Flying Higher Education:

Airports as Hubs of College Advertising

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Abstract

Colleges in the United States frequently advertise in airports, spending large sums of money to do so. This article hypothesizes why colleges favor airports as marketing venues using prior research as a guide. Wilcoxon rank-sum tests and content analysis are used in this exploratory case study to identify themes in airport college advertisements. 25 advertisements collected at a single mid-sized United States airport make up the data source for the single-site case study. Findings include that extracurricular activities only appeared in the ads of private universities, and affordability messaging only appeared in marketing for public institutions. 21 of 25 ads were for private colleges. No community colleges were advertised. All represented institutions were from the same state, and nearly all were from the same region of the state. The findings should serve to spur future more generalizable research into the proliferation of higher education airport advertisements in the United States.

Keywords: Airport, Marketing, Higher Education, College

Flying Higher Education: Airports as Hubs of College Advertising

Over the past two decades, the marketing landscape for higher education has changed. Today, there is an increasing focus on social media and digital advertisements (Hanover Research, 2014) – mediums that didn't exist until recent years – to help universities raise their profile and reach prospective students across a competitive global landscape (Ramirez, 2018). However, colleges have not entirely abandoned their old ways of advertising and promotion, as new technologies have not offered perfect advertising solutions to replace them (Bannister, Kiefer, & Nellums, 2013; Brackett & Carr, 2001).

In particular, traditional advertisements for higher education institutions have persisted within the confines of airports throughout the United States (Zinkan, 2018), which continue to be focal points of multi-million dollar campaigns for universities like Stephen F. Austin State University (Wermund, 2014a) and the University of Houston (Wermund, 2014b). The international airport in Charleston, SC boasts advertisements from nearby higher education institutions like the College of Charleston, The Citadel, the Medical University of South Carolina, and Wofford College (Wise, 2019). Nashville International Airport's terminals are plastered with advertisements from schools like Vanderbilt University, Belmont University, Tennessee State University, Meharry Medical College, and the University of Tennessee-Knoxville (Maples, 2018). Tulsa International Airport's online guide for buying advertisement space even features terminal ads from both the University of Oklahoma and the University of Tulsa as imitation-worthy exemplars. Austin College is so proud of their various airport advertisements around the state of Texas that they advertise the advertisements on the university website (Austin College, 2019). Even Harvard University, perhaps the school with the least need

to publicly promote itself, continues to advertise in Logan International Airport (Nakada & Vrotsos, 2018).

Based on the wealth of literature on higher education marketing, public information on airports and airport advertising, and recent college financial trends, there appear to be a number of key reasons why airports remain a highly saturated enclave of university advertising. The purpose of this study will be to offer informed speculation, based on principles from higher education and marketing literature – as well as data from the field – as to why higher education advertisements have seemingly specifically flourished in airports, how these institutions utilize this unique marketing environment, and what themes exist between college airport advertisements by institution type.

This case study utilizing the single case of Nashville International Airport (BNA) serves as an initial exploration of the landscape of higher education marketing within an airport setting, to test anticipated findings based on higher education literature on advertisements as they exist in the field. Specifically, literature indicates that in-state public universities and high-cost private higher education institutions have a greater motivation to advertise in airports, due to the general wealth of air travelers and their likelihood of traveling from out-of-state. However, arguably any higher education institution could benefit from the high visibility, captive audience, and high traffic nature of the airport setting. Two research questions undergird this study:

1. How do higher education airport advertisements differ, if at all, based on their host institutions' characteristics?

2. What common themes exist, if any, across the visual compositions, texts, and media of college airport advertisements?

Literature Review

A number of themes have emerged that can each partially explain the density of higher education advertising in airports. First, and perhaps foremost, higher education institutions seem to be drawn to airports out of a desire to "segment their marketing" (Bock, Poole, & Joseph, 2014; Drezner, 2018; Freathy & O'Connell, 2012; Tucciarone, 2007) – focus their efforts on an ideal customer population – to prospective students that are from wealthier backgrounds. Similarly, airports offer a unique setting to advertise to both international and out-of-state students, which can be ideal targets for public institutions that have higher tuition rates for both international and out-of-state students. Additionally, the unique captive and high-traffic setting of an airport is likely of particular interest to colleges who are actively competing to recruit from the same population of potential students. Lastly, it is possible that part of the motivation to market in airports is rooted in the symbiotic status of universities and colleges as local economic engines, which are institutionally invested in the local economy and vice versa.

The Rich

There is a long history of higher education disproportionately serving the wealthy and powerful through exclusionary admissions policies and a legacy of elitism (Karabel, 2006). A number of prominent higher education institutions, such as Stanford University and Duke University, have unabashedly targeted children of wealthy parents for recruitment, in the hopes of engendering a profitable, donative relationship with their affluent families (Golden, 2004; 2007). For private colleges operating with a high tuition/high aid financial model, recruiting students of wealth carries great financial benefits, as they can pay the full tuition sticker price without any discounting or aid, earning the university far more profit than other students (Curs &

Singell, 2010). Even for the public higher education institutions that don't follow the high

tuition/high aid financial model, wealthy students are still the "right" (Bock, Poole, & Joseph,

2014; Harrison-Walker, 2010) kind of student to recruit – they have a high potential of

converting into lucrative, donating alumni years down the line (Drezner, 2018; Harrison-Walker,

2010).

As it so happens, airports are an ideal space for catering advertising to the wealthy.

Business air travelers, who make up a significant portion of passengers, tend to be wealthy

(Freathy & O'Connell, 2012), and air travelers on the whole are likely to have disposable income

(Tulsa International Airport, 2019). Wilmington International Airport in North Carolina has

reported that 50% of its business travelers have an income of $100,000 per year or more (Lawler,

n.d.). Phoenix-Mesa Airport estimated that the median income of their passengers – including

both business and leisure – was $77,000 per year (Phoenix-Mesa Airport, n.d.). Tulsa

International Airport claims that nearly 40% of their passengers earn upwards of $100,000 per

year (Tulsa International Airport, 2019). The often prohibitive expenses of air travel help to self-

select a passenger population that comes from some financial means (Meyersohn, 2018; Seaney,

2014).

Because of the wealthier makeup of air travelers, advertising in airports is a means of

higher education institutions practicing both market segmentation and customer prioritization – if

ads in airports are more likely to reach wealthier prospective students, who in turn are more

likely to become ideal, high-dollar alumni donors, then airport advertisements should be

prioritized for the long-term financial health of the university (Bock, Poole, & Joseph, 2014).

There are indications that wealthier students possibly associate name recognition with

educational quality (Joseph, Mullen, & Spake, 2012) – meaning there is an additional incentive for institutions to catch their eyes whenever and wherever they can.

The Eyes

Airports offer a unique setting for advertisements. Airport ads are classified within the category of 'out of home' (OOH) advertising, along with other means of transit advertisements, like those found on buses or on roadside billboards (Wilson & Till, 2008; Zinkan, 2018). However, airport passengers are also regarded as a captive audience who can't escape the visual reach of the advertisements in the space, an effect that is enhanced by the fact that 88% of air travelers spend upwards of 30 minutes waiting in an airport concourse (Clear Channel Airports, 2019). Still, airports tend to be stressful, which leads to many passengers failing to consciously retain information about the advertisements that they see in airports, particularly those that are near bottle-necked areas like security stands (Wilson & Till, 2008). However, even when passengers do not actively process the advertisements they see in the background at airports, research has indicated that they do recall and recognize the brands when they see them again in the future, and are more likely to recall brands that they have seen in multiple advertisements (Turley & Shannon, 2000). Once again, higher education institutions stand to benefit by occupying as much visual space as possible, to catch as many passing eyes as they can.

For higher education, brand recall is particularly important. As mentioned earlier, research has indicated that some populations of students associate institutional brand recognition with educational quality (Joseph, Mullen, & Spake, 2012). Perhaps more importantly, marketing visibility to the public eye is one of today's critical competitive battlegrounds between rival institutions, regardless of the specific forum (Hanover Research, 2014). Higher education

institutions are in competitive positions where they utilize any angle possible to reach students, often spending $1500 per student in advertising before they even reach the school (Hanover Research, 2014; Pampaloni, 2010; Weisbrod, Ballou, & Asch, 2008, p. 177). A study in 2000 indicated that most higher education institutions took advantage of every form of advertising medium available to them, primarily as a means of raising awareness of their presence (Kittle, 2000).

In 2014, the University of Houston and Stephen F. Austin State University, two East Texas higher education institutions located 150 miles apart, announced parallel marketing campaigns targeting the same areas (notably including Houston's airports) within months of each other (Wermund, 2014a; 2014b). In 2005, Maryland's Towson University launched an ambitious, Baltimore-centered advertising campaign to not only reach prospective students, but also to pitch their merits to local politicians and business leaders, as the institution felt they were lagging behind in public goodwill when compared to other local institutions like Johns Hopkins University and University of Maryland – Baltimore County (Walker, 2005). This desperation for public recognition and attention is rooted in a desire for higher education institutions to project an image of reputational prestige to students, and to secure footholds of visibility in the public eye (Gibbs & Maringe, 2008; Laurer, 2007; Rasli, Hassan, & Iqbal, 2012). Further, one study has suggested that prospective students infer institutional quality from quantity of advertisements (Kiss & Kun, 2014), which further incentivizes institutions seeking as much visual advertising real estate as possible. In short, one reason that universities are advertising in airports is because there are eyes to engage with there, and college competitors looking to outshine them at any opportunity.

The Outsiders

Higher education institutions covet international students. Public universities, particularly given the recent trend of decreasing financial appropriations from their host states, see full-tuition-paying international students as a way to make up lost revenues (Jaquette & Curs, 2015; Owens, Srivastava, & Feerasta, 2011). Research-intensive universities rely on international students to fill prestigious graduate programs (Lee, 2014). Universities throughout the United States have made a concentrated effort to recruit high-paying and high-ability international students through specified marketing strategies, which has yielded great recruitment successes for many years, even in the face of increasing global competition (Hanover Research, 2014; Ramirez, 2018). There are benefits to the recruitment of international students that extend beyond tuition revenues, as well – many international students remain close to their alma maters after graduation, contributing financially to local economies (Owens, Srivastava, & Feerasta, 2011) In 2000, international students were estimated to have contributed a total of $12 billion to the United States economy (Owens, Srivastava, & Feerasta, 2011).

It stands to reason that many international students rely on air travel to enter the United States. So, it might make sense that airport advertisements are a means of drawing international students to universities. However, research has suggested that international students don't consider advertising pitches and messaging when making their college choices – they rely primarily on familial recommendations, word of mouth references from trusted sources, and a college's location to make their admissions decisions (Tan, 2015). Despite this, there are universities that cater advertising to international students, emphasizing institutional quality and general "consumer satisfaction" (Russell, 2005). Perhaps the most intriguing example of airport advertising used to cater to international students is Indiana University's annual takeover of Indianapolis International Airport, when the university installs a multitude of banners and

welcome signs, and even staffs a welcome booth to greet incoming international students (Briscoe, 2017). While it is possible that higher education airport advertisements are partially placed to appeal to potential international students, as is the case with this annual Indiana University campaign, it is more likely that higher education airport advertisements are meant to appeal to another kind of outsider – out-of-state prospective students.

As with international students, there is a financial incentive for many universities to recruit students from out-of-state: they often pay more in tuition, which can make up for revenue shortfalls in other areas for a university (Jaquette & Curs, 2015). Elite public universities like the University of Michigan particularly focus on reaping the financial rewards of recruiting out-of-state students, particularly those from wealthy backgrounds (Jaschik, 2019). The majority of air travelers in the United States are Americans flying domestically, which means that they are likely to see higher education airport advertisements while traveling outside of their home state, which means that airport advertising could be done with the intention of targeting this population (Bureau of Transportation Statistics, 2019). While this is far from conclusive evidence, President Renu Khator of the University of Houston seemed to imply attracting non-resident students was a key reason for the school's 2014 airport-focused advertising campaign:

> When was the last time you heard that the University of Houston is better known outside the city than inside? Shall we say, No More! Beginning in November, you will notice our "Welcome to the Powerhouse" campaign everywhere, but most importantly, you will see it at both Houston airports. (Wemund, 2014b)

The Public Interest

Airports in the United States are largely owned and operated by public entities or local

and state governments (Tang, 2017). Airports are integral to local economies, and are tied to the

financial health of their host cities and regions (Chura, 2009; Shrikant, 2018; Thomason, 2017).

Because of the mutual interest of airports in their local economies and vice versa, it would make

sense for local airports to support other local economic engines helping localities to thrive:

namely, higher education institutions. University partnerships with local industries are hardly

unheard of: in North Carolina, state universities and community colleges have already partnered

with the North Carolina Department of Transportation and U.S. Department of Transportation to

develop improved Unmanned Aircraft Systems (UAS), offer aviation-focused degree programs,

and conduct research on transportation innovations (North Carolina Department of

Transportation Division of Aviation, 2019). The fact that many American airports and

universities are supported by common governmental bodies makes partnerships all the more

natural. The concept that a local airport might invite local colleges to showcase themselves in

their terminals, or potentially cut them a reasonable deal, might not be so far-fetched – both types

of institutions offer benefits to the local area, and both rely on each other for business.

The idea of the university as an economic engine has gained steam in recent years with

the growth of "innovation districts" (Katz & Wagner, 2014) – urban zones often centered around

universities as anchors which act as clustered physical hubs for innovative start-up companies,

research, and mixed-used developments. Examples of these university-anchored developments

include Philadelphia's University City (anchored by the University of Pennsylvania and Drexel

University), St. Louis (near St. Louis University and Washington University – St. Louis), and

Cambridge's Kendall Square (spurred by MIT). These innovation districts don't just act as hubs

and magnets for highly skilled jobs in the local area, but also revitalize and grow cities (Katz &

Wagner, 2014). While universities have served as research hubs for the American public interest

for many decades – from the development of warfare technologies to improved farming

equipment (Loss, 2011) – the modern rise of innovation districts has brought a new twist to the

idea of colleges serving the public interest.

Numerous studies have been done to assess the economic impacts of higher education

institutions on local economies – Notre Dame University is estimated to contribute $1.167 billion

per year to Indiana's St. Joseph's County (Stevenson, 2013), Indiana State University

contributed $334.5 million across seven adjacent counties (Loughlin, 2017), and Fairfield

County, Connecticut was estimated to have received $5.58 billion in local economic impact from

its local private higher education institutions (Hall, 2019). As mentioned previously, students

attracted to an area by universities become local assets themselves - international students

recruited by American universities were estimated to have a total economic impact of $12 billion

in 2000, and international students are known to remain nearby after graduation to assimilate into

the local community (Owens, Srivastava, & Feerasta, 2011). Given the economic boon that

universities can provide their host localities, it might make sense for public entities and

local/state governments to help recruit students to the area – such as through providing prime

visibility advertising space in airports. While this is highly speculative reason for the density of

higher education advertisements in airports, the concept of local industries aiding each other for

the benefit of the area makes sense – if it isn't being done deliberately already, perhaps it should

be.

The Bottom Line

The ultimate purpose in advertising is to maximize profits – that is the bottom line. In the case of colleges, advertising is the key to building national name recognition for an institution. Once national name recognition is achieved, the pool of applicants to the school becomes deeper and broader, ultimately leading to more tuition revenue and alumni giving (Weisbrod, Ballou, & Asch, 2008). While there is resistance within the academy to the full embracing of marketing and advertising techniques and philosophies for a litany of reasons (Balogh, 2017; Gibbs, 2007; Gibbs & Maringe, 2008, Jugenheimer, 1995; Maringe, 2005; Ramachandran, 2010; Stimpson, 2006; Weisbrod, Ballou, & Asch, 2008; Wonders & Gyure, 1991), on some level, there is no avoiding the need for universities to market themselves to prospective students. However, not all advertising is the same when it comes to costs and benefits. From what data is available, it appears that airport advertising is a comparatively low-cost method of reaching a large number of people, making it an ideal advertising medium for institutions keeping a close eye on their bottom line.

Based on publicly available quotes of airport advertising costs, it appears that universities maximize their advertising impressions for the money that they spend on these ads. At the Tulsa International Airport, highly-visible ads run for as little as $350 per month, which seems like an appealing deal for an airport that had 3 million passengers pass through it in 2018 (Tulsa International Airport, 2019). Wilmington International Airport receives quite a bit less passenger traffic than Tulsa, with just over 836,000 in 2017, but offers similar advertising quotes that start at $350 per month (Lawler, n.d.). Phoenix-Mesa saw passenger traffic of just over 1.5 million, and offers ads in a similar price range of $400 per month (Phoenix-Mesa Airport, n.d.). To compare with other forms of advertising, billboards can run for thousands of dollars a month in cities (Treece, 2019), a nationally broadcast 30-second television spot averages around $115,000

(Rudder, 2019), and radio ads can range from $200 to $5,000 per week depending on the market (Aland, 2017). Particularly for small colleges trying to compete in the advertising realm with limited resources, airport advertisements are likely to be financially appealing. Given indications that most universities are explicitly focusing and spending more on advertising across the board (Weisbrod, Ballou, & Asch, 2008, p. 177), however, cost-effectiveness is likely less of a motivation for purchasing advertising space in airports for higher education institutions with more means.

The five motivations for higher education institutions to engage in airport advertising outlined here are by no means comprehensive. A handful of these motivations, such as appealing to outsiders (out-of-state and international prospective students), paying attention to the bottom line of advertising costs and benefits, and prioritizing marketing to the affluent are purely capitalistic. Ultimately, these three motivations boil down to balancing revenues and costs. The other two motivations are different – the general competition for eyes seems to be fueled by inter-institutional rivalry and the pursuit of increased branding power. While this motivation is ultimately about revenues as well, it is more convoluted when compared to the aforementioned three motivators. The logic isn't as clear – it is more reminiscent of the Bowen effect (Bowen, 1980) than a balanced spreadsheet, with its model of fervid and seemingly unfettered spending in the spirit of competition. Lastly, the motivation of serving the public interest is a true outlier when compared to the other motivators. While there is a capitalistic motivation for both an airport and a university to cooperate for the betterment of their common locale, there isn't an immediate gratification to this motivation – it is a long-term strategy with a large objective. While it seems to be a good idea for cities, airports, and higher education institutions to work together for mutual benefit, this is likely the lowest tier of the motivations for higher education

advertising in airports. The other four motivations are all behaviorally consistent for capitalistic academic machines, which seems to be the collective mindset behind the modern marketing of higher education.

Theoretical Base

This study operates with Keller's (1993) customer-based brand equity model. Keller's model emphasizes the importance of the awareness of a brand and the image of that brand among consumers and potential consumers. As he defines it, consumer-based brand equity is the effect of brand knowledge on consumer response to the marketing of the brand (Keller, 1993). The advertisements that make up the data source for this study are both a key means of building brand awareness and a venue to send messages to build or alter the brand's image. The messages advertisements convey are both a reflection of the institutions' values, and an impression deliberately projected onto a potential customer population to build brand equity. This study is focused on identifying how universities are using the airport setting to build brand equity with the population of air travelers through advertisements.

Higher education institutions are particularly reliant on brand equity – they depend on prospective students choosing to enroll without any clear way of assessing the quality of education ahead of time (Mourad et al., 2011). One of the few ways a student can make an enrollment decision is based on brand equity - the impressions that the institution has instilled in them through their interactions, which is likely to be largely through marketing. Mourad et al. (2011) identified three determinants of brand equity for higher education institutions: Consumer attributes, brand awareness attributes, and brand image attributes (p. 408). Anticipated motivations for colleges to advertise in airports based on literature align well with this

framework. For instance, attempting to be economically efficient and maximize exposure with advertising dollars is about maximizing brand awareness, whereas catering advertisements to appeal to international students would be focused on a consumer attribute. Specific messaging within advertisements like institutional rankings, available amenities, and job placement numbers would all fall under brand image attributes.

Methods

Data Collection and Analysis

On December 8, 2018, all of the higher education advertisements in the Nashville International Airport (BNA) were photographed, which totaled 25 throughout the three terminals and common areas. The selection of BNA was one of convenience – a delayed flight provided the researcher an opportunity to document higher education advertisements throughout the airport. BNA is a mid-sized international airport for the Nashville metropolitan area, which is known as a travel destination for its tourism appeal. The layout of BNA was such that all areas of each terminal were accessible for a waiting passenger of any flight at the airport, as there was only one common security area for all the combined terminals, which allowed access to all public areas of the airport for documentation. Notes were kept documenting the terminal location and advertisement type along with each photograph of an advertisement. Table 1 lists each advertisement, its location, and a brief description. Once all this initial data was collected, more information on each institution was collected for analysis, including their proximities from BNA, their institution types via Carnegie Classification, the median family income of current undergraduate students, the percentage of students from the top one percent of wealth, and the current out-of-state graduate and undergraduate tuition rates at each institution.

Table 1

BNA Higher Education Advertisement List with Institutions, Locations, and Descriptions

Ad #	Institution	Location	Description
1	Vanderbilt	Terminal B	Printed wall advertisement. Picture of a football player with a caption about his "passion" to "impact health care"
2	MTSU	Terminal B	Digital wall advertisement – static. "Awarding larger scholarships"
3	Lipscomb	Terminal B	Digital wall advertisement – static. "Our MBA comes with a job…A top-ranked program designed for you"
4	Belmont	Terminal B	Digital wall advertisement – static. Christmas concert on campus featuring celebrity guest (Sheryl Crowe)
5	Vanderbilt	Terminal B	Printed wall advertisement. "You know your gate, but do you know your destination? No other business school can help you navigate the business world in the ways that we can"
6	Belmont	Terminal A	Digital wall advertisement – static. Christmas concert on campus featuring celebrity guest (Sheryl Crowe)
7	Lipscomb	Terminal A	Digital wall advertisement – static. "#1 international business degree in Tennessee…providing innovative ideas to businesses around the world"
8	Vanderbilt	Terminal A	Printed wall advertisement. "Fly at a higher altitude…some business schools force you to go in their direction. We help you go in yours."
9	Vanderbilt	Terminal A/B Food Court	Floor projection. Vanderbilt logo and "Anchor Down" (athletic slogan)
10	Meharry	Security	Standee at security checkpoint. "We teach health caring"
11	TTU	Terminal C	Digital wall advertisement – static. "Immerse yourself. Engage. Lead. Online	Affordable	Industry Immersed"
12	TSU	Terminal C	Printed wall advertisement. Celebrity alumnae endorsement (Oprah Winfrey)
13	Belmont	Terminal C	Digital wall advertisement – static. Christmas concert on campus featuring celebrity guest (Sheryl Crowe)
14	Vanderbilt	Terminal C	Digital wall advertisement – animated. An animated, dancing student is shown next to the text "Find your impact. At Vanderbilt, passion inspires impact."
15	Belmont	Terminal C	Digital wall advertisement – animated. "College of Law, Belmont University"
16	Lipscomb	Terminal C	Digital wall advertisement – static. "Our MBA comes with a job…A top-ranked program designed for you"
17	Vanderbilt	Terminal C	Printed wall advertisement. "Fly at a higher altitude…some business schools force you to go in their direction. We help you go in yours."
18	Vanderbilt	Terminal C Food Court	Floor projection. Vanderbilt logo and "Anchor Down" (athletic slogan)
19	UTK	Terminal C	Physical banner hung from ceiling. "Imagine the possibilities…your innovation partner in Tennessee"

20	Vanderbilt	Terminal A	Printed wall advertisement. An antique football game bill for Vanderbilt vs. Michigan from 1922
21	Vanderbilt	Terminal A	Printed wall advertisement. "Find your impact. Riley's devotion to dance stirs the heart and mind. Her drive? Impact cures to crippling disease. Through discovery at Vanderbilt, passion inspires impact"
22	Meharry	Security	Standee at security checkpoint. "We teach health caring"
23	Meharry	Waiting	Physical ad wrapped around column. "Research, public health, dentistry, medicine"
24	Meharry	Waiting	Physical ad wrapped around column. "Research, public health, dentistry, medicine"
25	Meharry	Waiting	Physical ad wrapped around column. "Research, public health, dentistry, medicine"

Note. TSU is short for Tennessee State University, TTU is short for Tennessee Technological University, MTSU is short for Middle Tennessee State University, and UTK is short for University of Tennessee – Knoxville.

Measuring the proximity of institutions to BNA via Google Maps visualizes the geographic convenience of institutions deciding to place advertisements at the airport. Tracking institution types – namely their public or private status – could indicate whether public or private colleges were putting more effort (and funds) into advertising themselves at BNA. Using data on median family income and percentage of the student body from the top one percent of wealth – based on a 2017 report from *The New York Times* (Aisch et al., 2017) – should provide a glimpse of how much of an institution's clientele are wealthy, and if that might justify their focus on airport marketing. The tuition rates, listed on collegetuitioncompare.com for the 2018-2019 academic year, provides an estimation of how much public institutions stand to gain from recruiting an undergraduate or graduate student from outside of Tennessee, as well as how much private colleges comparatively profit off of their students (College Tuition Compare, n.d.). Table 2 provides all of this information by institution below.

Table 2

2018-2019 Statistics on BNA Represented Higher Education Institutions

Institution	Ads	Type	Out-state grad tuition	Out-state undergrad tuition	Students - 1% of wealth	Median family income for students	Distance (miles) from BNA
Vanderbilt	9	Priv.	$47,208	$48,600	22.8%	$204,500	8.5
Meharry	5	Priv.	$27,132	n/a	n/a	n/a	9.5
Belmont	4	Priv.	$21,870	$34,310	6.9%	$141,900	8.9
Lipscomb	3	Priv.	$17,766	$29,676	2.1%	$110,800	11.0
MTSU	1	Pub.	$23,508	$25,272	<1%	$71,700	37.2
TSU	1	Pub.	$21,608	$20,404	<1%	$38,200	10.7
TTU	1	Pub.	$24,560	$23,352	<1%	$76,100	72.7
UTK	1	Pub.	$29,432	$29,300	2.1%	$96,900	179.0

Note. TSU is short for Tennessee State University, TTU is short for Tennessee Technological University, MTSU

is short for Middle Tennessee State University, and UTK is short for University of Tennessee – Knoxville.

Meharry Medical College does not have undergraduate students, and no data has been reported on the median

family income of Meharry students or the percentage of Meharry students from the top one percent of wealth.

Distance from Nashville International Airport (BNA) was calculated assuming car travel with Google Maps.

Where relevant, Wilcoxon rank sum tests were used to compare the data from the public

institutions as a collected group to the private institutions as a group. A nonparametric

significance test was required because the distributions of each of the data were not normal.

Given the focus on differences between the public and private institution groups, Wilcoxon rank

sum tests were a natural fit for the data.

In addition to the quantitative analysis, the texts of each of the collected advertisements

were transcribed – along with rich descriptions of the advertisements' appearances – in order to

allow for qualitative content analysis to identify themes across the sample. In alignment with the

exploratory nature of the study, holistic codes were applied in the first cycle of coding to identify

common emergent themes and messaging in the advertisements, considering both textual and

visual elements (Miles et al, 2014). These holistic codes were used for the development of robust

coding categories with mutually exclusive sub-codes, which were subsequently applied to the

entire sample in a second round of coding (Rose, 2016; Shreier, 2014) (Table 3). The frequencies

of the codes were then tallied, with particular attention to the institution types of the represented

colleges.

Table 3

Codebook

Coding Category	Options	Description
Human Present	Y/N	A human is visually represented in the advertisement.
No White Human	Y/N	If any number of humans are in the advertisement, none of them are white presenting.
Affordability	Y/N	Elements of the ad emphasize affordability, scholarships, or cost-efficiency.
Adult Student	Y/N	Elements of the advertisement focus on nontraditional aged students or message around career changing, advancement, or reconnecting to education.
MBA	Y/N	Advertisement mentions MBA program or business degree.
Ranking	Y/N	The advertisement includes any form of college ranking or statistic.
Medium	Digital-video Digital-static Physical-backlit Physical-standard Projection	The type/presentation of the advertisement
Extracurriculars	Y/N	Elements of the advertisement emphasize extracurricular activities, on-campus entertainment, athletics, etc.
Local Emphasis	Y/N	Elements of the advertisement mention Nashville or the state of Tennessee.
Job Opportunity	Y/N	Elements of the ad emphasize job placement, employment opportunities, internships, or business partnerships.

Limitations

There are a number of key limitations to this study and its methods. First, the collected

data is only from the solitary case of a single airport, meaning that this study does not necessarily

offer external validity – BNA could easily be unique from other airports in regard to higher

education advertisements or passenger demographics, and Nashville may be a unique market for

higher education. Ideally, greater validity could have been pursued through the use of data

triangulation – documenting advertisements at additional airports in various geographic areas

and of various sizes, but neither the time nor the funds were available to document

advertisements at other airports for this study. Additionally, some data about Meharry Medical

College was not available or didn't exist – for instance, Meharry does not have undergraduate

students, and therefore does not have data on undergraduate tuition rates. Likewise, *The New

York Times* report did not include data on how many Meharry students are from the top one

percent of wealth, nor what the median family income was for Meharry students. However, the

data does allow some theories and assumptions based on the literature to be tested, regardless of

how limited the conclusions may be.

The qualitative content analysis in this study carries its own set of limitations. First, some

of the digital advertisements were in a video format, which couldn't be fully captured in a

photograph. Additionally, content analysis by design strips visual data of much of its rich detail,

so there are inevitably elements of the advertisements not captured by the coding categories that

are missing from the final analysis (Rose, 2016). Additionally, there in an inherent subjectivity to

the analysis of visual data. While the developed coding categories are detailed with mutually

exclusive subcategories by design, it is theoretically possible that another researcher could apply

them differently based on their different perspective on the data. As there was only one

researcher on this study, inter-rater reliability of the codes and coding categories cannot be fully

assured.

Results

Of the eight higher education institutions that had advertisements in BNA on the date of

data collection, Vanderbilt University had the most individual ads. Of the 25 higher education

advertisements in the airport, nine were for Vanderbilt. Vanderbilt's advertisements varied in

their content – some were specifically for Vanderbilt University's Owen Graduate School of

Management, while others generally promoted Vanderbilt's athletics or other extracurricular

opportunities. The advertisements also varied by medium – some of the ads were large printed

displays, whereas others were animated and digitally displayed on large computer screens.

Meharry Medical College had three printed advertisements wrapped around the circumference of

large columns in a pre-security waiting area. Two of Vanderbilt's advertisements were projected

onto the floor from above, rotating and flashing on prominent walking paths. Other schools with

advertisements present at BNA – such as Middle Tennessee State University, Lipscomb

University, and Tennessee Technological University – tended to favor static (non-animated)

digital display advertisements. Some of the advertisements in the airport were physical, but

backlit in such a way that they imitated the radiant appearance of a digital display. Alongside

Vanderbilt's two projected ads, there were two digital video advertisements, eight digital static

advertisements (essentially slides on a television screen), nine traditional physical advertisements

(banners, posters, standees), and four backlit physical advertisements. Notably, only private

institutions utilized non-traditional advertisements (projections and videos).

The majority of higher education advertisements at BNA were for private institutions. In

addition to Vanderbilt's eight advertisements, Lipscomb University had three, Belmont

University had four, and Meharry Medical College had five, meaning 21 of the 25

advertisements in BNA represented private institutions. None of the public universities

represented in BNA – Middle Tennessee State University, University of Tennessee – Knoxville,

Tennessee State University, and Tennessee Technological University – had more than a single

advertisement in the airport. Notably, two of the four public higher education advertisements

emphasized "affordability" and "awarding larger scholarships" (Table 1), whereas none of the

private institution advertisements mentioned affordability or financial aid. Six private institution

advertisements featured extracurricular activities: either athletics or concerts (Table 1). A

Wilcoxon rank sum test found that the out-of-state undergraduate tuition rates at represented

private universities were significantly higher than their public counterparts at the .01 level (Table

4), while an additional Wilcoxon rank sum test found that the difference in rates for out-of-state

graduate students between represented public and private colleges was not significant (Table 5).

Another set of Wilcoxon rank sum tests found that represented private institutions were

significantly more likely to have students from the top one percent of wealth than their public

counterparts at the .01 level (Table 6) and were likewise more statistically likely to have students

with wealthier median family incomes than publics, also at the .01 level (Table 7).

Table 4

Wilcoxon Rank Sum Test of Out-of-State Tuition for Undergraduate Students by Institution Type

Institution Type	Observations	Rank Sum	Expected
Private	16	200	168
Public	4	10	42
Combined	20	210	210
Unadjusted Variance	112.00		
Adjustment for Ties	-11.28		
Adjusted Variance	100.72		

<div align="center">z = 3.189***</div>

Prob > z = 0.0014

***p < .01

Table 5

Wilcoxon Rank Sum Test of Out-of-State Tuition for Graduate Students by Institution Type

Institution Type	Observations	Rank Sum	Expected
Private	21	282	273
Public	4	43	52
Combined	25	325	325
Unadjusted Variance	182.00		
Adjustment for Ties	-10.78		
Adjusted Variance	171.22		

z = 0.688

Prob > z = 0.4916

Table 6

Wilcoxon Rank Sum Test of Percentage of Students from Top One Percent of Wealth by Institution

Type

Institution Type	Observations	Rank Sum	Expected
Private	16	198.5	168
Public	4	11.5	42
Combined	20	210	210
Unadjusted Variance	112.00		
Adjustment for Ties	-12.13		
Adjusted Variance	99.87		

	z = 3.052***
	Prob > z = 0.0023

***p < .01

Table 7

Wilcoxon Rank Sum Test of Students' Median Family Income by Institution Type

Institution Type	Observations	Rank Sum	Expected
Private	16	200	168
Public	4	10	42
Combined	20	210	210
Unadjusted Variance	112.00		
Adjustment for Ties	-11.28		
Adjusted Variance	100.72		
	z = 3.189***		
	Prob > z = 0.0014		

***p < .01

The institutions represented in BNA were largely from the middle Tennessee region – institutions from western Tennessee, such as the University of Memphis, the University of Tennessee – Martin, and Rhodes College, were entirely absent. Except for the University of Tennessee – Knoxville, the school furthest from BNA represented, institutions from the eastern region of the state were also absent, such as East Tennessee State University, the University of Tennessee – Chattanooga, and Bryan College. Notably, a few higher education institutions from the middle region of the state were absent from BNA, including Fisk University, Austin Peay

State University, Nashville State Community College, and the Tennessee College of Applied

Technology, which has locations throughout the state. It is notable that no community colleges or

technical colleges were advertising within BNA at the time of data collection. The mean distance

of a represented institution to BNA was 19.68 miles, while the median distance was 8.9 miles,

indicating that represented institutions were generally in very close physical proximity to the

airport (Table 2).

Analysis of the texts of the advertisements yielded several additional themes. Four of the

advertisements targeted nontraditional students, either through explicit text or through the visual

depictions of nontraditional-aged students in the advertisement's image. Similarly, six of the

advertisements emphasized local connection, either through explicit textual mentions of

Nashville or Tennessee, or through prominent visual depictions of the Nashville skyline as part

of the advertisement's image. College rankings only appeared in all three advertisements for

Lipscomb University. Humans were depicted in 15 of the 25 ads, with the remaining 10

comprised only of text. Of the 15 ads that included human depictions, all ads for Meharry

Medical College and Tennessee State University – the two represented minority-serving

institutions (MSIs) in the sample – omitted the inclusion of a white person in the representation.

In addition, one of Vanderbilt's ads only featured a non-white student, meaning a total seven of

15 human-depicting ads specifically emphasized non-white students. Another emergent theme of

the advertisements was a focus on MBA and business programs, which appeared in a total of

seven advertisements across institution types.

Discussion

The content and form of the advertisements at BNA varied. As mentioned previously, two of the four advertisements for public institutions emphasized "awarding…scholarships" and "affordable," which were notably absent from any of the private institution advertisements (Table 1). If private institutions are specifically focusing on marketing to members of the top one percent of wealth – or otherwise wealthy air travelers – it makes sense for scholarships and affordability to not be a prominent element of their pitches. However, this absence of affordability language may simply be because private institutions are generally not as affordable as their public counterparts, at least for undergraduate students (Table 3). All three of Lipscomb's advertisements mentioned rankings of their programs as part of their content but did not cite the sources of those rankings. Interestingly, none of the other represented institutions utilized rankings as part of their advertisements. While it is difficult to speculate with such a small sample size, it is possible that institutions feel that their audiences are valuing rankings less than in the past, or they may feel that the decision-making of their target population in an airport setting are less swayed by rankings. A future study could explore perceptions of advertisements among prospective college students and their parents from varying economic classes, with an emphasis on how they view rankings.

The presence of extracurricular activities in advertisements for private institutions is notable. It is possible that the focus on on-campus concerts, athletic events, and other performances is akin to the focus in the past decade on campus amenities as a recruiting pitch for wealthy students (Burns, 2019; Lieber, 2021; McClure, 2019). Similarly, the difference in the mediums of the advertisements seemed to reflect the resourcing of the institutions. Vanderbilt and Belmont, both private institutions, were the only ones to utilize 'flashier' advertising like moving projections or videos, which stood out from the primarily static advertisements that

surrounded them. These advertisements are almost certainly more costly, but also more likely to succeed in grabbing the attention of passers-by over the less-pronounced advertisements of their competitors. The Vanderbilt floor projected advertisements in particular were difficult to avoid, and were the only advertisements in the entire airport than imposed themselves on passengers by interrupting the walkway.

The fact that six of the advertisements emphasized either Nashville or Tennessee as part of their content could lend credence to the idea of the local connection being a contributing reason for the proliferation of higher education airport advertisements. However, Nashville is also a tourist destination, and a natural selling point for colleges looking to lure in prospective students. If this theme is identified in the future in airports for less tourist-friendly locales, it would lend more credence to local connection as a motivation for airport advertising.

The emphasis within five advertisements on nontraditional students was not initially anticipated, but it is an important group for colleges to market to. While exact definitions for this group vary, these adult students are a huge portion of today's higher education student body, and made up 74% of college students in the United States as of 2012 according to one metric (Remenick, 2019). That said, it is interesting to consider given the lack of community colleges in the sample, which have historically focused on this segment of the higher education market.

The fact that only 15 advertisements chose to use a human representation was somewhat surprising, given how positively people react to human facial representations in ads (Guido et al., 2019). Perhaps more interesting is the racial element of using humans in ads: using a human subject is an easy way to project an image of diversity or send a message about the kind of student that represents the institution. The fact that all of the ads for minority-serving institutions

in the sample used human representations – and specifically Black representations – is likely a reflection of the importance of racial identity to those institutions, which could be explored further in a study comparing the visual content of general college advertisements between MSIs and predominantly-white institutions (PWIs).

The prevalence of MBA programs in the sample advertisements is interesting to note, though perhaps not surprising. While these programs have been popular in recent years, the focus on advertising for them could be partially due to a decline in enrollments in these programs at the time of data collection (Byrne, 2019). The reason for MBA programs in particular being featured may connect to some of the other themes that emerged as well, such as marketing to nontraditional-aged students. MBAs can be applied to any number of later-in-life career changes, making them an ideal focus of marketing to adult potential students.

Vanderbilt University's dominance of the BNA marketplace is likely tied to their reliance on students from wealthy family backgrounds (Table 2). This interestingly also seemed to come through in the formats of their advertisements – the use of flashy projections and animated digital displays projected an image of wealth, particularly when compared to their peer institutions within BNA (Table 1). It is of additional note that the floor projections and animated digital advertisements were also easily the most eye-catching advertisements in the airport, and likely would make the most prominent impact on passers-by for future brand recognition. The apparent reliance on wealthy students by the represented private institutions in general likely also accounts for why the other private institutions were advertising frequently in BNA, which is consistent with initial speculation based on the literature (Table 2). Of course, the opposite side of the coin is also worth discussing: the scarcity of public universities in BNA.

Based on the literature, it was anticipated that a fair number of advertisements from public universities would be present in any given airport out of a desire to attract out-of-state students, who pay a higher rate of tuition than their in-state counterparts and are more likely to be flying into the state (Jaquette & Curs, 2015; Jaschik, 2019; Owens, Srivastava, & Feerasta, 2011). Given budget cuts in recent years, many public universities have relied on these higher-dollar students, so it would make sense for these institutions to have a strong presence in BNA (Jaquette & Curs, 2015; Owens, Srivastava, & Feerasta, 2011). However, this wasn't the case – public representation was far outnumbered by their private counterparts. This could be unique to Nashville's higher education landscape – the flagship public institution for Tennessee is a great distance away (Table 2), and the public colleges in immediate proximity to the city are somewhat smaller or niche, like the public historically-black college, Tennessee State University. Dominant airport advertising campaigns from public universities often seem to rely on there being a major airport in immediate proximity to the public university, as was the case with the campaigns from Indiana University and the University of Houston (Briscoe, 2017; Wermund, 2014b). Nashville is, however, notably host to a handful of private universities, which outnumber the local public higher education institutions – particularly when technical and community colleges are not included. The ratio of public to private colleges represented in BNA may merely be a reflection of this fact.

The absence of advertisements for higher education institutions from other regions of Tennessee in BNA is likely due to competing airports that are closer to those institutions – there is a major airport in Memphis that would be a focus for western Tennessee schools, and Knoxville and Chattanooga both have airports that might be more attractive for eastern Tennessee institutions. It is notable that no institutions from outside of the state of Tennessee

were represented in BNA, despite Nashville being close to multiple state borders. It is possible

that this is deliberate on the part of the airport, in line with the concept that the airport relies on

the thriving of the state, and its colleges (Chura, 2009; Shrikant, 2018; Thomason, 2017).

However, it is also possible that no schools from other states expressed interest in advertising in

BNA. The absence of a handful of middle Tennessee colleges, however, is perplexing: Austin

Peay State University and Fisk University are both prominent institutions in close proximity that

would not be out of place to be represented in BNA. However, it is notable that both Austin Peay

and Fisk have less than one percent of their respective students from the top one percent of

wealth, and their median family incomes for students are $61,900 and $39,100, respectively,

putting them on the lower end of the institutions that were present in BNA (Aisch et al., 2017). If

wealthy clientele is a primary influence on whether an institution advertises in an airport, Fisk

and Austin Peay would be less inclined to market themselves in BNA than many of their peer

institutions.

The lack of advertising from community and technical colleges is also worth noting. If it

is true that airport advertising for colleges is motivated primarily by the pursuit of wealthy and

out-of-state students, it makes sense that institutions like Nashville State Community College

and the Tennessee College of Applied Technology would be absent from BNA. Community and

technical colleges are more likely to serve students from the local area, as well as students from

lower socioeconomic status backgrounds. These institutions are also perhaps less likely to have

available funds to direct towards marketing, so they would need to be judicious in which ways

and in what venues they choose to advertise themselves (Yuen, 2020). However, if connections

with the local community were a significant indicator of whether an institution advertises in their

local airport, as could be speculated based on literature, it would have made sense for these

community-focused colleges to have a visible presence at BNA. Their absence could indicate

that community connection is a less powerful motivator for higher education advertising within

airports, or at least in the specific case of BNA. An exploration of how and where community

colleges choose to market themselves merits exploration in its own study.

Perhaps the most interestingly absent institution from BNA, given the findings of this

study, is Sewanee – The University of the South. Sewanee is a private university in Tennessee

located roughly 92 miles from BNA and has a similarly wealthy clientele to Vanderbilt and

Belmont – the median family income for Sewanee students is $178,200, and 14.4% of the

student body come from the top one percent of wealth (Aisch et al., 2017). Based on this reliance

on students from wealthy backgrounds, it would feasibly make sense for Sewanee to advertise in

BNA, a nearby prominent airport. However, as mentioned previously, Sewanee has a closer – if

less highly trafficked – airport than BNA in Chattanooga.

Based on the data from BNA, it seems that higher education institutions that are close to

the airport and have students from wealthier backgrounds are the most likely to advertise in a

given airport. Other institutional motivations, such as pursuing out-of-state and international

students or focusing on building community connections, seem to play less of a role in whether

institutions choose to advertise at BNA, though this may not hold true at other airports.

Practical Implications

Based on the findings of this study, marketing professionals working in or on behalf of

higher education institutions should assess and re-evaluate their current utilizations of the airport

setting for advertisements. For instance, a local community college would need to consider

carefully whether the cost of advertising in a nearby airport makes sense to them, given the

makeup of passengers moving through that airport. A large state university in need of higher-paying students from out-of-state, on the other hand, might consider advertising in multiple airports throughout their state, regardless of the proximity of the airport to their campus. As seems to be the case at BNA, private colleges have a rare forum for advertising to a large volume of generally wealthier people by focusing on air travelers.

For prospective students and their guardians, this study should heighten their awareness of higher education marketing around them, particularly when traveling by air. In the case of BNA, the institutions that were most visible in the airport setting were also comparatively expensive higher education options. Many of the advertisements boasted as to their various program rankings, which should be viewed somewhat critically and not taken at face value given the often criticized and widely diverse methodologies behind the current ranking systems (Nietzel, 2020; Strauss, 2018).

Gaps and Guidance for Future Research

There are a number of gaps in the existing higher education marketing literature that were exposed by this study, as well as a number of questions raised that could be pursued in further research. First, a major gap in the literature exists regarding how prospective college students view college advertisements in general, let alone airport advertisements. One 2000 study conducted student focus groups on University of North Texas mailing materials, which the students criticized for being out-of-date and lacking in visual design appeal (Armstrong & Lumsden, 2000). It would be helpful to know what students would value in advertisements and promotional materials today, as airport advertisement currently seem to function as minimal-content brand awareness vehicles (Moogan, 2010). It would also be interesting to see differences

in responses based on relevant student characteristics, such as residency (in-state, out-of-state, international) and family income.

There is perhaps no better way to understand the motivations behind higher education marketing decisions – as was speculated in this review – than to speak to the decision-makers themselves, which could make for a fascinating focus of a future study. Aside from the practical knowledge that informs marketing decisions, it would be interesting to know if responses differed based on the interviewee's employment status (consultants vs permanent staff). Additionally, based on the contentious academic higher education marketing literature that surrounds concepts like students-as-consumers – coupled with the historical hesitancy for higher education institutions to embrace marketing – it could be interesting to know how marketing professionals perceive higher education as an industry. Likewise, it would be intriguing to explore how admissions officers view higher education marketing in airports, and how much input they have on the content and intended audience of advertisements.

It is worth noting that the studies that exist on student attitudes towards advertising pre-date Generation Z. It is more than possible that this new generation brings new perspectives and attitudes to marketing and advertising, as well as to the prospective student logic behind college choice decision making. It would be unwise to base major marketing and advertising decisions and initiatives on outdated research, and there is still much to understand about this new generation of college students in regard to the field of marketing.

Lastly, the findings of this study could be bolstered by future research that collects data on more advertisements from multiple airports. A variety of airport sizes and a wider geographic distribution could provide insights on higher education advertising trends within airports, both in

the United States and abroad. This study, given its small sample size, was intended as an initial

probing exploration of the topic of higher education airport advertisements to identify themes

and concepts, which can ideally be built upon with future research utilizing larger samples that

can produce more generalizable findings.

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