Blended New Student Orientations are Making a Difference: A Case-Study on Students' Experience with the Online Learning Activities

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Abstract
Transitioning from high school to college is challenging for many students. The inability to make successful transitions can affect students' abilities to integrate into and graduate from college, especially for marginalized students. New student orientations were created to help students navigate their new academic environments. However, with the advent of the COVID-19 pandemic, all in-person orientation activities defaulted to online formats. As institutions emerged from the pandemic, various blended new student orientation modalities were implemented. This case study focuses on how a university's new student orientation blended modality (consisting of both online and in-person activities) affected social connectedness as perceived by first-year students. Twenty students were interviewed, leading to three main findings regarding the impact of blended modalities: (a) they motivated these students to transition to college, (b) they helped these students develop a sense of connection to the institution before even stepping foot on campus, and (c) they showed that the combination of online and in-person orientation activities provided a holistic experience for these students. We discuss how blended modalities help build and strengthen connections and a sense of belonging between students and institutions. We conclude with suggestions on how current technology trends in education might be used to adapt blended modalities from their current state to one that could result in more engaging and personalized orientation experiences for first-year students.

Keywords: Blended learning; new student orientation; sense of belonging; transitioning

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Introduction

The transition from high school to college can be a challenge academically, socially, and emotionally for many first-year students (Schuster, 2019). Students coming from diverse backgrounds (due to socioeconomic status, educational training, and learning abilities) may find this transition even more challenging (Astin, 1984). To help students make this transition successfully, institutions coordinate in-person orientation activities designed to orient students to their new environment through socially focused tasks (Pascarella et al., 1986). Additionally, these activities serve the purpose of helping students make social and institutional connections, which Astin (1984), Tinto (2003), and others (Cutrona, 1982; Rovai, 2002; Sidelinger & Booth-Butterfield, 2010) have claimed are crucial to transition, integration, and graduation. A student's inability to make social and institutional connections may lead to learning difficulties, challenge a growth mindset, and increase attrition rates (Bruffaerts et al., 2018; Credé & Niehorster, 2012; Lee & Robbins, 1995). College orientations play an important role in overcoming these barriers.

However, the COVID-19 pandemic caused the suspension of all in-person orientation activities, and colleges and universities rushed to produce orientation activities for an online student audience. After the pandemic, many institutions recognized the benefits of online orientation activities. They began investing more time, effort, and resources into integrating online orientation activities with previous in-person activities, creating blended orientation modalities. However, it's been unclear how students perceived the blended orientation activities and their influence on the social connectedness between students and the institution. While scholars have conducted studies on either online or in-person new student orientations separately, more can be learned by examining blended modalities. Since blended orientation activities have become common only recently, only a few studies have been conducted on the topic. Moreover, the rapid implementation of these hybrid models has outpaced current research, leaving a gap in understanding their impact on new student orientations, especially from the students' perspective. Without this understanding, institutions may risk missing opportunities to support student transition and wellbeing in meaningful ways.

This paper aims to answer those inquiries by interviewing students about their experiences with the blended orientation activities and how those experiences may or may not have influenced their social connectedness or sense of belonging to the institution.

Literature Review

In this literature review, we analyzed the existing literature on college orientations and their effects on student psychology, mainly from the ERIC database, drawing from topics such as social connectedness, traditional and online college orientations, and blended orientation practices. Most existing studies have focused on the impacts of traditional and online orientations on new students' academic, affective, and social connectedness. However, blended orientation for first-year college students is a fairly new topic, and there has been little published on it in terms of social connectedness.

Social Connectedness

Many theoretical frameworks uphold the concept of successful student transition through social and institutional connections. In 1981, Transition Theory emerged from Schlossberg's extensive studies and interviews in adult development, counseling psychology, and career development. In her findings, she saw patterns for the impact of transition on a person's sense of identity and the role of social support in facilitating the transition process. Building upon Astin's Student Involvement Theory (1984) where student success is based on student college involvement, Tinto incorporated the framework of social connectedness and transitioning in his Model of Institutional Departure (1993), which elaborated on how students will persist in their education if they are integrated into both the academic and social aspects of the institution. Rovai (2002) expanded the reach of these theories by incorporating them into online learning. He concluded that building a sense of community within an online environment will decrease feelings of isolation and increase integration and overall retention. These theories build upon each other and strengthen the argument that students who participate in college orientation at the beginning of their first year are more likely to have a successful transition (Can & Kalkan, 2021; Jorgenson et al., 2018; Starke et al., 2001). These frameworks laid the foundation for our research and questions.

More recently, many studies on social connectedness have framed the concept in terms of belonging or sense of belonging. In their mixed-methods study, Xu and Brown (2024) explored how to build a sense of belonging and ways to "foster connections" (p. 336) for online post-traditional students at a higher educational institution. Although their research did not focus on new student orientations, their findings showed that one of the most impactful factors promoting a sense of belonging among this group of students is university support and acceptance. They suggested that institutions provide support and acceptance through social presence aimed at "normaliz[ing] challenges, provid[ing] support, and promot[ing] interactions and inclusion (p. 336). Lastly, the study conducted by Mohzana (2024) concluded that first-year orientations "assist new students in adapting to a new campus environment by increasing their sense of belonging to the institution" (p. 176).

Confidence and Motivation in Making Transitions

Schlossberg's Transition Theory highlights the importance of connection and a sense of belonging as essential elements in navigating life transitions. Supporting this framework, Sax and Weintraub (2014) and Mohzana (2024) found that the first year of college is critical in shaping a student's ability to successfully transition from high school. Students who struggle with this adjustment are less likely to return for their second year (Nalbone et al., 2015; Mayhew et al., 2016; Schuster, 2019). Schuster (2019), Attaraya (2021), and Mohzana (2024) further emphasized that institutions must take a more active role in supporting students through this transition by fostering confidence, reducing anxiety, and helping students become familiar with the institution's culture and expectations. In addition to confidence, new student orientations may motivate students to become more involved in the institution's culture, which will also aid in a more positive transition experience (Li et al., 2022; Mohzana, 2024).

College Orientations

As involvement, integration, and sense of belonging fall under social connectedness, institutions looked to college orientations as a resource for helping students navigate successful transitions. Most college orientations are often described as either traditional or online modalities.

Traditional In-Person Orientations

The focus of traditional orientations has been for first-year students to be on campus, bond with peers through social gatherings, and learn about different institutional resources and cultures (Can & Kalkan, 2021; Mohzana, 2024). Although many traditional colleges are shifting towards more academic and institutional orientation goals—such as helping students navigate online course systems, register for classes, and increase awareness of available institutional resources—social factors remain prevalent in orientation experiences (Brooman & Darwent, 2013; Can & Kalkan, 2021). Traditional college institutions have often used higher grade point averages (Owusu et al., 2014), and an increase in self-efficacy (Can & Kalkan, 2021), resilience (Can & Kalkan, 2021), and social connectedness (Brooman & Darwent, 2013; Can & Kalkan, 2021; Thongsawat et al., 2019) as evidence of students' transitional successes. However, these positive results were not consistently seen in every study except for social connectedness. For this reason of maximizing social connectedness and belonging (Leonard et al., 2024; Ning et al., 2021), the majority of in-person new student orientations are beginning to rely more on online components to support students in learning about academic and institutional goals and services (Clark et al., 2024; Garivaldis et al., 2022).

Online Orientations

Similar to traditional orientations, online institutions implemented online orientations focused on setting up, navigating, and using online courses (Scagnoli, 2001). Initially, their primary concern was aiding students' academic success. However, they later recognized the importance of social connectedness and institutional engagement as factors in student retention and success (Abdous, 2019; Castro & Tumibay, 2021; Colucci & Grebing, 2020). Despite this, earlier online studies showed that recreating authentic social connections between peers, students to faculty, and students to institutions proved challenging (Gao & Lehman, 2003; Marjanovic, 1999; Wang & Hsu, 2008). Still, online orientation designs are evolving to overcome this challenge as more recent studies have shown some positive results in terms of academic achievement (Colucci & Grebing, 2020), self-efficacy (Abdous, 2019; Marshall, 2017; Stoebe & Grebing, 2020), retention rates (Marshall, 2017; Stoebe & Grebing, 2020), and social connectedness (Jaggars & Xu, 2016), especially for community college students (Robichaud, 2016).

These evolving designs are incorporating different elements to increase engagement and connectedness. Some of these elements are virtual reality tools, interactive campus tours with pop-up information, and discussion or social media groups. In a qualitative study conducted by Sadanala et al. (2023), the metaverse and virtual reality (VR) tools are used to semi-immerse online university students in their new academic environment. The results of their study showed "the VR online orientation could effectively disseminate the necessary information, and students could retrieve the corresponding information that the orientation can offer, both in an interactive, immersive, engaging, and resource-saving way" (p. 727). Even though there were some challenges with using the VR tool, several students claimed that "the design of the university

campus appeared to be quite realistic" (p. 727). Additionally, their study found that those students who were dissatisfied with using VR were still "positive about learning through the VR technology for orientation and about other opportunities available for them as new online students in the program, rather than visiting the campus in person" (p. 727).

In a design research study carried out by Leslie (2024), using several technological tools (such as Blackboard, Articulate Storyline, discussion boards, and blogs for journaling) successfully increased student engagement. In addition to these innovative tools, other studies of online orientations have included videos (Hanna-Benson, 2019; Liu, 2019; Watts, 2019), interactive activities (Hanna-Benson, 2019; Jones, 2013; Lui, 2019), tutorials (Taylor, 2015), quizzes/assessments (Liu, 2019; Taylor, 2015), and embedded information (Chou, 2012; Hanna-Benson, 2019; Liu, 2019). As technological advancements come forth, it is clear that they will play a role in the orientation experience.

During and Post COVID-19 Pandemic College Orientations

Faced with challenges in both traditional and online college orientations, institutions continued to seek models best adapted to their students' needs. However, with the worldwide COVID-19 pandemic, higher education institutions could not hold in-person orientations and instead defaulted to online formats (Crozier, 2021; Gravett & Ajjawi, 2022). As institutions adapted, they began to see the advantages (accessibility, flexibility, and reduced stress and financial costs) and challenges (differences in online navigation skills, access to technological devices and the internet, intrinsic motivation, and lack of opportunities for connections with peers, faculty, or the institution) of an online modality. In 2021, many institutions combined online and traditional models into a blended modality (Crozier, 2021). A blended orientation modality provides students with resources and opportunities to learn about the university's culture and expectations through both online and in-person mediums.

Studies on Blended Orientations

Before delving into studies on blended orientations, it is important to understand the concept of blended learning, particularly in higher education. At its basic, broad definition, blended learning is an approach that delivers content through traditional in-person (F2F) and online (OL) activities or interactions (Graham, 2006). However, within the context of blended learning, there are various types (i.e., flipped classroom, flex, station rotation) that differ based on degrees of online interactions, online integration, flexibility, and personalization, making it more complex than its basic definition (Castro, 2019; Castro & Tumibay, 2021). Fernandes et al. (2016) refined the definition of blended learning with the addition of "materialized in a flexible, multimodal, and multi-linear redesign" (p. 12). By interpreting Fernandes et al., we agree that there is more than one right way of conducting blended learning, and these nuances allow instructional, course, or program designers to facilitate blended learning to best meet their needs. Akin to blended learning, blended orientation models will vary based on the needs of their institutions.

Traditional in-person orientations and blended orientations both prioritize key themes essential to student success: social connectedness/sense of belonging and meaningful engagement with the campus culture and support systems. In-person formats achieve this through immersive, full-day(s) experiences that include live interactions with other incoming

students, peer-mentors, and institutional administrators that build emotional ties to the institution (Can & Kalkan, 2021; Leonard et al., 2024; Mohzana, 2024; Ning et al., 2021). Blended orientations, however, do not dilute these themes; rather, they expand on them. By combining online flexibility with in-person engagement, blended models warrant that more students, especially non-traditional students, can access the same sense of connection in ways that meet them where they are (McGee et al., 2016; Rovai & Jordan, 2004). They create new pathways to belonging through videos, discussion boards, interactive activities, and personalized onboarding, while still incorporating live events to deepen relationships. Additionally, the online component of blended orientation allows institutions to share easily accessible support resources and gives students the ability to review those resources throughout the school year, thereby reducing cognitive overload (Hodgson et al., 2008), which can happen during in-person orientation. Rather than being a compromise, blended orientations represent an evolution, building on the strengths of tradition while broadening impact and inclusivity.

Little has been published on blended orientations and their effects on social connectedness and belonging. While articles are being published on blended learning, only a couple (McGee et al., 2016; Ware & Strickland, 2019) have touched on blended college orientations. The multi-university, blended online learning orientation study conducted by McGee et al. (2016) found that most colleges had their preferred method of delivering orientation materials. These ranged from no "distinction between the two delivery modes" to including a diagnostic section that could "benefit the university by both filtering enrollment as well as providing a necessary introduction to BOL (blended online learning) by giving the student a stronger idea of what is expected of their performance" (McGee et al., 2016, p. 225).

Other online orientation modalities have included text-based websites, video tutorials, and live webinars with university personnel. McGee et al. concluded that although these institutions varied in their approaches to blended online learning orientations, these modalities help students to be more successful as they become aware of services, tools, and expectations (2016). Although their study focused on blended online learning orientations, we found no evidence of "blendedness," as the mentioned orientation modalities only included online activities and not in-person activities.

The case study conducted by Ware and Strickland (2019) was more aligned with the expectations of a blended orientation model. Their study concluded that blended orientations offered the following benefits to students: (a) reduced anxiety due to awareness of course expectations, (b) minimized orientation time in class, and (c) provided opportunities for students to prepare before coming to class. Although both studies conducted by McGee et al. and Ware and Strickland focused on blended orientations or aspects of it, they did not engage in how this modality can affect students' sense of belonging.

Research Questions

Based on the theoretical frameworks and studies presented in the literature review, we believe that modality can play an important role in a blended orientation setting (Colucci & Grebing, 2020; Crozier, 2021; Graham, 2021) and help students develop social and institutional connectedness (Brooman & Darwent, 2013; Foster et al., 2012; Jorgenson et al., 2018; Rovai,

2002). As students rely on more information to guide their academic and social involvement decisions, institutions are discovering a need to disseminate this information more effectively (Giblin et al., 2021; Makara & Karabenick, 2013). As a result, many institutions are redesigning their orientation programs and supplementing in-person activities with online activities, aiming to provide students with more valuable information and the advantages of both worlds (Crozier, 2021; Graham, 2021). Besides the concerns of costs, time, and effort required to create an effective online component, institutions are weary of the social disconnect students may feel when participating in online orientation activities due to a lack of human interactions (Hehir et al., 2021; Tinto, 1993), which may influence their motivation to be socially involved once on campus. To validate or resolve this concern, we must understand how students perceive online orientation activities.

There are currently no articles about the connection between blended college orientations and social connectedness from students' perspectives. As blended orientations become integrated into higher education, more research needs to be done. This literature review helps identify a gap in the current research on the topic of social connectedness in blended college orientations, particularly with a focus on the online component of the blended modality. In this context, we posed the main research question: What are students' perceptions of their blended college orientation experiences? In addition to the students' experiences, our secondary research questions focused on the online component of the blended new student orientation asked: (a) How does it motivate students to engage with their new community? (b) How does it assist students in developing connections to the institution? (c) How does it help students gain a sense of belonging after participating in blended orientation activities? Although Tinto (1993) mentions both social and academic integration as predictors of academic persistence, this paper will mainly focus on social integration as the online and in-person orientation activities were developed mainly with that intentionality, and not primarily for academic integration.

Methods

As this study's focus was on a sense of connection and belonging among students and the institution, we used qualitative methods to allow us to obtain answers directly from students about their experiences through semistructured interviews. This study's parameters were defined by the participants (first-year college students) who engaged in both face-to-face and online orientation activities at a specific institution. With these boundaries, a case study qualitative approach (Merriam, 1998) was the best research design.

Research Design

The study took place at a private research university located in the Western part of the United States. First-year students enrolling in the fall of 2023 chose to receive orientation information through online orientation activities before coming to campus, in-person and on-campus activities, or both—allowing them to experience a blended modality. Students could also choose not to participate in any of the orientation modalities.

These different orientation modalities can be studied as units of analysis (Merriam & Tisdell, 2016). See Table 1 for a list of elements in each of the online and in-person new student orientations. As this case study was focused on the online orientation component, a description

of the online approach was emphasized. Students were sent monthly orientation emails by the institution's Office of First-Year Experience with links to where they could access the online learning modules. An online modality using computers and mobile devices was used to access a digital learning system through the institution's website. In these online orientation activities, students viewed video presentations and selected to learn more about specific interests through digitally interactive activities. The online orientation activities consisted of seven learning components. The first and last components served as an introduction and closing, while the remaining five modules (academics, learning, services & support, student life & culture, and wellness & safety) created most of the learning content.

Students moved linearly through the modules and were not able to skip to different sections. If students needed technical support, the online learning module consisted of contact information students could use to get assistance. Students were encouraged to complete the online orientation activities before arriving on campus. With the ability to leverage technology through the online orientation activities, our conjecture was that students would benefit from additional information that would not be included in the in-person orientation activities.

Other benefits of these online orientation activities might include reduced cognitive overload and more allotted time for interactions during the in-person activities. Additionally, online orientation activities increased flexibility, allowing students to access online information when, where, how often, and as quickly as they would like.

Table 1

Elements in Each of the Online and In-person New Student Orientations

Modalities	Online Activities	In-person Activities
Location	In any place with internet access	On the institution's campus
Duration	Flexible: Ranging from 2 days to 2 weeks	3 days
Access	Individually through a website (sent via the Office of First-year Experience), on an electronic device (computer, laptop, mobile, tablet, etc.) with internet access	Face-to-face in-person interactions in groups of 50–60 students
Content	1. Introduction (Welcome) 2. Academics (LMS, time management, majors/minors, how to register for classes)	1. Welcome assembly 2. Crash courses (a fast-paced in-person review of the 5 online

	3. Learning (academic integrity, library, testing center) 4. Services & Support (academic advising, career services, IT, accessibility, financial center) 5. Student Life & Culture (list of clubs, sports events, mascot, housing) 6. Wellness & Safety (CAPS for mental health, student health center, fitness centers, Title IX, campus safety, SafeWalk) 7. Conclusion	content topics) with peer mentors in groups across campus 3. Social activities (Friday Fun Night, soccer or volleyball games, ice-cream & food trucks, group photos) 4. Club fair (over 100 tables represented by different clubs on campus) 5. Explore a major or department (optional)
Technical support	An email address & a telephone number were provided for students with technical issues	No technology was used

Participants

The participants were drawn from a pool of incoming first-year students at a private university. Since this study was conducted in collaboration with the institution's Office of First-Year Experience (OFYE), they sent a survey email to all incoming first-year students with a direct link to participate in the study. The institution's survey identified students who (a) completed all of the online orientation activities, (b) completed part of the online orientation activities, and (c) never completed any part of the online orientation activities. The interviewed participants consisted of both females and males. Our criteria for selecting participants for the study were that the participants (a) come directly from high school, (b) be 18 to 19 years old, (c) enroll full-time at the university for the coming year, and (d) complete both online and in-person orientation activities. The first 20 participants who met the inclusion criteria were interviewed for this study.

Although there were an estimated 7,000 incoming first-year students, only a little more than 1,300 students (19%) responded to the survey email. Of those 1,300 survey responses, 55.74% completed the online orientation activities, 16.10% started but did not complete the entire online orientation activities, and 28.16% did not complete any portion of the online orientation activities. Among the survey respondents, about 100 students replied to our study request to participate in a 30-minute interview. From these 100 students who met our inclusion criteria (come directly from high school, be 18 to 19 years old, enrolled full-time at the university for the coming year, and completed both online and in-person orientation activities), we selected the first 20 students (20%) who replied to our email and scheduled an interview date and time. The 20 selected students (12 females and 8 males) were from 12 states and comprised of 15 different majors, with three as undeclared. Although more students could have been

interviewed for this study, the researchers believed that after 20 interviews, a level of saturation in the findings had sufficiently been reached.

Instrument and Data Collection Process

Data collection came from semistructured interviews. Interviewed participants received compensation for their time with a gift card to the institution's bookstore, funded by the institution's Office of First-Year Experience. The questions used in the semistructured interviews were created and revised by a group of researchers consisting of the authors and two external researchers. We first asked the main question about students' experiences with the online orientation activities, allowing students to respond freely about their perceptions, and then, if needed, followed up with questions for more details and further clarification (see Table 2).

The semistructured interviews were conducted over Zoom during the first two weeks of the fall semester (September 2023) since the in-person orientation activities took place three days before classes started. Video recordings of the interviews were transcribed into text for coding purposes. All transcribed text and human-entered codes were kept on an Excel spreadsheet in a separate file from the original transcripts for simplification and privacy protection of the participants. All survey participants were given pseudonyms to protect their identities, and data was aggregated.

Table 2

Samples of Semistructured Interview Questions

Type of Questions	Samples of Questions
Main/First Question	Please tell me about your online orientation experience.
Potential Follow-up Question	Did the online orientation experience motivate you to become more involved at [institution]? Why or why not? How?
Potential Follow-up Question	Did the online orientation experience affect how connected you feel to [institution]? Why or why not?
Potential Follow-up Question	After completing the online orientation activities, how do you feel about being a part of the [institution] community?
Potential Follow-up Question	Did the online orientation experience impact how you feel about contributing to the [institution] community? Why or why not?

Data Analysis Process

The researchers decided to use Saldana's (2013) coding methods and Braun and Clarke's (2006) thematic analysis method to analyze the data for two main reasons: (a) it allows for the interviews to be organized in a meaningful way through themes that may not be obvious and (b) by focusing on themes, we can offer a more in-depth understanding of the participants' perceptions. One main drawback of using thematic analysis is bias in interpretation. Two researchers reviewed the transcripts, created codes, and discussed any discrepancies. Two external researchers and an administrator from the Office of First Year Experience resolved any disagreements. The researchers tried to minimize biases as shown in the Trustworthiness section by implementing a transparent coding process, justification for code choices, member checking, peer debriefing, and thick descriptions.

The following are steps we took to analyze the interviews based on Saldaña's coding methods (2013). First, we became familiar with the data by reviewing the 20 video transcripts twice and the researchers' memos written after each interview to gauge the "feel" of the information. Second, we determined initial codes throughout interview transcripts by going through each interview line by line. Initial codes that ranged from a few grouped words (i.e., "useful information," "very helpful," "too long") to complete sentences (i.e., "And now, I'm even more excited, because I'm actually experiencing all the things that I was oriented about.") were saved in an Excel spreadsheet with columns for each of the familiarization and coding steps. Inductive coding was used as there was no predetermined set of codes. Third, the initial codes were then combined into groups with similar patterns. Fourth, these combined codes were discussed among the researchers to determine the emergent themes (see Table 3).

Table 3

Samples of Thematic Analysis

Transcript Quote	Initial Code	Combined Code	Possible Theme
I'm a first-generation college student, so I had no idea what I was doing. I thought [the online orientation activities] would help me.	• First-generation college student • No idea what I was doing • Thought it would help	• New experience/ environment • Confusion, anxiety • Helpful resource	• Resource about a new environment • Resource to alleviate nervousness, anxiety, and fear of failure in a new experience

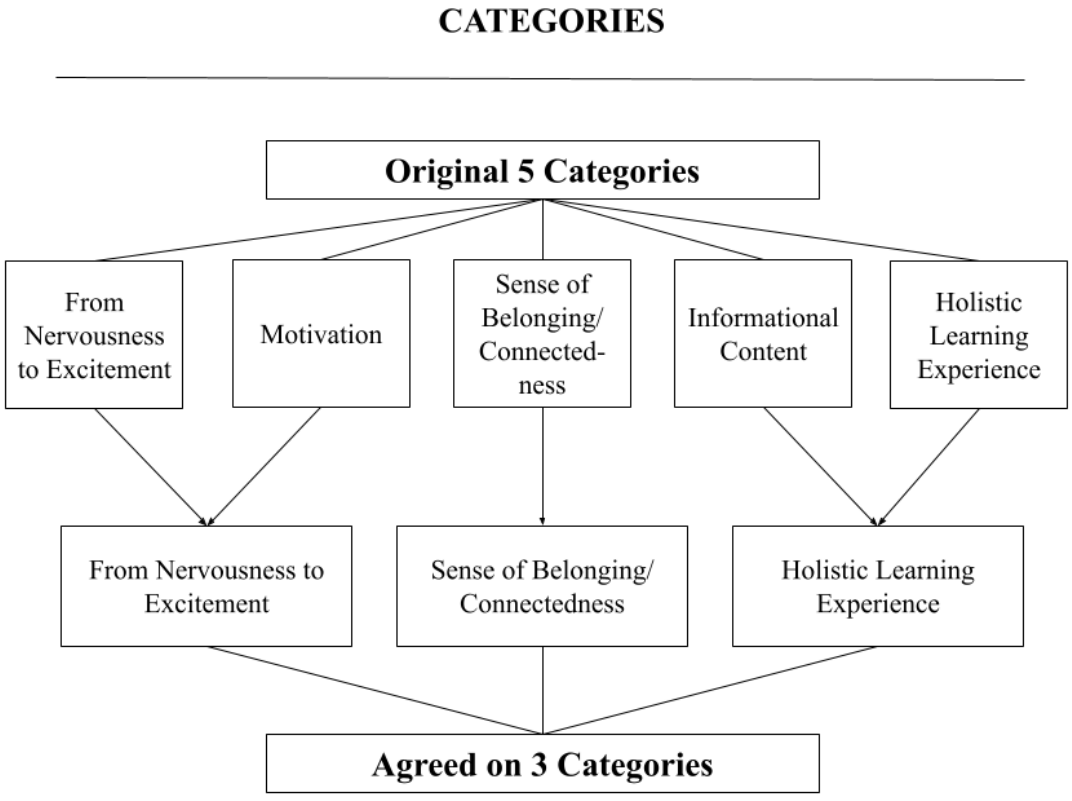
To a small degree it both helped me understand how to get help when I have questions, it also opened my eyes to the complexities of [institution]. So, in a sense, it made me feel anxious about all the things, all the changes, and the big things that we're going to have to do, but it also offered solutions to them.	• Helped me understand how to get help when I have questions • It also opened my eyes to the complexities of [institution] • Made me feel anxious about all the things...all the changes...and the big things that we're going to have to do • Offered solutions	• Helpful resource • Confusion, anxiety • Complexities of a new (academic and living) environment	• Resource about a new environment (complexities) • Resource to alleviate nervousness and anxiety • Resource that fueled anxiety
The orientation modules helped with all the other information you wouldn't have time to talk about during in-person orientation. I think they both came together quite nicely.	• In-person and online orientation activities focused different things • Both came together nicely	• Each type of orientation had their own focus • Each orientation component complemented each other • Helpful resource	• Resource for "what" but not "how" but complemented in-person orientation activities
I did it in a few days, and it was just an overload of information...It really taught me what things are, but not how to do them necessarily. F*or example, there*	• Did it in a few days • Overload of information • Taught me what things are but not how to do them • I'm not following you guys	• Personalized learning • Too much information • "What" but not "how" • Confusion, overwhelmed • Need to know more about "how"	• Resource for "what" but not "how" • Resource for a new environment

was a video where they're in the library and speed walking around to show you where stuff is. And I'm like, I'm not following you guys. This thing is huge. It showed me what's in there and what I can do here, but I don't actually know where to find it yet.	• This thing is huge • I don't actually know where to find it yet		
I think it helped knowing something before, I felt I knew a little bit more about what was going on before coming on campus, which helped me see what resources are here. I felt more connected.	• Knew a little bit more before coming on campus • Helped me see what resources are here • I felt more connected	• Helpful resource • Available institutional resources • Sense of belonging/connected	• Resource about a new environment • Learned more about institutional culture and expectations • Felt connected to the institution
Not really. Not really, but it didn't make me feel less connected. I don't know. It gave me good information. I guess that was the main thing I was looking for.	• "Not really" in response to the question: Do you feel that your online orientation experience helped you feel more connected to the [institution]?	• Sense of belonging/connected • Helpful resource	• Resource about a new environment • Did not feel connected to the institution

- It didn't make me feel less connected
- It gave me good information...the main thing I was looking for

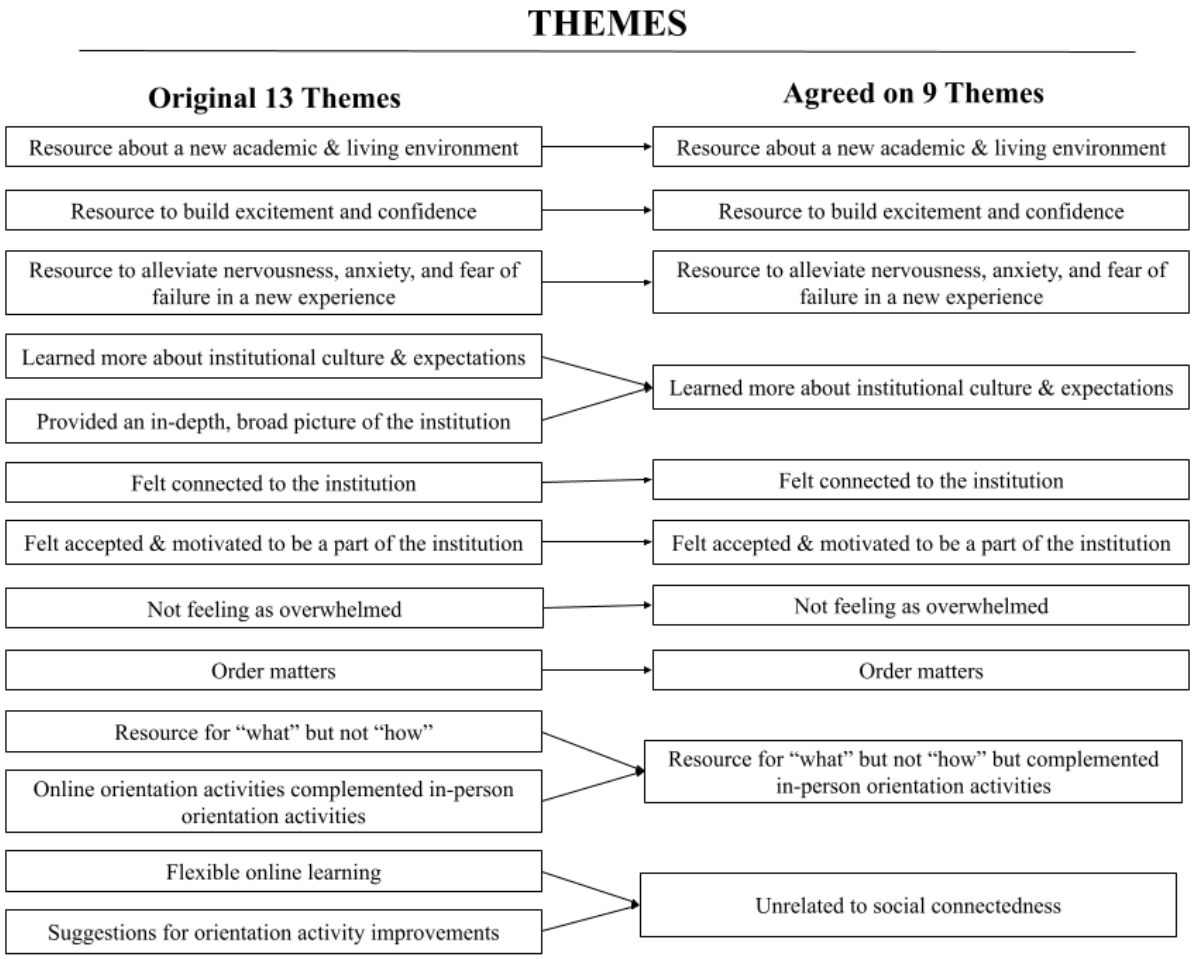
Originally, there were five categories and 13 themes. Two of the categories, *from nervousness to excitement* and *motivation* were combined since students in their excitement became more motivated, one being the cause of the other. We also decided that *informational content* was a part of the *holistic learning experience* and combined the two categories (see Figure 1).

Figure 1
Emerging Categories Flow Chart



Although we kept nine of the original 13 themes, two themes were combined (*resource for "what" but not "how"* and *online orientation activities complemented in-person orientation activities*). The themes *learned more about institutional culture and expectations* and *provided an in-depth, broad picture of the institution* were combined due to similarities on the subject. Two themes—*flexible online learning* and *suggestions for orientation activity improvements*—were viewed as unrelated to social connectedness and were removed (see Figure 2). In the end, only three categories and nine themes remained (see Table 4). After this process, peer debriefing was conducted with members of the Office of First-Year Experience to determine the credibility of these themes.

Figure 2
Emerging Themes Flow Chart



Trustworthiness

For purposes of trustworthiness, memos, peer debriefing, and member checking were used. Memos were kept on how interview participants were selected and why, and the researcher's initial thoughts and takeaways after the interviews. Peer debriefing of the findings

consisted of the researcher, the committee chair, and an administrator from the Office of First-Year Experience. Member checking was used to confirm with interview participants that the overall findings accurately reflect their views, feelings, and experiences. The completed analysis was emailed individually to each participant, along with an explanation that if any quote or a perspective was misrepresented, they could contact the researcher directly. Member checking allowed students to confirm or clarify any direct quotes in the narrative. Additionally, to ensure correct representation, all participants were required to have their cameras on during the Zoom interviews. With the use of these trustworthiness strategies, we were able to provide a more correct and valid case study.

Findings

Our study produced three main findings about online orientation activities and blended modalities: (a) they supported students' motivation to transition to college, (b) they helped to develop a sense of belonging, and (c) they contributed to an overall holistic experience in addition to the in-person orientation activities—which students still believed to be important. Within each category of findings, we identified many themes (see Table 4). Although transition played a major role in how the blended orientation activities were perceived within all the findings, we have chosen to place it within its own category as there were themes that we felt were specifically geared towards alleviating anxiety and nervousness and preparing students before coming to and living on campus.

Table 4
Categories and Main Themes

CATEGORIES	THEMES
From nervousness to excitement	• Resource about a new (academic and living) environment • Resource to build excitement and confidence • Resource to alleviate nervousness, anxiety, and fear of failure in a new experience
Sense of belonging /Connectedness	• Learned more about institutional culture and expectations • Felt connected to the institution • Felt accepted and motivated to be a part of the institution
Holistic learning experience	• Resource for "what" but not "how" but complemented in-person orientation activities • Order matters • Not as overwhelmed

From Nervousness to Excitement

More than half of the students found online orientation activities to be relevant sources of information for transitioning. For many of these first-year students, this was their first time living alone and away from families and friends. Cassandra shared, "I'm a first-generation college student, so I had no idea what I was doing at all. I thought [the online orientation activities] would help me a bit." Many of these students looked to the online orientation activities to help

them with this transition. Danielle commented, “It made me excited after going through all the online orientation activities and seeing what’s going to be there for me and how different college was going to be from my high school. It made me excited about college.” Even though there was a sense of excitement about change, there was also trepidation. Laura said, “I wanted to make sure I had all the necessary information to be successful on campus. I just wanted the information I needed to succeed so I could feel less scared about coming to [the institution].” Nancy shared an interesting perspective about the role of online orientation before an in-person orientation, stating:

> I’m new and nervous. I want as much information as I can get because there are a lot of things like logistics that I don’t know, and I want to understand. If you’re in person and you don’t understand something, it’s different from being at home at your computer and not understanding something. If you’re in person, you’re worried about where you’re going and if everything is going to be okay. It’s good to have a baseline knowledge before you get thrown into that.

Penelope shared that the online orientation activities “reassured me as a new freshman. I didn’t know anything, and I was really scared, but I would come back to review things just so I could get that reassurance again.”

Additionally, students reported that the online activities reduced anxiety, nervousness, and any fear of failure by creating a level of familiarity with the institution and culture that helped students feel prepared before even stepping foot on campus. Barbara said, “I don’t think everyone did the online things, so I’m a little step above. And now, I’m even more excited, because I’m experiencing all the things that I was oriented about.” They also claimed that the information in the online orientation activities increased their excitement to participate within the institution. One student shared, “It took away some of the nervousness of it and replaced that nervousness with even more excitement.”

Students also stated that online orientation activities supported in-person orientation activities by motivating them to engage more with peers and become more involved with extracurricular activities, organizations, and clubs, once on campus by informing them of possible options. Evelyn shared, “I don’t think [the online orientation activities] would help anyone make friends unless it was telling them about opportunities to make friends once they came to campus.” Grant, another first-year student, remembered, “It got me more excited about doing stuff because there’s just a lot of stuff I didn’t know existed.” Based on his experience with the online orientation activities, Grant said, “It showed me that there are a lot of different ways that I could connect with people and get help if I needed it.” Even though the online orientation activities did not directly connect students to their peers, they may have had an indirect and supportive effect once students arrived on campus.

Sense of Belonging/Connectedness

Most participants perceived an increased attachment to their institutions and a sense of belonging after participating in the online orientation activities of the blended modality. Students are trying to find where they belong as they transition from high school to college. Katherine stated, “I’m trying to do my research online and go on different social media pages [about the

institution] and just find what fits me because I'm eager to find where I belong." As students first interacted with the online orientation activities, they became more familiar with the institution. This familiarity led to an increase in connectedness with the institution and being able to see themselves as a part of that community. Evelyn claimed, "I think it helped knowing something before, I felt I knew a little bit more about what was going on before coming on campus, which helped me see what resources are here. I felt more connected." Another participant, Nancy, explained how her perception of the institution changed:

> I'm from Oregon. It's pretty far, and so I'd always considered [the institution] like my stepping stone to getting employment and moving on with my life. I did feel more connected after watching [the online orientation activities]. I felt more connected, because this isn't just a stepping stone, it's going to be a great experience.

For her, the institution morphed into something she could take part in.

In addition to connectedness, students felt a sense of belonging. Danielle shared, "It helped me understand the expectations at [the institution] and made going there in a few months more real to me. Before, it was a completely abstract concept. I want to contribute and be a part of this." John, like several other participants, observed that the online orientation activities helped him feel more "accepted" into his new academic community:

> In the beginning, I felt a little lonely, if we're being honest, but I think I felt [the online orientation activities] helped alleviate some of that loneliness, knowing where you could go, meet people, or find things to do. It made me feel more connected and realize that there's something for everyone. If you're an introvert, extrovert, or whatever type of personality you have, whatever your interests are, you can always find something that fits you, and I found stuff that fits me.

Another student, Matilda, said, "When you spend so much time on something, you feel connected to it more. The time I spent in the modules helped me bond with the fact that I'm going to [institution] and I felt more connected." Beyond connectedness, some participants expressed "a deeper understanding of wanting to get into stuff" and to "join and be a part of the culture" of the institution. Even one participant who struggled to feel connected noted, "As an outsider, I felt less like an outsider because I had more inside information," when talking about their perception of the online orientation activities. This idea of wanting to be a part of the institution contributes greatly to a sense of belonging.

Another factor that enhanced a sense of belonging was the perception that the institution had positive feelings toward the students. Some students asserted that the blended orientation activities gave the impression that the institution was organized, cared about them, and wanted them to succeed. Cassandra said, "I do think that [blended orientation] would help [new students] be a little less nervous just because you can tell that the people who put the time and effort into it care about you." Harry added, "It was nice to learn that [institution] wants us freshmen to succeed as much as possible, and so they provided links to resources to help me." It is this perception of the institution wanting students to succeed that also factors into participants feeling an increase in acceptance and being a part of the community.

Even though the online orientation activities provided connectedness and a sense of belonging for most students, there were a few participants who did not feel this way. For them, it was the in-person orientation activities that cemented that connection. Barbara commented:

> I don't think the online orientation modules made me feel like I belonged. I think I only felt that way after going to the in-person orientation. I felt like I had a network of people that the online orientation modules didn't give me.

Interestingly, those same students who did not identify an increased sense of belonging or connectedness to the institution after the online orientation activities indicated they felt neutral about the concept of attachment to the university.

Holistic Learning Experience

The majority of students who participated in the blended orientation modality thought online orientation activities complemented the in-person activities by allowing for refreshers through some overlapping of information. Grant shared, "Because of online orientation activities, I knew where buildings are physically and what they did in those specific buildings, so when I got on campus for the in-person orientation, I knew where to find everything." He also added that by completing the online orientation activities first, he "was able to get a job before coming to campus and beat the rush of new applicants."

Most students believed completing the online orientation activities first before attending the in-person orientation gave them a more holistic overall blended orientation experience. Ingrid said, "In-person orientation showed more of the things you need to be on campus to see. The orientation modules helped with all the other information you wouldn't have time to talk about during in-person orientation. I think they both came together quite nicely."

A few participants could see the benefits of doing the blended orientation in either order. One participant, Victor, commented:

> I don't know if it's better to introduce online first and then more fully develop an idea of how things work in person, or go to in-person first, and then finish it off by filling in any gaps with the online.

However, after some deliberation, Victor concluded by saying, "Maybe online first [because] then you get a broad look at these different things that are available." Many participants agreed that the online and in-person orientation activities complemented each other, especially after completing the online orientation activities first.

Another component of the blended modality that several participants mentioned was how overwhelming the in-person orientation was. John observed, "There's a ton of new stuff, a ton of new information, and [blended orientation] sort of help[s] break up that information. So, it's not just all dumped on you at once." Learning in smaller increments online and then coming on campus in person helped students to better process the new information and not be overwhelmed, which were important factors in how students perceived the blended orientation.

Although students perceived a blended modality to be a more holistic experience, there were differing opinions on the other advantages of the online and the in-person orientation activities. Some participants preferred the online orientation activities, while others preferred the in-person orientation activities for various reasons. For those who preferred the online orientation, their reasoning was based on convenience, flexibility, and accessibility. Penelope offered:

> I could complete the [online orientation activities] on my own time, which was very convenient. I felt that the online orientation modules gave me information that I was not able to get in the physical orientation. I'm a student with accessibility concerns, so I was in a wheelchair, and we had to go through routes that were away from the group for extended periods, and I did not get that information in person. However, with the online orientation, I was able to get what I missed.

Still, some participants preferred in-person orientation and commented on the advantages of learning with other people, knowing the why and not just the what of the institution, and hearing stories shared by mentors. Thomas remarked, "[In-person orientation helped] first and foremost for learning my way around campus. My mentor told us stories about the campus that I would never have gotten online or if I had had a map." While Danielle shared, "Seeing and hearing people be passionate about their interests at the in-person orientation motivated me and made me want to join in." Katherine acknowledged that for her, "I feel like I learned better by talking to people and asking questions. I learn by talking to friends and family, not doing a lot of online research. That's probably why I leaned more towards in-person." For some students, the need for personal interaction is crucial to learning, again supporting the need for a blended modality over only online or in-person orientation activities.

Discussion

Although research on blended learning, in general, has shown it to be beneficial with some challenges, this qualitative case study's specific focus was on the impact of the online orientation activities in a new student blended orientation modality by asking: What are students' perceptions of their blended college orientation experiences? We also wanted to understand students' motivation to engage with their new community and how connections to the institution and a sense of belonging develop after participating in blended orientation activities. In asking these questions, our findings confirmed transition and involvement theories. Second, our findings supported the ability of online orientation activities to help build connections to the institution before students arrive on campus. Lastly, they illuminated how a blended orientation modality was perceived by students.

Building Confidence to Motivate Involvement

This study found that online orientation activities in a blended modality motivated more than half of the participants to become involved in their university community. These activities included learning about their new environment, growing excitement and confidence about their transition, and alleviating concerns they may have had about becoming new college students.

Additionally, these activities can contribute to greater first-year student involvement in their university community and thereby increase retention rates.

As institutions adapt their orientation modalities to increase student confidence, engagement, and retention rates, researchers are exploring students' narratives of their experiences. In Thomas' multi-project report (2012), three research studies looked at college retention through involvement. The first study was conducted by researchers at Nottingham Trent University, Bournemouth University, and the University of Bradford. Two key findings in their longitudinal study are of particular interest: a lack of confidence and the ability to adapt to the university were categorized as demotivation or motivation for retention (Foster et al., 2012). In particular, other studies have shown low learning motivation within the online-only learning environments (Buchan & Precey, 2023; Pregowska et al., 2021), a perceived weakness of blended learning. The focus then became how to increase confidence and the ability to adapt (Mohzana, 2024).

A second study, conducted by researchers at the University of Reading and Oxford Brookes University, concluded that institutions can help increase confidence and the ability to adapt, which would lead to an increase in retention by providing first-year students with support in terms of managing expectations and promoting a sense of belonging (Mohzana, 2024; Morey at el., 2012).

In the third study by Cashmore et al. in 2012, researchers at the University of Leicester "found that 43% [of first-year students who dropped out] felt that [they were] not being given helpful academic support from their department [or institution]" while "25% of respondents regarded the fact that they did not know where to go to seek academic help or advice" as reasons for drop out (Thomas, 2012, p. 42). The need for institutional support is aligned with our findings that students gain excitement and confidence through a blended orientation modality. Students perceived that the blended orientation modality managed expectations and created a sense of belonging, thereby increasing students' motivation to become more involved in their university community.

Connections to Institutions Through Online Orientation Activities

In Rovai's definition (2002), connectedness is a sense of belonging, being a part of something greater, building relationships, and "may play a role in student commitment toward the institution" (Jorgenson et al., 2018, p. 76). Tinto (2003) added that as institutional commitment increases, students become more aware of their responsibility to participate within the institution. Many studies have shown the need for students to make connections as a condition for retention (Bruffaerts et al., 2018; Credé & Niehorster, 2012; Cutrona, 1982; Lee & Robbins, 1995; Rovai, 2002; Sidelinger & Booth-Butterfield, 2010). In both their qualitative and empirical studies on the perception of students on connectedness, Jorgenson et al. observed that many students "did not distinguish between social and institutional connectedness, even though previous research identifies the two as independent concepts" (2018, p. 79). In the online orientation activities of a blended orientation modality, students could not directly interact with their peers to build those relationships, and many recognized this lack of student-to-student interaction. However, our study showed that online orientation activities helped students build connections with institutions. This challenges the observations made by Jorgenson et al., as our participants viewed social and institutional connectedness as two distinct concepts.

Even though many see social connectedness as the most important of the two concepts from Jorgenson et al. (Brooman & Darwent, 2013; Foster et al., 2012), institutional connectedness is still relevant and impactful on students (Jorgenson et al., 2018; Tinto, 2003). As students orient themselves through the online orientation activities of a blended modality, our study showed that students with disabilities and first-generation students preferred a blended learning modality and found it helpful, as it offered greater access and flexibility.

This institutional attachment may be the result of students perceiving online orientation activities in a blended modality either as a neutral entity or one that leans in support of them and wants to see them succeed. It is this feeling of support that develops and strengthens institutional connectedness as students move from a "me" mentality to a "we" mentality (Tinto, 2003). Online orientation activities are crafted to inform students of institutional culture, expectations, and resources (McGee et al., 2016; Ware & Strickland, 2019); they are unlikely to produce misinterpretations that may lead to feelings of insecurity or marginalization.

By growing institutional connectedness before social connectedness through online orientation activities, institutions can reinforce a sense of belonging and support in a controlled learning environment. During in-person orientation activities, there are many moving parts and people that first-year students may negatively process certain speech, actions, or facial and body expressions of peer mentors, faculty, staff, and other students. Online orientation activities avoid these pitfalls. The focus of orientations now surpasses that of transition and delves deeper into one of integration.

Blended Modality as a Holistic Experience

The term "holistic" is more commonly used in medicine and psychology, viewing something as holistic is to see individual components as parts of a whole (Merriam-Webster, n.d.). Each component holds value independently and may contribute different or additional values when seen as part of a whole. As previously mentioned in the literature review, both online (Colucci & Grebing, 2020; Marshall, 2017; Stoebe & Grebing, 2020; Jaggars & Xu, 2016) and traditional (Brooman & Darwent, 2013; Can & Kalkan, 2021; Owusu et al., 2014) orientation activities, as individual components, hold strengths and challenges.

Graham (2021) predicted that after the COVID-19 pandemic, many institutions would "return to in-person education but will want to augment that experience with what they consider the best of the online learning opportunities for their students," (p. 23) opening the door to more blended learning and orientation experiences. The best of these online orientation opportunities in terms of a blended modality came in the form of accessibility, flexibility, reduced stress, cognitive load, and financial costs (Crozier, 2021; Hill & Smith, 2023; Ware & Strickland, 2019). Students could progress through the online versions at their own pace and review information that was pertinent or of interest to them. Even with these benefits, there were still challenges.

These remaining challenges of a blended modality were differences in online navigation skills and access to technological devices and the internet (Crozier, 2021; Hill & Smith, 2023). The challenges of intrinsic motivation and lack of opportunities for connections with peers or the

institution (Harper et al., 2024) were no longer barriers as students learned online about, and were motivated by, the institution's culture and expectations and came in person to experience what was learned online and build connections with their peers (McGee et al., 2016).

It is the experience of being able to connect to the institution through online activities and then connect with peers through in-person activities that captures the best of a blended modality. Many students in our study perceived the blended modality as a more holistic orientation experience in comparison to an online or in-person only model. In their meta-analysis on the effects of blended learning, Yu et al. (2023) concluded that blended learning had a significant positive effect on students' attitudes and motivations.

Several students in our study commented that the online and in-person orientation activities complemented each other, further increasing their motivation to be a part of the institution. They also perceived a greater advantage to completing the online orientation activities first. Yu et al. inferred similar conclusions in their study, showing that online first and then in-person later produced a slightly higher effect ($g = 0.722$) than other sequence variations; although most of their sequence variations had "upper-medium effects" (2023, p. 10). While many of our participants perceived an online first and then in-person later sequence to be holistic, they did not agree with Yu et al. that most variation sequences had similar positive effects. Some students believed that a reversed sequence of in-person first and then online later orientation modality would come off as a redundant or unnecessary process, concluding that sequence does matter in creating a holistic experience.

Other studies further support the claim of blended learning as a holistic experience. In their research, Beukes et al. (2019) explored students' perceptions of blended learning from a holistic perspective. Their study of 461 third-year undergraduate accounting students concluded that students perceived the online components (tutorials and lecture videos) as greatly contributing to their learning experience. Studies conducted by Zhou and Chu (2016) and Suson (2024) also found that blended learning environments provided better student experiences through tutorials and ease of use for motivation and satisfaction. Studies on blended learning environments have resulted in more student engagement (Buchan & Precey, 2023; Johler, 2022) and increased learning effectiveness (Beukes et al., 2019; Mikulecky, 2019; Salcedo, 2022) to create a more cohesive and holistic learning environment (Suson, 2024).

Implications for Practice

As traditional and online institutions turn to blended orientation modalities, the future designs of orientation programs must be considered. Although we are no longer limited by time or resources due to a pandemic, many institutions rely on traditional and somewhat conservative approaches as they form their blended orientation activities. This section identifies implications for practice affecting future designs of orientation programs at traditional and online institutions, prompting consideration of how to effectively implement blended approaches and ensure the most impactful experiences are achieved.

Online Integration

As more traditional institutions move towards adopting blended orientation modalities, students will benefit from greater levels of preparation and transitioning (Wilson & Minhas-

Taneja, 2015). However, the challenge is in implementation. As the meta-analysis on blended learning of Yu et al. (2023) emphasized, there are many elements and combinations of elements that make blended modalities more effective. As mentioned previously in our study, the sequence of online and then in-person instruction is important to effectiveness. Additionally, the proportion of online and in-person instruction is another factor to consider when creating a blended orientation modality. In their study, Yu et al. (2023) concluded that 50% online was the most successful ratio, while other combinations of online and in-person produced lower results. Lastly, deciding how to disperse the content among the online and in-person activities plays a key role in the effectiveness of a blended modality. These blended learning factors contribute to the overall reception and effectiveness of blended orientation modalities.

Online Interactions

Our study showed that more could be done to foster increased interaction with peers and engagement with content through online orientation activities. In addition to poll checks, discussion boards, and Padlet-like introduction videos, gamification presents a dynamic approach to enhancing peer interactions during orientation online activities. By creating online teams of first-year students with commonalities, such as majors, interests, or geographical locations, and incorporating ideas like virtual scavenger hunts, interactive challenges, and leaderboards geared towards helping students make successful transitions, institutions can create platforms where students collaborate, connect, and compete with their peers virtually.

Flexibility and Personalization

Many online orientation activities provide a general overview of the institution and resources and often do not allow students to skip familiar topics or personalize for their interests. Several students in our study noted that this characteristic of the online orientation activities was frustrating. One potential approach is to allow students to select from a variety of academic and extracurricular topics they may want to delve deeper into. For example, if a student is interested in biology, the institution can provide specific online information about the biology department, including details on majors, minors, research opportunities, and faculty members. By implementing flexibility and personalization, institutions empower students to shape their own learning and orientation experiences.

Limitations

Due to the boundaries placed on this case study and despite our best efforts to minimize biases, there are inherent limitations due to its scope. The study's participants were from a specific institution's single orientation program and consisted of only the first 20 first-year college students (who met our criteria) to schedule an interview. Although the response rate was high to the request for interviews, the overall response to the general survey was low. As a result, institutional culture and response time may have influenced the findings and led to a skewed sample. To enhance the generalizability of future research, we recommend including more than 20 students from multiple institutions and expanding the scope by including students from other populations, such as non-traditional, community college, or transfer students.

Another possible limitation of this case study was the inclusion criteria and the selection of students who were motivated to respond to our email and interview schedule. By limiting which students participated in the interview process, this case study specifically looked at the

perceptions of students who may not represent many of their peers. This may have led to confirmation or selection bias. We suggest that future studies make efforts to intentionally include students from diverse backgrounds.

Additionally, the researchers used Excel spreadsheets and hand-coding for the data analysis. Even with peer-debriefing, it is possible that this type of analysis may have introduced research bias. To reduce research bias, future studies may choose to use coding software.

There was a limitation of time. Although this study focused on blended orientations and their impact on students' social connectedness, it did not encompass the extent of time that the impact would last. Future studies could also discuss the challenges faced as students' self-paced and personalization may lead to missed information and complete rates. Lastly, by exploring the impact of blended online orientation activities from both a social connectedness and an academic persistence view, as identified by Tinto (1993), institutions would have a more comprehensive understanding of the benefits and challenges, To better answer these last points, we suggest conducting future research involving longevity and the impact of blended orientations on social connectedness and academic persistence after the first year of college.

Conclusion

This study highlights blended modalities, consisting of online and in-person activities, transforming traditional new-student college orientations into more flexible, personalized, and empowering instruments. As students engage with the online orientation activities, these interactions may result in greater confidence, connection to the institution, and a holistic experience. With more focus placed on the design and implementation of online orientation activities, institutions can better meet the diverse needs of their student body and create an overall learning environment that encourages successful student transition, retention, and a sense of belonging.

Disclosure Statement

The authors declare no known conflict of interest related to this research. Although both authors are affiliated with the university used in this study, we disclose that the research was conducted independently and not influenced by any member of the institution. Participants in this study had no previous association or contact with the researchers or peer-debriefing committee.

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