Southeast United States. The unit directly advises students in transition, primarily major exploration first-year students, re-deciding upperclassmen, students coming to drop-in advising who are interested in switching majors, and special populations for whom the university wishes to provide an extra layer of support (i.e., international and transfer students). Student advisees are required to meet with an assigned academic advisor at least twice per semester. First-year exploratory students also complete two 1-credit courses taught by their advisor, one in the fall semester and another in the spring. In addition, the institution admits fewer than 100 first-year students to this program in the spring term, and offers these students a 2-credit hour spring course. All advisors within the unit were full-time, primary role academic advisors, with some having administrative or special population advising responsibilities.

Further, the advising unit's institution did not require COVID-19 vaccines for students to return to in-person classes, appointments, and activities. Students, faculty, and staff were strongly encouraged, but not required, to receive COVID-19 vaccinations and booster shots. Masks were required on-campus during the fall term and COVID-19 testing was available at multiple locations and required before participation in fall in-person classes or housing. During the time of the study, 85% of the undergraduate students and 91% of graduate students at the institution reported they were fully vaccinated against COVID-19.

NACADA's Core Competencies (2017) provide the framework for the unit's daily practice in

student advising appointments, advisor training and development, and assessment plans. With the transition to in-person and virtual advising, the advising unit wanted to ensure that advising appointments in both modalities met the main components of academic advising. Within the unit, advisors employ developmental academic advising (Crookston, 1972; Grites, 2016; Winston et al., 1984) as the principal advising approach. As part of the Conceptual component of the core competencies, NACADA (2017) encourages the use of advising theory, and developmental advising focuses primarily on educational, career, and personal goal setting (Grites, 2016; Smith & Allen, 2006). Advisors use the developmental approach to connect with students in transition, assist students in achieving long-term goals, provide exploration of majors and career opportunities, and support holistic development (Grites, 2016; Smith & Allen, 2006). With the transition to virtual and in-person advising appointments, the advising unit wanted to ensure that the academic advising maintained the essence of developmental advising, regardless of the modality.

Method

A quantitative study (Creswell, 2014) used two online surveys to compare academic advising modalities. Surveys were the selected method due to access to the population, necessity of timely data collection for continual work operations, and desire to infer students' advising experiences (Creswell, 2014). Researchers collected data from students and advisors weekly during the Fall 2021 semester. Survey questions were derived from the research questions and NACADA core competencies (2017). Descriptive statistics and *t*-tests were used to analyze the data for statistical significance on advising quality. Chi-square analysis (Shavelson, 1996) was used to determine any significant differences in those topics discussed during in-person and virtual appointments related to developmental advising (Grites, 2016; Smith & Allen, 2006).

Population

The study consisted of two populations: students who participated in advising appointments within the advising unit virtually and in-person, and academic advisors who conducted the appointments. Participants included enrolled undergraduate students in transition, either first-year

Table 2. Unique Advisees by Race/Ethnicity

IPEDS Race/Ethnicity	Survey Respondents		Population	
	N	%	N	%
American Indian or Alaska Native	2	0.7	5	0.4
Asian	24	8.8	105	8.8
Black or African American	12	4.4	64	5.4
Hispanics of any race	25	9.2	115	9.6
Native Hawaiian or Other Pacific Islander	0	0.0	1	0.1
Nonresident Alien	17	6.3	59	5.0
Race and Ethnicity unknown	2	0.7	9	0.8
Two or more races	13	4.8	51	4.3
White	177	65.1	784	65.7
Total	272	100.0	1,193	100.0

Note. Total percentages may not add up to 100.0% due to rounding.

undeclared students exploring major options, upperclassmen who started in a major and then were undecided, or declared students who sought advice regarding a change of major.

The advising unit schedules appointments and records advising notes, a third-party software that stores notes and tracks student outcomes via institutional data to assist advisors. The primary investigator for this study downloaded advising reports from the previous week to identify students who recently completed advising appointments. That list was used to invite all students who completed advising appointments in the Fall 2021 semester to participate in an online survey about their in-person or virtual appointments. All students who completed advising appointments in the fall 2021 semester were invited to participate in the survey. Before the survey, students were asked to provide consent for their responses to be included in this study. Additionally, the academic advisors in the unit participated in weekly surveys about appointments from the week prior, and consented for their data to be included in this study. Both

surveys were conducted during Fall 2021, when the advising unit began to offer in-person and virtual advising appointments concurrently.

Data Collection

Researchers administered two quantitative online surveys to students and academic advisors. The IRB-approved surveys collected data on the modality of advising appointments, advisor and student perceptions of appointments, topics discussed, advisor feedback, and overall quality of the appointments. Student ID numbers were collected for demographic information only. Student and advisor responses were anonymous and unidentifiable to the researchers. The researchers offered no incentives to encourage participation in the study.

Results

Three hundred and five unique students completed the student survey (25.6% population, $n = 1193$). Thirty-three students did not provide consent, so they were removed from the data set, for a total of 272 unique students. Respondents matched the ratio of gender and racial identities within the population (see Tables 1 & 2), except for gender. In the population, 50.8% identified as female, with 55.5% of survey respondents identified as female. Of the 2,302 advising appointments conducted in Fall 2021, 69.2% were conducted virtually and 30.8% were conducted in-person (see Table 3). Of the participants in this study, virtual appointments were under-sampled (60.5%) and in-person appointments oversampled (39.5%) compared to the population. Overall, 334 students responded to the survey (14.5% response rate) over the course of the

Table 3. Advising Appointments by Modality

Method	Survey Respondents		Population	
	N	%	N	%
Virtual	202	60.5	1,592	69.2
In-Person	132	39.5	710	30.8
Total	334	100.0	2,302	100.0

Note. Total percentages may not add up to 100.0% due to rounding. Table 3 includes duplicates or students who attended more than one advising session.

Table 4. Advisee Feedback on Advising Sessions, Overall

Please tell us about your most recent advising appointment by responding to the items below.	Mean	Strongly Agree (4)		Agree (3)		Disagree (2)		Strongly Disagree (1)	
		N	%	N	%	N	%	N	%
My advisor asked me about my academic goals and interests.	3.7	250	75.5	80	24.2	0	0.0	1	0.3
I believe I had the full attention of my advisor during the advising appointment.	3.9	298	89.2	35	10.5	0	0.0	1	0.3
We discussed my questions/concerns in the advising appointment.	3.9	288	86.5	42	12.6	2	0.6	1	0.3
We identified action steps for me to take to enhance my academic experience.	3.7	246	74.3	77	23.3	7	2.1	1	0.3
I had technology issues in my appointment that made my meeting challenging.	1.6	12	5.8	14	6.8	60	29.0	121	58.5
Overall, I am satisfied with the quality of the advising appointment.	3.8	257	76.9	73	10.9	3	0.9	1	0.3

semester. Most students, required to meet with their advisor at minimum twice per semester were able to complete the survey more than once.

Academic advisors completed surveys weekly ($n = 19$) for 15 weeks for a total of 204 survey responses. Of those who provided consent, the participation rate for this study was 89.5% ($n = 17$). Weekly data collection proved advantageous as the advising unit successfully identified means to improve the quality of virtual academic advising, such as specific student guidelines, and the researchers were able to gauge changes in advisor opinions over time throughout the Fall 2021 term.

Research Question 1

The first research question explored potential differences in developmental advising quality between in-person and virtual appointments. Students rated the quality of their appointments using a 4-point Likert scale (strongly disagree to strongly agree; scale 1-4). Overall, students reported high-quality advising appointments (see Tables 4 & 5) and reported satisfaction with the quality of advising appointments ($M = 3.8$). During the appointments, advisors and students discussed academic goals and interests ($M = 3.7$) and action steps for students ($M = 3.7$). When asked about topics covered in the appointment, students responded that advisors in both modalities wanted to get to know them. They discussed academic topics, adjustment to college, and long-term goals. In addition, students reported they

had their advisor's full attention ($M = 3.9$) during advising appointments. Researchers then compared students' perceived quality between in-person and virtual modalities. Among the six variables, a statistically significant difference was observed between in-person and virtual meetings for two variables, discussion of student questions/concerns during the appointment ($t(331) = 2.70$, $p = .007$) and whether they had the full attention of their advisor in the appointment ($t(334) = 2.29$, $p = .023$). However, while significant, these differences were not considered meaningful as the overall means across variables were nearly identical (see Table 5).

When comparing topics discussed in appointments, students self-reported engaging in various advising topics related to developmental advising (Crookston, 1972; Grites, 2016; Winston et al., 1984) at different rates (see Table 6). Students who attended in-person advising appointments were statistically more likely to report conversations with their advisor for the purpose of "getting to know me" ($\chi^2(1, N = 334) = 9.687$, $p = .002$). Further, students reported their advisor was more likely to ask about the student's adjustment to college ($\chi^2(1, N = 334) = 7.567$, $p = .006$), probe about their campus involvement ($\chi^2(1, N = 334) = 10.072$, $p = .002$), and to refer them to resources ($\chi^2(1, N = 334) = 6.796$, $p = .009$). Questions related to course selection, academic goals, and career opportunities were also observed less in virtual appointments than

Table 5. Advisee Feedback on Advising Sessions, by Modality

Please tell us about your most recent advising appointment by responding to the items below.	In-Person Advising Sessions												Virtual Advising Sessions											
	Strongly Agree (4)				Disagree (2)				Strongly Disagree (1)				Strongly Agree (4)				Disagree (2)				Strongly Disagree (1)			
	M	t	N	%	N	%	N	%	N	%	N	%	M	N	%	N	%	N	%	N	%	N	%	
My advisor asked me about my academic goals and interests.	3.8	1.2	103	78.6	28	21.4	0	0.0	0	0.0	0	0.0	3.7	147	73.5	52	26.0	0	0.0	1	0.5			
I believe I had the full attention of my advisor during the advising appointment.	3.9	2.29*	124	93.9	8	6.1	0	0.0	0	0.0	0	0.0	3.9	174	86.1	27	13.4	0	0.0	1	0.5			
We discussed my questions/concerns in the advising appointment.	3.9	2.7**	122	92.4	10	7.6	0	0.0	0	0.0	0	0.0	3.8	166	82.6	32	15.9	2	1.0	1	0.5			
We identified action steps for me to take to enhance my academic experience.	3.8	1.52	101	77.7	28	21.5	1	0.8	0	0.0	0	0.0	3.7	145	72.1	49	24.4	6	3.0	1	0.5			
I had technology issues in my appointment that made my meeting challenging.	1.7	-.70	5	8.8	3	5.3	17	29.8	32	56.1	1.6	7	4.7	11	7.3	43	28.7	89	59.3					
Overall, I am satisfied with the quality of the advising appointment.	3.8	.81	104	78.8	27	20.5	1	0.8	0	0.0	3.7	153	75.7	46	22.8	2	1.0	1	0.5					

NNote. Statistically significant difference was found in discussing questions/concerns in the advising appointments ($p = .007$) and having the full attention of my advisor ($p = .023$). However, this was not seen as meaningfully different between the modalities. $*p < .05$, $**p < .01$, $***p < .001$

Table 6. Topics Covered in Advising Appointments by Modality

What topics did you cover in the advising appointment?	In-Person		Virtual		χ^2
	N	%	N	%	
Getting to know me	85	64.4	95	47.0	9.687**
Academic and campus resources (e.g., tutoring, office hours, Counseling Center)	95	72.0	117	57.9	6.796**
Adjusting to Campus	83	62.9	96	47.5	7.567**
Discussing courses Recommendations	100	75.8	154	76.2	.010
Exploring majors and minors	111	84.1	152	75.2	3.723
Extra-curricular involvement opportunities	77	58.3	82	40.6	10.072**
My academic goals	113	85.6	164	81.2	1.101
Potential career options	68	51.5	89	44.1	1.782
Total Respondents	132	100.0	202	100.0	

Note. Total respondents represent the total number of students who answered this question. Does not include unique students. * $p < .05$. ** $p < .01$. *** $p < .001$

during in-person appointments but were not found to be statistically significant.

Research Question 2

The advising unit was also interested to discover the reasons students chose a particular academic advising modality for appointments. The survey offered students the option to select multiple applicable reasons (see Table 7). For virtual appointments, 78.2% of students indicated convenience as their main rationale, while those students who chose in-person appointments cited personal preference (92.4%). Virtual students cited health concerns (20.3%) and advisor time availability (16.3%) as other main factors.

Research Question 3

Institutional and unit leadership were interested in issues that may arise during virtual appointments. The surveys asked student and advisor respondents if technical difficulties occurred during virtual appointments (see Tables 5,

8, & 9). Twenty-six students reported technical difficulties (14.1% Agree/Strongly Agree). Among the 204 weekly advisor appointment surveys submitted, 22 responses indicated a technical problem during the previous week. However, advisors reported that they built rapport with students in both modalities (95.1%) and did not have interruptions in their appointments (94.6%). Eight advisor responses (3.9%) cited the desire to have met with their students in-person for more in-depth discussions or for the need to refer the student to on-campus resources (e.g. a counseling center).

Advisors who reported technical issues answered an additional question about the frequency of that issue in the previous week's appointments (see Table 10). Of the 22 responses that indicated technology issues, 63.6% occurred only once. Eleven appointments with interruptions occurred only once (54.5%) or a few times (45.5%). Of all issues observed by advisors in appointments, almost all issues occurred only once or only a few

Table 7. Advisee Appointment Selection by Modality

Why did you select this appointment type? (Select all that apply)	In-Person		Virtual	
	N	%	N	%
Convenience	65	49.2	158	78.2
Preference	122	92.4	71	35.1
Personal Health & safety	2	1.5	41	20.3
Only date/time slot available	4	3.0	33	16.3
Other	5	3.8	16	7.9
Total Respondents	132	100.0	202	100.0

Note. Total respondents represent the total number of students who answered this question. Does not include unique students.

Table 8. Advisor Reported Issues by Appointment Modality

Please think about the advising appointments you had in the past week.	Total		No		Yes, in-person and virtual		Yes, in-person only		Yes, virtual only	
	N		N	%	N	%	N	%	N	%
I had technology issues that made at least one advising appointment challenging.	204		180	88.2	8	3.9	2	1.0	14	6.9
I had interruptions outside of technology that made at least one advising appointment challenging.	204		193	94.6	2	1.0	7	3.4	2	1.0
I was able to build rapport effectively with students in advising appointments.	204		4	2.0	194	95.1	2	1.0	4	2.0

Note. Total respondents represent the total number of students who answered this question. Does not include unique students.

times. Many technical issues decreased over the course of the term as advisors instructed students on virtual advising expectations, such as the importance of a being in a quiet space, having a strong internet connection, and not meeting via their cell phone.

Research Question 4

The advising unit was concerned about the health and safety of advisors during the COVID-19 pandemic as in-person operations resumed in Fall 2021, vaccines were not required (but strongly encouraged) on campus, and advisors were required to offer student in-person and virtual appointment options. Researchers asked advisors how often they felt safe and healthy during in-person appointments for the previous week (see Tables 9 & 10). Advisors conducted 710 in-person academic advising appointments during the fall semester. Among the 204 surveys collected over the 15-week period, 72 responses indicated that advisors felt unsafe or in an unhealthy environment (35.3%). Three or fewer felt unsafe during at least one individual in-person appointment (31.9%) in any given week,

while four or fewer felt unsafe always or most of the time during all in-person appointments (59.7%). For the overall advising team, over half felt safe during in-person appointments in the Fall 2021 semester. The response rate during Thanksgiving break was significantly less due to fewer days available for advising appointments.

In Fall 2021, the academic advising unit reintroduced in-person appointments for the first time since the start of the COVID-19 pandemic in Spring 2020 and required advisors to provide the option for in-person advising. However, the COVID-19 Delta variant became the main strain of COVID-19 in the United States at that time (Katella, 2022). Several academic advisors felt uncomfortable meeting with students in-person in an enclosed office space while COVID-19 rates were high in the community. Throughout the semester, COVID-19 rates decreased. In order to gauge whether advisor reports of unsafe feelings and unhealthy environments coincided with events related to the pandemic, researchers reviewed the timing of advisor responses (see Table 11 & Figure 1). The comparative data showed most advisors felt unsafe and in an

Table 9. Advisor Concerns During Appointments

Please think about the advising appointments you had in the past week	Total	Yes		No	
	N	N	%	N	%
For my virtual advising appointments, I had at least one advisee I would have preferred to see in person.	204	8	3.9	196	96.1
For my in-person appointments, I felt like I was in a safe and healthy environment.	192	120	62.5	72	37.5

Table 10. Advisor Reported Frequency of Issues During Advising Appointments

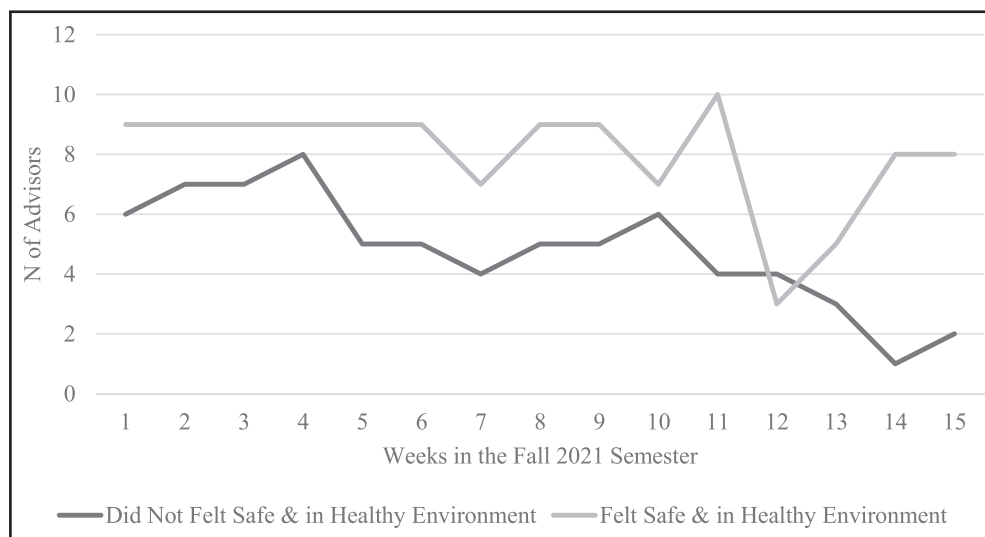
Please think about the advising appointments you had in the past week	Total		Once		A few times		About half of the time		Most of the time		Always	
	N		N		N		N		N		N	
How frequently did you experience technology issues in your advising appointments in the past week?	22	14	63.6	7	31.8	0	0.0	1	4.5	0	0.0	
How frequently did you experience interruptions in your advising appointments in the past week?	11	6	54.5	5	45.5	0	0.0	0	0.0	0	0.0	
How frequently were you unable to build rapport with a student in your advising appointments in the past week?	2	1	50.0	0	0.0	0	0.0	0	0.0	1	50.0	
How frequently did you prefer to see a student in person that you met with virtually in the past week?	8	5	62.5	1	12.5	1	12.5	0	0.0	1	12.5	
How frequently did you feel like your in-person advising meetings were not a safe and healthy environment in the past week?	72	23	31.9	6	8.3	0	0.0	24	33.3	19	26.4	

Note. Advisor respondents who responded negatively to questions presented in Tables 8 and 9 (indicating issues present within their advising appointments) were asked about the frequency of their issues.

Table 11. Advisor Concerns in Appointments by Week & Frequency

Week	How frequently did you feel like your in-person advising meetings were not in a safe and healthy environment in the past week?										I felt like I was in a safe and healthy environment	
	Once		A few times		About half of the time		Most of the time		Always			
	N	%	N	%	N	%	N	%	N	%	N	%
Week 1	1	6.7	1	6.7	0	0.0	2	13.3	2	13.3	9	60.0
Week 2	3	18.8	1	6.3	0	0.0	2	12.5	1	6.3	9	56.3
Week 3	2	12.5	2	12.5	0	0.0	1	6.3	2	12.5	9	56.3
Week 4	3	17.6	1	5.9	0	0.0	2	11.8	2	11.8	9	52.9
Week 5	1	7.1	0	0.0	0	0.0	3	21.4	1	7.1	9	64.3
Week 6	3	21.4	0	0.0	0	0.0	1	7.1	1	7.1	9	64.3
Week 7	1	9.1	0	0.0	0	0.0	3	27.3	0	0.0	7	63.6
Week 8	2	14.3	0	0.0	0	0.0	2	14.3	1	7.1	9	64.3
Week 9	1	7.1	0	0.0	0	0.0	2	14.3	2	14.3	9	64.3
Week 10	3	23.1	0	0.0	0	0.0	2	15.4	1	7.7	7	53.8
Week 11	0	0.0	1	7.1	0	0.0	2	14.3	1	7.1	10	71.4
Week 12	2	28.6	0	0.0	0	0.0	1	14.3	1	14.3	3	42.9
Week 13	0	0.0	0	0.0	0	0.0	1	12.5	2	25.0	5	62.5
Week 14	0	0.0	0	0.0	0	0.0	0	0.0	1	11.1	8	88.9
Week 15	1	10.0	0	0.0	0	0.0	0	0.0	1	10.0	8	80.0

Note. Week 12 correspondents with Thanksgiving break (University was closed Wednesday – Friday).

Figure 1. Advisors' Feeling of Safety in Meeting with Students In-Person During a Pandemic.

Note. Week 12 Corresponded with Thanksgiving Break (University Closed Wednesday – Friday)

unhealthy environment earlier in the Fall 2021 term during the COVID-19 Delta variant surge (Katella, 2022), but felt more comfortable during in-person appointments over the course of the semester as COVID-19 rates decreased.

Discussion

This quantitative study has several implications for the field of academic advising. As academic advisors at traditionally on-campus institutions balance in-person and virtual appointments in the future, knowing if there is a significant difference between in-person and virtual advising quality can influence the advising model within individual units and campuses.

Virtual vs. In-Person Advising

In this study, some statistically significant differences were observed between in-person and virtual advising appointments; however, these differences were not found to have a meaningful difference in the perceived quality of advising. Students and advisors highlighted that they were able to build advising relationships within both modalities. NACADA core competencies (2017) emphasize the Relational competency as the means for the Conceptual and Informational competencies to be successful. If an advisor is not able to demonstrate their skills (Farr et al., 2018), then students will not trust their advisor to support them in their education and goals. In this

study, students in both modalities stated that their advisor wanted to get to know them, and asked about their goals and interests. Students believed advisors gave their full attention during virtual appointments and had few interruptions from technical difficulties.

The main concern from institutional leadership for the advising unit was that students would perceive virtual advising as not as strong or high quality as in-person advising. Advisors in this study built advising relationships with their students in-person and virtually, providing more options for students to connect with their advisors. Students were able to meet with their advisor at their preferred time in their preferred modality based on convenience and preference, providing an opportunity for students to engage with their advisor more than through in-person only advising availability.

Further, advisors felt they built connections with their students in both modalities. Only in a few instances did an advisor wish they had met with a student in-person in order to provide more support, often related to campus resource referrals such as the counseling center or the financial aid office. Additional follow-up with these students was necessary to connect them to resources. During the Fall 2021 term, the advising unit recognized the few times technical difficulties occurred in virtual advising appointments and resolved the issue through communication with

students regarding online appointment expectations such as a locating quiet space and a strong internet connection. These changes were communicated to students, added to the advising unit's operating procedures, and were added to the advising syllabus to be shared with students in future years. Overall, this study demonstrated that advisors can provide the same quality academic advising appointments based on NACADA's core competencies (2017) in virtual and in-person advising appointments.

Developmental Advising

The NACADA core competencies (2017) encourages advisors and advising units to choose an advising approach as part of their practice. The developmental approach (Crookston, 1972; Grites, 2016; Winston et al., 1984) to academic advising emphasizes connecting with students so they can create and achieve their own academic and personal goals. In this study, 99.7% of students stated their advisor asked them about their goals and interests, and 97.6% stated they discussed action steps to enhance their academic experience. Regardless of modality, advisors supported their students in discovering their goals and providing campus resources to help them succeed.

However, there was a statistically significant decrease in the rate of developmental advising topics (Crookston, 1972; Grites, 2016; Winston et al., 1984) reported in virtual advising appointments. This study adds to the advising technology literature (Steele, 2016) by highlighting that developmental advising is possible using video conferencing online technology but may require advising units to provide materials for advisors to meet their approach. As the use of advising technology continues to support students in higher education (NACADA, 2017; Steele, 2016), advisors are able to build developmental relationships with students and develop meaningful advisor/student connections, regardless of location. Advising administrators should emphasize to advisors that expectations in their advising approach need to be met in both modalities, which they can address by providing advisors with topics or suggested questions to ask students in all appointments. Advisors whose units follow a developmental approach should make a concerted effort to know their students, make referrals to campus resources, inquire about adjustment to college, and encourage campus involvement.

NACADA's (2017) core competencies may need to be adjusted not only in the knowledge of advising technologies but the usage of video conferencing technology to build meaningful relationships with 21st century students. Advising administrators will need to train new advisors not only on SIS and LMS software (Steele, 2016) but on how to integrate those technologies via screen sharing. The field of advising technology is ever-evolving (Steele, 2016), and the COVID-19 pandemic has only accelerated the field of advising into the digital space.

Student Appointment Modality Choice

When students are able to choose the advising modality, they prefer virtual appointments (69.2%). Advisors in this study reported that even on days when they were available for in-person appointments, students chose virtual appointments. Virtual appointments give students access to advisor from any location. During the pandemic, international students who could not return to their institutions due to travel restrictions (Tamez-Robledo, 2021) could still meet with their academic advisors. Virtual advising appointments also provide scheduling flexibility for students without having to travel to or across campuses. They offer an option for advising during normal operations or during reduced operations due to adverse weather, health concerns, pandemics, or other emergencies. Virtual appointments offer advisors the opportunity to work remotely. Remote work may be used as a staff retention tool as flexible work arrangements may increase academic advisor morale, offset expenses in years without salary raises, and enhance work/life balance for staff. With an increasing number of professionals and academic advisors leaving the higher education field (Lederman, 2022; Schroeder, 2022), enabling advisors to conduct virtual appointments and offering remote work options for advisors may increase staff retention. Advising administrators must consider how to balance in-person and virtual advising modalities as students used both options in this study. Offering flexibility to students and academic advisors may enhance work-life balances for advisors (Lederman, 2022) while meeting the departmental, college, or institutional outcomes for students through advising.

Health and Safety

Overall, most academic advisors in the study felt safe meeting with students in-person, and

over the course of the Fall 2021 term, advisor concerns about in-person meetings lessened as the COVID-19 Delta variant subsided (Katella, 2022) as student vaccination rates increased. In the future, virtual advising via video conference may provide opportunities for academic advisors and students to connect during health and safety emergencies. Either during another global pandemic or when a student has the flu and is isolating in their on or off-campus residence, virtual appointments provide access for students to be connected with their academic advisors without risking the health and safety of academic advisors. Depending on their position and caseload, academic advisors may interact with several students in the course of a day, week, or month, especially during registration advising. Reducing the advisor's exposure to common illnesses may reduce the exposure happening to other students, faculty, and staff on campus. The option of virtual advising allows advisors to connect with students who may be unwell or experiencing other concerns. Virtual appointments provide them a connection to campus resources such as health centers, counseling centers, women's centers, food resources, and others that a student may have the opportunity to hear about if they had to come to an advisor's office for a meeting. Virtual advising provides an opportunity for advisors to provide students with the resources they need without having to be in the same physical location.

Limitations

This study had several limitations impacting the generalizability of the results. The study surveyed students from one advising unit at a large, Research-I university. Responses may vary if all students on campus were sampled, and the findings may not be generalizable to other institutional types, advising offices, or institutions outside the United States. Institutional pandemic policies and procedures varied based on institutional type (i.e. private vs. public), federal, state, tribal, and local government policies, and community COVID-19 rates (Smalley, 2021). Other institutional types, geographic considerations, and advising approaches should compare in-person and virtual advising appointments.

Future longitudinal studies could compare appointment modalities and changes in student perceptions over time. Longitudinal studies may find it difficult to garner participation without incentives. In this study, the response rate for

completing the student survey decreased over the term as the students may have been over surveyed. Academic advisors' response rate remained high throughout the semester, but they had a vested interest in the study and may have felt required to complete the survey as employees. Future studies should consider response rates and power dynamics. Due to the nature of the closed-ended survey instrument, there was limited opportunity for participants to further define or describe responses to questions. This limits how to interpret and understand respondent definition of terms such as "convenience" or "personal health and safety." Future qualitative studies could provide a deeper analysis of student and advisor experiences. In addition, advising modalities may differ between faculty advisors or hybrid advising models (King, 2008). The advising unit in this study consisted of all primary-role academic advisors. Departments, colleges, and universities with different advising structures may vary in advising appointments offered in-person and virtually. More research is needed on offering multiple advising modalities as a future option for academic advisors to meet student needs and outcomes.

Conclusion

This quantitative study found that in-person and virtual academic advising in one advising unit were similar in quality and met the NACADA competencies (2017). Data from in-person and virtual appointments highlight that students and advisors believe they can create meaningful advising relationships that support the student's holistic success. Students preferred virtual appointments when given the option. For the advising unit, providing both modalities still met the standards of academic advising set by NACADA's core competencies (2017). The developmental advising approach (Crookston, 1972; Grites, 2016; Winston et al., 1984) could be improved in virtual appointments. Results from this study support student choice between in-person and virtual, video-based appointments post COVID-19.

The academic advising field has shifted into multi-modality advising appointments including in-person and virtual options. Further research by institutions and NACADA should continue to see if providing the options for both virtual and in-person advising is sustainable long-term in the field, meets NACADA's core competencies

(2017), and meets institutional outcomes. Providing both modalities over time may overload academic advisors who already have significant caseloads. With virtual appointments, advising administrators and campus leaders have the opportunity to provide academic advisors flexible work arrangements that could assist with advisor retention. Academic advising has supported students throughout the pandemic (Neuwirth et al., 2021; Wang & Houdyshell, 2022). As the profession continues to offer in-person and virtual appointments, more research is needed to compare advising modalities and the use of advising video conference technology (Steele, 2014) to ensure that student success outcomes are met after the COVID-19 pandemic.

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