

EXPLORING FACTORS CONTRIBUTING TO THE REPUTATION OF COLLEGES OF AGRICULTURE: A DELPHI STUDY WITH COLLEGE STUDENT AMBASSADORS



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Abstract

When deciding on which college or university to attend, the reputation of the institution has been identified as a characteristic that impacts this decision. However, little research has identified specific attributes that impact the reputation of agricultural colleges making it difficult for administrators, faculty, or staff to assess the reputation of their college. Therefore, the purpose of this study was to determine factors contributing to the reputation of a land grant college of agriculture. The objectives guiding this study were to 1). Compile a list of factors contributing to the reputation of a land grant college of agriculture, 2). Determine consensus for college of agriculture characteristics contributing to college of agriculture reputation, and 3). Categorize characteristics reaching consensus that contribute to college of agriculture reputation. This was accomplished with a Delphi study consisting of three rounds from agriculture college undergraduate student ambassadors at six land grant universities. Results of the Delphi study yielded 51 unique characteristics influencing the reputation of an agriculture college. It was recommended that an instrument be developed for agriculture colleges to use for assessing their reputation. Results from reputation assessments could help with student recruitment and enrollment.

Keywords: reputation, recruitment, college selection

According to a United States Department of Agriculture study, the demand for graduates with agricultural degrees continues to increase with almost 60,000 new job opportunities expected annually; however, a shortage of qualified graduates exists (Fernandez et al., 2020). Compounding this problem is what has been described as an enrollment cliff; starting in 2025, the number of students seeking a college degree is expected to decline (Schuette, 2023). These issues will increase the need for colleges and universities to intensify student recruitment efforts, especially for institutions with lower student enrollment (Busta, 2020; Phillips & Jones, 2024).

To maximize student recruiting efforts, it is important to understand what factors influence students' decision-making process for which university to attend (Busta, 2020; Herren et al., 2011; Rayfield et al., 2013). Opportunities after graduation such as career prospects, job placement, and graduate school placement are factors known to influence university choice (Braddock & Hua, 2006; Munisamy et al., 2013). Additional characteristics influencing university choice have included cost of attendance, financial aid availability, degree program and curriculum alignment with student interests, opportunity for an active social life, race/ethnic composition of students on campus, and geographic location (Braddock & Hua, 2006; Munisamy et al., 2013). Influential individuals such as parents, teachers, and friends have also been noted to impact students' decisions on which university to attend (Munisamy et al., 2013). While these factors all contribute to a student's decision on which university to attend, the academic reputation of the university has been cited as one of the most influential characteristics impacting decisions (Alter & Reback, 2014; Braddock & Hua, 2006; Herren et al., 2011; Munisamy et

al., 2013; Robinson et al., 2007; Rocca & Washburn, 2005).

Similar to findings at the university level, studies have identified certain factors that influence students' decisions to choose degree programs within colleges of agriculture (COA). Significant individuals such as parents, guardians, family members, friends, high school guidance counselors, high school agricultural education teachers, college faculty, graduates of the college, and current students in the college influence COA choice (Herren et al., 2011; Jackman & Smick-Attisano, 1992; Rayfield et al., 2013; Robinson et al., 2007; Rocca & Washburn, 2005; Shrestha et al., 2011; Wildman & Torres, 2001). Additional influences on the decision of which COA to attend include quality of preparation for employment, potential opportunities after graduation, quality of facilities, campus atmosphere and environment, campus safety and security, scholarships awarded, financial aid availability, internship opportunities, variety of majors offered, programs and curriculum aligned with student interests, faculty quality, faculty friendliness, and class sizes within the desired degree program (Herren et al., 2011; Robinson et al., 2007; Rocca & Washburn, 2005; Shrestha et al., 2011; Wildman & Torres, 2001). College of agriculture communications and outreach efforts from sources like social media, websites, personal letters from university representatives, and personal contact with COA professors, outreach representatives, and ambassadors have also contributed to the COA selection process for students (Herren et al., 2011; Rayfield et al., 2013; Robinson et al., 2007; Rocca & Washburn, 2005).

The overall reputation of a COA also has effects on students' decisions (Herren et al., 2011; Shrestha et al., 2011). Several facets of COA reputation that have been reported to strongly influence students' decision of which COA to attend include the reputation of specific academic programs, departments, professors, faculty, and students (Jackman & Smick-Attisano, 1992; Robinson et al., 2007). According to Wildman and Torres (2001), the teaching reputation of departments and professors is also influential in this decision-making process. Reputation has been identified as one of the most important factors students consider when determining which university or COA to attend, creating the need for frequent assessment of reputation among stakeholders (Ressler & Abratt, 2009). However, the concept of reputation is somewhat elusive and all factors influencing reputation have not been identified, particularly in the context of COAs, making evaluation of COA reputation difficult. To assess COA reputation, Herren et al. (2011) recommended researchers determine what factors students believe comprise a COA's reputation. Given the clear need highlighted by Herren et al. (2011), this study aimed to identify factors and COA characteristics influencing COA reputation, so what is known about the concept can be advanced, making future evaluation of reputation easier for COAs.

Literature Review

Existing literature has predominately examined reputation in the context of corporations but can be used to provide a basis for outlining factors comprising university and COA reputation. Definitions of corporate reputation included a company's ability to provide outcomes (Fombrun et al., 2000), perceptions of past actions and projected future actions, (Alessandri et al., 2006; Walker, 2010), and evaluations of a company's goods, services, communications, and interactions (Walsh & Beatty, 2007). While definitions varied, a commonality was customers, constituents, or stakeholders form the perceptions and opinions of a company's reputation, and these views are relatively stable over time (Alessandri et al., 2006; Fombrun et al., 2000; Walker, 2010; Walsh & Beatty, 2007). Definitions from the corporate research sector are useful in describing the concept of reputation; however, they may not necessarily reflect the unique context of the university setting.

University reputation has been depicted as attitudes, valuations, and representations held by various stakeholders over time (Alessandri et al., 2006; Rindova et al., 2005). Stakeholders include internal and external constituents such as students, research financiers, government authorities, the media, and others (Alessandri et al., 2006; Rindova et al., 2005; Xu, 2016). Xu (2016) suggested that stakeholders' perceptions were based on an institution's past, present, and future spirit, behavior, conditions, and social contributions as compared to other universities. These descriptions of reputation contain many concepts rooted directly in organizational and corporate reputation research, allowing the possibility of applying concepts from these areas to the university context. However, scant literature was found defining reputation at the COA level, so from existing definitions of corporate and university reputation, we operationalized COA reputation as: *the attitudes and perceptions held by various stakeholders formed over time based on the institution's past, present, and expected ability to create value and meet the needs of stakeholders.*

In addition to defining reputation, several studies have identified factors and characteristics that influence reputation at the university level. For example, elements such as care for students, prospects for future growth, management of the university, level of social responsibility, and financial soundness have been identified as components of university reputation (Sung & Yang, 2008). Other influences have included teaching staff, course materials, administrative support, facilities, campus life, and industry linkage (Plewa et al., 2016). Furthermore, student experiences, information received about the institution, the university's visual identity communicated through various university symbols, quality of services, emotional appeal, employee competence, academic leadership, student orientation, social responsibility, and perceived value have all been identified as direct or indirect predictors of university reputation (Alessandri et al., 2006; Amado et al., 2023; Dursun & Gumussoy, 2021). In the context of online graduate schools, Martín-Miguel et al. (2020) found that

sustainability, quality of service, and good governance had significant impacts on reputation.

Perceptions of reputation can also be impacted by which stakeholder group is being consulted (Vogler, 2020). Vidaver-Cohen (2007) proffered that stakeholders for a particular academic college can include current students, alumni, employers, college faculty, and the business community, each of which possess differing priorities. A study within the context of COA reputation and brand identity found that stakeholders such as agricultural producers, community leaders, government officials, local media, regulators, and industry partners can provide COAs valuable insight into perceived success of the land grant mission (Abrams et al., 2010).

Another factor potentially influencing COA reputation is the type of university in which the COA is located. Agricultural programs, whether in its own COA or encompassed within other units under a university or college, can be found in 1862, 1890, and 1994 land grant universities, non-land grant universities, regional or branch colleges and universities, and 2-year colleges (National Research Council, 1995; Talbert et al., 2022; Westfall-Rudd, et al., 2022). Colleges of agriculture offer services to stakeholders unique from other colleges in the university (National Research Council, 1995), which could have an impact on how reputation is viewed and on which factors stakeholders emphasize more. For example, 2-year, regional, and branch COAs often have a teaching and service focus while non-land grant COAs may focus on these areas along with research (Talbert et al., 2022; Westfall-Rudd, et al., 2022). Land grant universities have long had a tripartite mission focusing on teaching, research, and extension and can primarily serve different stakeholders depending on if the university is an 1862, 1890, or 1994 institution (National Research Council, 1995; Talbert et al., 2022; Westfall-Rudd, et al., 2022). Due to their mission and status, land grant universities could arguably be held to higher standards, further affecting their reputation.

Following the lead of others who have studied factors influencing student COA choice (Rocca, 2013; Rocca & Washburn, 2005), Chapman's (1981) model of student college choice served as the theoretical basis for this study. According to Chapman (1981), student characteristics in combination with external influences (significant persons, fixed college characteristics, college communication efforts) contribute to students' general expectations of college life (a mediating influence), which then impacts students' choice of college. His model also suggests the three areas of external influence can directly impact students' choice of college. The student characteristics included in the model are socioeconomic status, aptitude, level of educational aspirations and expectations, and high school performance. Significant persons, an external influence, includes friends, family, role models, school personnel, and college admissions officers. They can strongly persuade students' choice through their comments and advice. Chapman (1981) described fixed college factors as location, costs, financial aid, campus environment, and availability of desired programs. These factors, except for location, can be changed by an institution. However, even

when changed, it can take an extended period for image and reputation to change with prospective students and their significant influencers, such as parents and guidance counselors. College communication efforts were described as the marketing approaches used such as recruiters making school visits, advocating for college's positive qualities in comparison to the competition, and providing information for those seeking a college education. The mediating variable impacted by all three areas of external influence, expectations of college life, is the prospective student's idealized mental image of what college will be like. Chapman (1981) noted that it is often called the "freshman myth" because it is often unrealistic, despite efforts from external influences to provide accurate information, and is often ignored or distorted by the prospective student. When applying Chapman's model to this study, it would imply that a deeper understanding of fixed college factors and how they affect reputation, subsequently impacting students' COA choice, could allow for more efficient use of recruiting resources and development of reputation assessment techniques.

Purpose and Objectives

Given the need established by Herren et al. (2011) and the potential to improve recruiting efforts (Chapman, 1981), the purpose of this study was to determine factors contributing to the reputation of 1862 land grant colleges of agriculture in the southeastern United States. The objectives that guided this study were:

1. Compile a list of COA characteristics that contribute to COA reputation.
2. Determine consensus for COA characteristics that contribute to COA reputation.
3. Categorize COA characteristics reaching consensus that contribute to COA reputation.

Methods

To determine consensus for factors contributing to the reputation of 1862 land grant colleges of agriculture in the Southeastern United States, a modified Delphi approach was utilized. The Delphi method, originally developed by the RAND Corporation in the 1950s, solicits opinions from experts and identifies convergence of opinion, or consensus, among them (Best et al., 2025; Dalkey, 1969; Hsu & Sandford, 2007). This method has been widely used in secondary agricultural education and higher education studies to compile information and establish consensus, often with the intention of creating a survey questionnaire or instrument in the future (Best et al., 2025; Howerton et al., 2019; Lundy et al., 2017; Peake et al., 2020; Shinn et al., 2008; Swafford & Waller, 2018). According to Allen et al. (2019) and Habibi et al. (2014), modern Delphi studies require the following steps: (1) determine qualifications for experts and establish a panel, (2) provide the panel an initial questionnaire round where they generate responses, and (3) conduct repeated rounds where expert panelists review

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the previous group responses and produce consensus. Consensus is usually achieved within two to four rounds of review (Allen et al., 2019).

Establishing a panel of experts is one of the most crucial steps of the Delphi method, contributing to the validity of a Delphi study (Stitt-Gohdes & Crews, 2004). Panelists should be knowledgeable about current information and perceptions on the topic under investigation, highly trained and competent on the issue, and have similar experiences and criteria qualifying them as experts (Hsu & Sandford, 2007; Stitt-Gohdes & Crews, 2004). Panel membership should also be diverse to reduce bias from its individual members (Hussler et al., 2011). While there are no set parameters for selecting panelists, three groups of people are considered well-qualified according to Delbecq et al. (1975): (a) top management decision makers who will utilize results of the Delphi study; (b) professional staff members with their support team; and (c) respondents of the Delphi questionnaire whose judgements are requested. Despite measures taken to ensure validity and credibility of expert panelists, Delphi study results should be interpreted with caution (Vernon, 2009). Considering the guidelines for selecting panelists, COA student ambassadors at six 1862 land grant universities in the southeastern United States were chosen as the experts to provide consensus on the topic of COA reputation.

According to COA websites, ambassadors are undergraduate students selected by their college to recruit prospective students; develop public awareness of the college and its programs; and speak on behalf of the COA with alumni, donors, administrators, and other supporters (Auburn University, 2024; Clemson University, 2024; Oklahoma State University, 2024). Ambassadors are required to attend trainings and regular meetings, be knowledgeable of the college and campus, interact with prospective students at career expos, and contribute to improvement of the recruiting process and COA undergraduate student experience in the COA (Clemson University, 2024; University of Arkansas, 2024; University of Florida, 2024; University of Georgia, 2024). We believe COA ambassadors can be considered experts on factors influencing the COA reputation for the following reasons: (a) as undergraduates, they had personal experience with deciding on a COA to attend while considering its reputation; (b) as part of their ambassador role, they are required to interact with prospective students for the purpose of recruiting and must discuss COA qualities they believe positively contribute to the reputation of the COA; (c) they are required to participate in training on interacting with various COA stakeholders where maintaining a positive reputation is a key priority, making them well-trained and competent on the issue (Hsu & Sandford, 2007; Stitt-Gohdes & Crews, 2004); (d) they are expected to contribute to continuous improvement of the COA recruiting process; (e) they are considered a COA support team as described by Delbecq et al. (1975); (f) ambassadors come from all majors in a COA making the panel diverse and less biased toward a particular agricultural industry (Hussler et al., 2011); (g) they interact with current COA undergraduates from freshmen to seniors with the responsibility of helping improve COA

undergraduate student experience making them familiar with factors positively and negatively impacting current student opinions on their COA's reputation; and (h) they are keenly aware of their COA's reputation and that of their competitors from observations and interactions at career expos. College of agriculture ambassadors from 1862 land grant universities were chosen due to the potential higher standard to which these institutions are held, and southeastern universities were chosen for convenience and researchers' interest.

While there is no set requirement for the number of panel members, Dalkey (2002) concluded a panel of 13 members could provide an acceptable reliability coefficient of .90; however, when Delphi panels exceed 30 members, few new ideas are generated (Delbecq et al., 1975). With these guidelines in mind and due to anticipated low response rates, six land grant universities in the southeastern United States with COA ambassadors listed on their websites were purposely selected to create a sampling frame. The frame included 155 undergraduate COA student ambassadors from Auburn University ($n = 24$), Clemson University ($n = 26$), Mississippi State University ($n = 47$), Oklahoma State University ($n = 22$), the University of Arkansas ($n = 13$), and the University of Tennessee – Knoxville ($n = 23$).

After establishing a panel of experts, three rounds of data collection commenced. The questionnaire used for the initial round of this study was developed and scrutinized for content and face validity by a panel of three experts in agricultural teacher education at the University of Arkansas; each expert had prior experience in survey research, the Delphi method, and undergraduate student recruiting. After IRB approval (Protocol # 2210430933), student email addresses were recorded from the selected COA websites and ambassadors were sent information on the multi-component expectation for the Delphi process and provided a link to an online Qualtrics questionnaire. The questionnaire used for the first round provided participants with the definition of reputation operationalized from the literature review: *Reputation – The attitudes and perceptions held by various stakeholders formed over time based on the institution's past, present, and expected ability to create value and meet the needs of stakeholders.* Next, participants were asked to provide responses for two open-ended questions: “*When thinking about the decision to select a college of agriculture to attend, what are the characteristics of a college of agriculture with a good reputation?*” and “*When thinking about the decision to select a college of agriculture to attend, what are the characteristics of a college of agriculture with a poor reputation?*” Both positive and negative questions were asked to encourage a greater diversity in responses. Demographic data were also collected during round one including age, gender, race/ethnicity, academic year classification, and major. To increase participation, the Dillman et al. (2014) tailored design method was used to create five unique email contacts, approximately one week apart. Data collection began November 10, 2022, and ceased after six weeks from the initial email.

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Round one of data collection yielded 19 respondents from Mississippi State University ($n = 7$), the University of Arkansas ($n = 4$), the University of Tennessee – Knoxville ($n = 4$), Oklahoma State University ($n = 2$), Auburn University ($n = 1$), and Clemson University ($n = 1$). Data from respondents were exported from Qualtrics into a Microsoft Excel spreadsheet where open-ended responses from each participant were separated (respondents could list multiple) into individual unique COA characteristics (positive and negative) influencing reputation. Next, a list of characteristics was created by the research team by consolidating responses from all participants into a one list. Care was taken to ensure student wording was maintained for each item in the list so meaning would not be altered. The team removed duplicate or redundant items resulting in 65 unique characteristics influencing COA reputation.

A second Qualtrics questionnaire was created for round two of data collection. The operationalized definition of COA reputation was provided again, and participants were asked to rate their level of agreement (1 = *Strongly Disagree* to 5 = *Strongly Agree*) with whether each of the 65 characteristics identified by the panel of experts from round one influence the reputation of a COA. A mean rating of 3.5 was set *a priori* for a characteristic to be retained to the third round. The 19 panelists, who responded from round one, were emailed the questionnaire for round two beginning January 17, 2023, using the same distribution techniques for data collection as in round one. After four weeks of data collection, responses were completed by 15 of the original 19 panelists from the following institutions: Mississippi State University ($n = 5$), University of Arkansas ($n = 4$), University of Tennessee – Knoxville ($n = 4$), Auburn University ($n = 1$), and Clemson University ($n = 1$). Data were exported from Qualtrics into a Microsoft Excel spreadsheet where means were calculated for ratings of agreement on each of the 65 items. In round two, 58 of the 65 characteristics had a mean of 3.5 or higher and were retained for round three.

To establish consensus, a third Qualtrics questionnaire was created with the 58 retained items from round two and asked participants to indicate “Yes” or “No” on whether they agreed each of the listed characteristics contributed to the reputation of a COA. Prior to round three data collection, consensus was defined as 85% of participants indicating “Yes.” Any statement failing to reach 85% “Yes” was removed from the final list of characteristics influencing COA reputation. The questionnaire for round three was sent to the 15 panelists on February 16, 2023, who responded in round two, using the same distribution protocols as the previous two rounds. All 15 panelists who responded in round two submitted responses for round three. Data were exported to Microsoft Excel where Yes/No frequencies and percentages were calculated for each item resulting in a final list of 51 unique characteristics reaching consensus that influence COA reputation. With consensus achieved during round three, subsequent rounds were not needed and data collection ceased (Allen et al., 2019; Custer et al., 1999). With the final number of panelist responses exceeding Dalkey’s (2002) recommended minimum of 13, results can be considered reliable.

The final step was to categorize COA characteristics contributing to COA reputation. The constant comparative method (Glaser, 1965) was used to determine themes, or categories, that emerged from the 51 COA characteristics. This qualitative analytic technique is a four-stage process that includes: (1) coding each item that can be applied to each category, (2) reviewing codes for items and integrating them into categories using an iterative process, (3) describing heuristic themes, and (4) reviewing themes and codes to form theories about the data (Glaser, 1965). To accomplish categorization, the research team collectively assigned an initial code to each characteristic, then repeatedly reviewed and compared the initial codes to generate categories and themes. This process was completed digitally in a Microsoft Excel spreadsheet. Resulting categories and themes were used to develop theories and make recommendations.

Results

Demographic data were collected in round one to describe the 19 members of the initial expert panel. The mean age of respondents from round one was 21 years ($SD = .94$), and the majority were female ($f = 16$), White/Caucasian ($f = 17$), and seniors in college ($f = 11$). College of agriculture ambassadors represented 12 different majors including Agricultural Business ($f = 3$), Agricultural Education ($f = 1$), Animal Science ($f = 3$), Agricultural Communications ($f = 2$), Agronomy ($f = 1$), Horticulture ($f = 2$), Poultry Science ($f = 1$), Landscape Architecture ($f = 2$), Food Science ($f = 1$), Wildlife and Fisheries Science ($f = 1$), Human Development and Family Science ($f = 1$), and Agricultural Engineering ($f = 1$). A complete breakdown of panelist demographic characteristics is presented in Table 1.

In round one, the 19 responding COA ambassadors collectively listed a total of 156 characteristics they believed influenced COA reputation. After consolidating responses by removing duplicate and repetitive items, 65 unique COA characteristics were identified and were subsequently sent to respondents so they could rate their level of agreement with each characteristic. Fifty-eight items from round two met the 3.5 mean threshold, of which participants strongly agreed ($M = 4.51 - 5.00$) with 17 items. The top five items that participants strongly agreed with were “Professors/faculty who are experts and leaders in their field” ($M = 4.93$, $SD = 0.26$); “COA provides opportunities for students to gain experience” ($M = 4.87$, $SD = 0.35$); “Opportunities for hands-on learning” ($M = 4.80$, $SD = 0.41$); “Faculty members who care for teaching and students” ($M = 4.80$, $SD = 0.41$); and “Faculty members who are passionate about their field” ($M = 4.80$, $SD = 0.56$). Seven items failed to reach the 3.5 mean threshold in round two and were not included in round three. Those items were “Campus located in good climate zone” ($M = 3.47$, $SD = 1.25$); “Diverse population among students” ($M = 3.40$, $SD = 1.40$); “Small and personable university campus” ($M = 3.40$, $SD = 1.24$); “Low rate of students changing majors” ($M = 3.40$, $SD = 1.18$); “College has a namesake or is named after somebody” ($M = 3.00$, $SD = 1.41$); “Distance from hometown” ($M = 2.87$, $SD = 1.19$); and “College of agriculture is not located in a metropolitan area” ($M = 2.73$, $SD = 1.33$).

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Table 1

Demographic Characteristics of Expert Panelists from Round One (n = 19)

Characteristic	f	%
Age		
19	1	5.26
20	4	21.05
21	9	47.37
22	4	21.05
23	1	5.26
Academic Classification		
Sophomore	2	10.53
Junior	6	31.58
Senior	11	57.89
Gender		
Female	16	84.21
Male	3	15.79
Race/Ethnicity		
White/Caucasian	17	89.47
Black/African American	1	5.26
Hispanic/Latino	1	5.26

Round three responses resulted in consensus on 51 unique characteristics influencing the reputation of a COA. Twenty-seven items in round three achieved 100% consensus, while seven items did not achieve the pre-established 85% consensus. Items from round three where consensus was not met included, “Diverse faculty and staff” (80.00%); “Excellent, state-of-the-art, and plentiful facilities for research, teaching, and extension” (80.00%); “Reasonable cost of attendance” (80.00%); “Strong campus/industry partnership” (80.00%); “Thriving graduate program” (73.33%); “College located in an area with a strong agriculture influence” (73.33%); and “Does not feel like a junior college” (66.67%).

After analyzing the final 51 characteristics using the constant comparative method, 10 themes were identified for item categorization: (1) faculty characteristics, (2) student opportunities, (3) college environment, (4) college resources, (5) college accolades and recognition, (6) communication, (7) student success, (8) student support, (9) postgraduation, and (10) enrollment characteristics. Nine items were categorized as faculty characteristics including “professors/faculty who are experts and leaders in their field”; “faculty who care for teaching and students”; and “faculty who are passionate about their field”. Refer to Table 2 for a complete list of faculty characteristics influencing COA reputation.

Table 2

Faculty Characteristics COA Reputation Items Reaching Consensus (n = 15)

Family Characteristics	Round Two		Round Three
	M	SD	% Agreement
Professors/faculty who are experts and leaders in their field	4.93	0.26	100.00
Faculty members who care for teaching and students	4.80	0.41	100.00
Faculty members who are passionate about their field	4.80	0.56	100.00
Positive reviews of faculty and staff	4.53	0.52	100.00
Faculty members who are involved	4.47	1.06	100.00
Faculty take time to meet with prospective students	4.46	0.92	93.33
Faculty have an agricultural/industry background	4.27	0.88	100.00
Low rate of faculty turnover	4.13	0.74	93.33
Faculty have robust research programs in a variety of areas	3.87	0.99	100.00

Student opportunities influencing COA reputation included nine items (Table 3). “Opportunities for students to gain experience”, “participate in hands-on learning”, and “having a variety of majors and programs to choose from” were characteristics receiving the highest level of agreement (100%), while “networking opportunities” had the lowest level of agreement (86.67%).

College environment characteristics (6 items) included “having a friendly/homelike feel”, “a strong agricultural culture”, and “distinct COA identity on campus”. The item “current students feel important” was initially rated second highest in agreement during round two but tied for lowest level of agreement among college environment characteristics in round three. This information is summarized in Table 4.

Four items were classified under the category of college resources (Table 5). Items receiving the highest levels of agreement were “large number of resources for student use (i.e. technology, equipment, labs, etc.)” and “has a college farm”. Having a college farm was rated highest within the college resources category during round two but tied for the second highest level of agreement in round three.

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Table 3

Student Opportunities COA Reputation Items Reaching Consensus (n = 15)

Student Opportunities	Round Two		Round Three
	M	SD	% Agreement
COA provides opportunities for students to gain experience	4.87	0.35	100.00
Opportunities for hands-on learning	4.80	0.41	100.00
Variety of majors and programs to choose from	4.67	0.49	100.00
Opportunities for student internships	4.60	0.63	100.00
Opportunities for students to gain leadership skills	4.47	0.83	100.00
Opportunities for student involvement in research	4.47	0.83	100.00
COA has a variety of agricultural student organizations	4.40	0.74	100.00
Opportunities to study abroad	4.20	0.86	93.33
Opportunities for networking	4.20	1.21	86.67

Table 4

College Environment COA Reputation Items Reaching Consensus (n = 15)

College Environment	Round Two		Round Three
	M	SD	% Agreement
COA has a friendly/home-like feel	4.73	0.46	100.00
Current students feel important	4.53	0.74	86.67
Known for having a safe campus	4.36	0.50	100.00
Strong agricultural culture	4.33	0.49	93.33
COA has a distinct identity on campus	4.33	0.72	93.33
COA is connected or in close proximity to main campus	3.80	1.32	86.67

The category of college accolades and recognition consisted of seven unique COA characteristics. "COA is known for its strength in multiple agricultural programs" and "programs are accredited" received the highest mean agreement in round two, but this was not the case in round three. "College has received positive media attention", "Success stories and testimonials of current and former students", and "COA is known for its innovations and advancements" received 100% agreement in round three. More information on COA reputation characteristics related to college accolades and recognition can be referenced in Table 6.

Table 5

College Resources COA Reputation Items Reaching Consensus (n = 15)

College Resources	Round Two		Round Three
	M	SD	% Agreement
Has a college farm	4.53	0.83	93.33
Large number of resources for students to use (i.e. technology, equipment, labs, etc.)	4.47	0.64	100.00
COA is well funded	4.33	1.05	93.33
COA has cutting-edge programs	4.33	1.11	86.67

Table 6

College Accolades and Recognition COA Reputation Items Reaching Consensus (n = 15)

College Accolades and Recognition	Round Two		Round Three
	M	SD	% Agreement
COA is known for its strength in multiple agricultural areas	4.60	0.63	93.33
Programs are accredited	4.60	0.51	86.67
College is involved in the community	4.33	0.49	86.67
Success stories and testimonials of current and former students	4.20	0.59	100.00
COA is known for its innovations and advancements	4.13	0.99	100.00
Programs are recognized through awards and accolades	3.87	1.46	93.33

Three items were classified within the communication category (Table 7). The item receiving the highest level of agreement in rounds two ($M = 4.73$) and three (100%) was "good communication between recruitment staff and prospective students".

Student success COA characteristics (4 items) included "high graduation rates", "excellent job placement", "graduates having a good reputation among employers", and "students feeling prepared for the real world". Rounds two and three information for these four items is presented in Table 8.

College of agriculture student support characteristics (3 items) influencing COA reputation were "having academics support services for student success", "scholarships/financial aid available for students", and "adequate opportunities to be mentored". These characteristics are shown in Table 9.

The two postgraduation items influencing COA reputation (Table 10) that reached consensus were "supportive alumni" and "COA has a strong network among alumni".

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Finally, COA enrollment characteristics (4 items) that influenced reputation, as agreed upon by the panel of experts, were “low student/faculty ratio resulting in small class size”, “having adequate program enrollment”, “having steady program enrollment”, and “having a good mix of male and female students”. Refer to Table 11 for agreement results from rounds two and three.

Table 7

Communication COA Reputation Items Reaching Consensus (n = 15)

Communication	Round Two		Round Three
	M	SD	% Agreement
Good communication between recruitment staff and prospective students	4.73	0.59	100.00
Communication from the COA	4.60	0.51	100.00
COA outreach	4.20	0.77	93.33

Table 8

Student Success COA Reputation Items Reaching Consensus (n = 15)

Student Success	Round Two		Round Three
	M	SD	% Agreement
High graduation rates	4.60	0.51	100.00
Excellent job placement in high quality professional positions after graduation	4.46	1.13	100.00
COA and graduates possess a good reputation among employers	4.40	1.12	100.00
Students feel prepared for the real world	4.40	1.12	93.33

Table 9

Student Support COA Reputation Items Reaching Consensus (n = 15)

Student Support	Round Two		Round Three
	M	SD	% Agreement
COA has academic support services for student success	4.29	0.47	93.33
Scholarships/financial aid available for students	4.27	1.10	93.33
Adequate opportunities to be mentored	4.27	0.96	93.33

Table 10

Postgraduation COA Reputation Items Reaching Consensus (n = 15)

Postgraduation	Round Two		Round Three
	M	SD	% Agreement
Supportive alumni	4.27	0.59	100.00
COA has a strong network among alumni	4.07	1.22	93.33

Table 11

Enrollment Characteristics COA Reputation Items Reaching Consensus (n = 15)

Enrollment Characteristics	Round Two		Round Three
	M	SD	% Agreement
Low student/faculty ratio resulting in a small class size	4.73	0.46	93.33
COA has adequate program enrollment	4.33	0.62	93.33
COA has steady program enrollment	4.33	0.90	100.00
Good mix of male and female students	3.73	1.10	86.67

Discussion

One limitation of Delphi studies is the reliance on a relatively small panel of experts to arrive at a consensus for the topic of interest. As Vogler (2020) suggested, the reputation of an organization can differ, depending on which stakeholder group is consulted. Therefore, we recommend interpreting results from this study with caution. Findings from this study are not intended to be representative of perceptions of all stakeholders or populations outside of those from which we drew our sample. Generalization of findings should be limited to undergraduate student COA ambassadors located at land grant universities in the southeastern United States. Even with the limitations of this Delphi study, we believe several conclusions can be drawn from our findings that could be of interest to COA administrators, recruiters, ambassadors, decision makers, and reputation researchers.

The panel of experts for this study generated 65 unique COA characteristics they believed influence the reputation of a COA and arrived at consensus on 51 of those characteristics. An interesting observation was the change in agreement ambassadors had for several of the characteristics from round two to round three, even though the individuals were the same in both rounds. According to Hussler et al. (2011), change in agreement can happen from one round to the next as panelists consider the topic being studied in greater detail, especially if panelists are not fully confident in their responses, possibly explaining the change in agreement found in this study between rounds two and three. Four characteristics: strong campus/

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industry partnerships; reasonable cost of attendance; college located in area with strong agriculture influence; and excellent, state-of-the-art, and plentiful facilities for research, teaching, and extension all had mean levels of agreement in the *agree to strongly agree* range; however, these four characteristics did not reach consensus in the final round. Perhaps a different stakeholder group was consulted. Additionally, three characteristics, initially rated with lower mean agreement scores from round two compared to other items in that round, all reached 100% consensus in round three. These characteristics included: success stories and testimonials of current and former students, COA is known for its innovations and advancements, and faculty have robust research programs in a variety of areas.

After examining the 51 COA reputational characteristics identified in this study, they were classified into 10 categories with three to nine characteristics corresponding with each category. Many of these categories and individual items were congruent with characteristics previously identified as influencing reputation at the university level (Alessandri et al., 2006; Dursun & Gumussov, 2021; Plewa et al., 2016; Sung & Yang, 2008), highlighting the similarities between reputation at the college and university levels. Interestingly, several characteristics, which theoretically should influence COA reputation did not reach consensus among respondents. While Plewa et al. (2016) suggested that industry/university connections should influence reputation, “strong campus/industry partnerships” did not reach consensus as a reputational characteristic in this study. Moreover, a COA located in an area with strong agricultural influence did not emerge as affecting reputation, which is an important finding for COAs located in urban settings.

Many of the characteristics emerging from this study align with previous research regarding factors influencing students' decisions to enroll in an institution, including faculty characteristics, student opportunities after graduation, scholarships awarded, and campus environment (Herren et al., 2011; Jackman & Smick-Attisano, 1992; Rayfield et al., 2013; Robinson et al., 2007; Shrestha et al., 2011). When examining how our findings apply to Chapman's (1981) model of student college choice, most categories and individual items would be considered fixed college factors within the model. Additionally, our panel of experts arrived at consensus on several items related to communication, another area Chapman suggested impacts college choice. While many of the categories and associated specific COA characteristics resulting from our study can be considered external factors impacting college choice, our panel suggests they are also factors influencing the reputation of a college. Reputation is not a specific component in Chapman's model, however more recent literature suggests it is an important influence on college choice. Perhaps the model should be revisited and updated to include reputation. Perhaps reputation is not necessarily a concrete item like many of those in Chapman's model but rather an abstract concept like the expectations of college life mediating variable. Consequently, many of the factors identified by our panel could be considered “external influences”, which

can directly impact the choice of college or the prospective student's perceptions of reputation, influencing expectations of college life and subsequently college choice.

Summary

Findings from this study add to the body of literature on the complex topic of COA reputation by identifying 51 unique characteristics within 10 different categories that contribute to the reputation of a COA as was recommended by Herren et al. (2011). Based on these findings, recommendations for practice and further research can be made. First, we recommend a questionnaire be created and validated from the responses that met consensus in this study. This questionnaire could be used for surveying stakeholders of land grant universities with a COA to evaluate reputation and identify areas where improvement can be made by appropriate decision-making COA personnel. Continuous improvement within the 10 categories of characteristics described in this study should be considered if the desire is to improve reputation. For example, “professors/faculty who are experts and leaders in their field” was an item that reached consensus in this study with the potential to impact COA reputation. Therefore, the future hiring process could make this a priority if it is not already. Additionally, alignment of COA strategic plans with the 10 categories that impact COA reputation should be examined at individual institutions to ensure efforts are being made to maintain or improve the college's reputation. College of agriculture recruiters should highlight areas in which the college has a good reputation when discussing possible enrollment with potential students and their parents. A critical examination of outreach materials used for recruitment should also be conducted to ensure alignment with the 10 categories identified in this study. As with any Delphi study, a limited perspective was gained through the lens of college ambassadors who are trained to communicate positively about their college. Therefore, future studies should examine reputation from different stakeholder groups like high school students, parents, teachers, alumni, industry representatives, and others. It may also be worthwhile to investigate this topic from different institutional types like 2-year colleges, regional or branch universities, and 1890 and 1994 land grant institutions. Reputation is an important factor that is not always easily repaired, therefore frequent study or awareness of a college's reputation should be a priority.

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